

THE UNPUBLISHED
PORTRAITS OF TASMANIAN BIRDS

200 illustrations by Sue Lester

with accompanying text by Bob Green

These plates were reproduced from 35mm slides of the original paintings. The text was computed, edited and printed by Tim Thorne with progressive amendments by the author; end pages give a brief outline of the production and failure to publish.

Limited to two sets in two [*sic*] volumes, for the artist and author.

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Volume 1

Introduction

The activities of humankind have, from the time of the cave dwellers, been influenced in many ways by our association with other animal species, not the least of which have been birds.

Crude drawings of birds were included in the array of forms which decorated the walls of many prehistoric places of human habitation. Although their original significance has for the most part been lost, they remind us that from the earliest times our lives and our activities have involved, in various ways, a study and appreciation of birds.

Down through the ages that association has strengthened. Birds are recorded as having been kept for food 10,000 years ago, and numerous species were subsequently domesticated. The early Norsemen, on their long ocean voyages, were said to have carried live birds which they released from their cages at sea. If the birds did not return to the ship it was believed that they had flown over the horizon to nearby land.

The early European explorers took back many examples of strange and exciting birds they had discovered in the new world. These included both live specimens which were destined for zoo exhibits and those which were dried or preserved in spirit for later study and description in scientific journals and books.

With the European settlement of Australia came a much more intense study of its native fauna. Scientific collections were developed and illustrated books on the subject began to categorise, list and depict the various species. In the middle of the nineteenth century John Gould, an eminent British ornithologist, after collecting and studying in the new colonies, produced his massive eight volume work entitled *Birds of Australia*,¹ which became a benchmark and inspiration for ornithologists, both professional and amateur. It also became a treasure for collectors of fine illustrated works on natural history.

It was not, however, until several decades into the twentieth century that the growing awareness of the importance of native fauna to the quality of the environment and hence to humanity began to develop to a significant level. Researchers started to demonstrate the importance of individual species in the chain of life and the fragility of some habitat types which were vital to the survival of diminishing populations.

Public interest in birds began to expand and the value of the contribution made by amateurs to the study of ornithology was increasingly acknowledged by those who were professionally engaged in the science. Gone were the days of haphazard and uncontrolled collecting. The finite status of species was realised, leading to the introduction of strict fauna regulations which gave legal protection to most. The seasonal shooting of several species was totally stopped, whilst for others it was greatly restricted.

¹ John Gould, *Birds of Australia* (John Gould, 1848).

The aesthetic value of birds, their natural beauty and charm and the considerable part played by them in the overall enjoyment afforded by the landscape, were quickly becoming recognised. Today we have come to accept that “development” and “progress” must include planning the retention and protection of as much of the endemic flora and fauna as possible, for our own sake as well as for that of succeeding generations from whom we “borrow the present”.

Thus it is with pleasure and a sense of dedication that we have been involved in the production of these volumes. The work has not been designed or intended as another textbook on Tasmanian birds, with illustrations added, but rather as the reverse. I believe that this reflects a strengthening awareness of the diverse beauty of our bird fauna and the growing public appreciation of both its charm and its importance. The emphasis has therefore been placed on Susan Lester’s magnificent paintings of the 200 species most likely to be seen in Tasmania, together with a short accompanying text designed to give some information on the distribution and habits of each and to make reference to some others, not illustrated, which may be encountered.

Altogether about 320 species have to date been found in Tasmania and its adjacent areas, representing some 35 per cent of the total bird species from the whole of Australia. Of the Tasmanian species, approximately 50 are oceanic birds which spend most of their lives at sea. Many of these breed in the Antarctic or sub-Antarctic regions and are seen here as visitors to our coastal waters mostly during winter, outside the breeding season. They are referred to as southern migrants. There are also about 30 species which visit here in summer from their Arctic and sub-Arctic breeding grounds. These birds fly south to escape the harsh northern winter and are referred to as trans-equatorial migrants. Among this group are many of the small wading birds.

About 25 species migrate regularly across Bass Strait, flying in each Spring from the mainland to spend the summer and breed here and departing again in the Autumn, when their offspring are sufficiently strong and experienced to make the return flight.

There are approximately 100 species which are classed as rare visitors or only accidental visitors to Tasmania. These are birds which, for various reasons, occur so infrequently as to be insignificant among our fauna but which create excitement for the keen observer who is fortunate enough to sight one of them.

Some 130 species are either permanent residents or opportunistic or nomadic visitors which might be found in Tasmania at any time of the year. These birds have successfully adapted to finding their food here during the Winter months and to surviving the colder climatic conditions. Included in this last group are the truly endemic Tasmanian species and sub-species. These are the birds which, because of their long geographic isolation and their consequent specialisation under Tasmanian conditions, have been ever so gradually evolving and adapting to becoming best suited for survival and propagation here.

The actual number of endemic Tasmanian species and sub-species is at present debatable as researchers and taxonomists continue to investigate their degree of divergence from and relationship to apparent near relative species occurring elsewhere. However about 14 may presently be considered as endemic species or perhaps twice that number differ at sub-specific level.

It is this segment of our avifauna which is of special interest and importance. Among these birds one can witness a result of the gradual process of adaptation and evolution in a semi-closed community. Here birds can be seen and enjoyed which do not occur anywhere else and, with a little effort, one can experience in a single day all habitat types from coastal seas to sub-alpine rainforests and moorlands, finding the many birds peculiar to each.

These volumes are intended to complement such experiences, to help in identification and explain a little about the subjects. Most especially, however, they are intended simply to be enjoyed as a reflection of the physical and visual encounters with what may well be called "living jewels of nature".

Wandering albatross *Diomedea exulans*

When considering the birds of Tasmania one should not overlook the many oceanic species which either breed on some of the more remote islands or, having bred far away in places such as the Antarctic, migrate here annually to spend their non-breeding season on the sea surrounding this island state.

Among these are eight species of Albatross, giants among the oceanic wanderers, the subject of many nautical myths and legends. The superstitious sailors of old believe them to be the spirits of seamen lost at sea.

Albatross have a world-wide distribution apart from the Arctic seas in the north Atlantic. They are masters of the wind and the waves, for with the aid of the former they wander the globe, whilst from the latter they take their food. They rarely come ashore except to breed, and otherwise spend their whole life far from land. They will rest on the water and appear quite unconcerned by, in fact oblivious to, the ferocity of the elements.

The Wandering Albatross is a bird of the southern oceans and is circumpolar in its range. It breeds on many sub-antarctic islands but non-breeding birds move to more northerly latitudes and may even reach the Tropic of Capricorn. It is these birds which are found around the coast of southern and south-eastern Australia. In Tasmanian seas it is a relatively common bird, although only rarely does it fly so close to land that it can be seen from the shore. Its nearest breeding ground is on Macquarie Island, about 1380 kilometres to the south south-east of Tasmania.

It is the largest living bird which is able to fly. Some individuals attain a wingspan in excess of three metres and a body weight of over eight kilograms. The only other bird with which it might be confused is the Royal Albatross *Diomedea epomophora*, a rather rare visitor to our waters, which breeds on some southern islands of New Zealand.

In flight the Wandering Albatross provides a perfect example of a bird's mastery of the air. Its huge wingspan, which gives it a somewhat clumsy and awkward appearance when it is ashore, furnishes sail power which must be the envy of many yachtsmen. Wheeling into the face of a gale, it is lifted effortlessly before turning again to sweep downward on a long and gradually descending glide. It hardly ever beats its wings, except in calm weather, when it is denied the benefit of the wind. Then it often rests on the surface of the ocean, feeding and casually passing the time until the wind's revival provides the force for its carriage and mobility.

It eats mostly fish and squid which are caught on or near the surface and, like many seabirds, it has learnt to follow ships in order to scavenge edible scraps. It occurs mostly as solitary individuals but numbers will congregate at locations of exceptionally abundant food.

Because of the Wandering Albatross's long breeding cycle, which spans about eleven months, most adults manage to breed only every second year and breeding maturity might not be attained until the age of nine years. Nesting begins in spring when a number of pairs form a loose community, usually on an exposed grassy elevation overlooking the sea. The nest is a mound of mud and plant matter piled on the ground. It might be used in successive years.

A single white egg, sometimes sparsely marked with reddish brown, is incubated by both parents for about ten weeks. Nestlings are at first covered with white down, but fledge with mostly brown feathers and fly at about nine months old. The white plumage of adults, which is the same for both sexes, is progressively attained with age.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#1). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Black-browed Albatross *Diomedea melanophris* [now *Thalassarche melanophris*]

Probably the most common of all the albatross in the seas around Tasmania, the Black-browed Albatross breeds on many of the sub-antarctic islands, the nearest of which is Macquarie Island. It has a circumpolar distribution.

During the winter months, when not occupied with breeding, it wanders over the ocean searching for food and congregating in locations where it finds an abundance. As is the case with many seabirds, it has learnt to follow ships and fishing boats, attracted by any refuse which might provide an easy meal.

It is often found close to shore and can easily be confused with the somewhat similar Shy Albatross. When it is in flight, however, and the pattern of the underwing is visible, it can be readily distinguished by the broad, blackish leading and trailing edges, separated by only a narrow band of white. The Shy Albatross has much more white under its wings. Both species often occur together.

The Black-browed Albatross is one of the medium-sized albatross species, with a wingspan of slightly over two metres and a body weight of about three kilograms. To some people it is known by the catch-all name of “Mollymawk”.

Like all albatross it is a master of the oceanic elements, utilising a head wind to gain height and wheeling to sail with it for speed and distance. The vast distances it travels across the oceans have been demonstrated by the discovery on Tasmanian shores of sub-adults which have been leg banded as nestlings on the breeding islands to the south of South America only a few months previously. To reach our waters they would have travelled with the prevailing winds across the South Atlantic and Southern Oceans. The heaviest mortality occurs among sub-adults, which are not fully experienced and competent in obtaining food and it is the decaying carcasses of these unfortunate individuals which are sometimes washed ashore, allowing such discoveries to be made.

Most mature adults arrive back at their breeding islands about September and it is then that pairing and mating display commences. The nuptial display is complex and prolonged, with much bowing, head nibbling and braying. The exhibition of these social graces is continued through the process of nest building or nest renovation, activities during which the female is in charge of operations. She stands on the nest and moulds into a concaved mound the muddy soil and reinforcing vegetable material brought to her by the male.

After about a month of courtship and nest preparation a single white egg, sparsely marked with reddish-brown blotches, is laid and the ten weeks' period of incubation begins. Both sexes take shifts on the nest while the other partner exercises and feeds at sea.

The small nestlings are clothed in pale grey down and when two or three weeks old are left alone in the nest while the parents search for food. This consists mostly of fish and squid which are caught on or just beneath the surface, mainly during the hours of darkness. The young bird fledges and flies at about four months old and at this stage it rather resembles its parents, except that the back and wings are a more dusky shade and the beak appears black.

The Black-browed Albatross usually mates for life and returns to the same nest site in successive years. It is a social bird and many pairs congregate to breed in loose colonies, often on steep slopes overlooking the sea, from where they can more easily drop into the wind to initiate flight. The sexes are alike.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#2). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey-headed Albatross *Diomedea chrysostoma* [now *Thalassarche chrysostoma*]

Ranging widely over sub-antarctic waters, the Grey-headed Albatross has a circumpolar distribution and appears to tolerate somewhat colder conditions than do most albatross. Except when on its remote breeding grounds, it is seen mostly as solitary individuals, far from land.

With a wingspan of about two metres and a bodyweight of some three and a half kilograms, it is one of the medium-sized albatross. Adults are identifiable by the beautiful, pale smoky-grey mantle and the striking orange and golden stripes on the top and bottom of the otherwise black beak. Immature birds lack the brilliant black colouring and they have a mantle which is a darker shade of grey. Although not commonly recognised and recorded by the casual observer, it is probably more plentiful than might be thought. Beachwashed remains, mostly of sub-adults, are occasionally found and brought to museums.

Like all albatross it has mastered the power of the wind, the force of which it utilises to the fullest advantage as it wheels and turns to rise and glide with only an occasional wing beat. On calm days, a rarity in the southern oceans, it is disadvantaged as it then has more difficulty in rising from the water.

It feeds mostly on fish and cephalopods, but does not dive to capture its prey. Landing on the surface, it plunges its head under water, takes the item in its powerful beak and swallowing it whole.

John Gould, the imminent British ornithologist who visited Australia and wrote many beautifully illustrated volumes on birds last century, called it the Culminated Albatross and wrote of finding it frequently while on sea trips between Tasmania and the mainland. Later it became known as the Flat-billed Albatross, but its presently accepted English name seems much more appropriate and descriptive.

The Grey-headed Albatross breeds on Macquarie Island and many other remote islands in the southern and sub-antarctic seas. With the approach of Spring birds return to their breeding islands to select a nesting site and engage in an elaborate ritual of courtship display as pair bondage is established and strengthened. At this time it is a colonial bird, nesting in association not only with others of its own kind but also with the Black-browed Albatross.

The nest is generally sited on a ledge on steeply sloping ground and is formed by the birds piling damp earth and vegetable matter, gathered from around the area, to form a convex mound. The single egg is dull white, sparsely marked with reddish-brown. The parents incubate it in shifts of about five days. The young bird, which at first has a covering of fluffy, pale grey down, fledges and takes its first flight about May, by which time it is some five months old. Both sexes are of similar appearance and both engage in fishing and carrying food back to the nestling.

Studies of this bird conducted on South Georgia in the southern Atlantic Ocean have shown that the total breeding cycle takes about seven months and that pairs breed only every second year.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#3). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Yellow-nosed Albatross *Diomedea chlororhynchos*

This is the smallest of the albatross and looks almost dainty when compared to the larger species with which it sometimes associates. Its distribution ranges over much of the South Atlantic and Indian Oceans, around southern Australia and into the Tasman Sea, but does not reach the colder sub-antarctic waters which are inhabited by most other albatross species.

Its breeding islands are in the South Atlantic and Indian Oceans, and those birds which reach Tasmania are nomadic visitors. Although less common than some of the larger species, it occurs regularly over the continental waters, usually singly, although several might be found attracted to a temporary food source in association with other seabirds.

In July 1838 John Gould found it off the coast of New South Wales when it visited the ship, sometimes in "considerable numbers". Most were birds which he considered to be only one or two years of age.

My experience with this bird was in November 1977 when I spent eight days at sea with Trevor Singline, a crayfisherman working off the north-east coast. Odd individuals circled the boat on most days and sometimes landed on the water to take fish scraps cast to them. On several occasions a bird was seen attracted to one of the orange plastic buoys which were used to mark the position of a craypot. Its curiosity extended to landing and tossing the buoys about with its beak in a playful manner. No doubt it was most interested in the possibility that it may contain galley refuse or some other such edible items.

Apart from their smaller size, mature adults can be distinguished from other species of albatross by the bright yellow line which runs along the top of an otherwise black beak, the hooked tip of which may be noticeably flushed with a deeper shade of orange.

In common with other albatross it makes good use of the wind to aid it in flight, wheeling and gliding over the waves as it searches the surface for the fish and other marine animals on which it feeds. To secure these it does not dive from the air but rather drops to the surface and plunges its head and neck under water. Some observers have noted the Yellow-nosed Albatross to become totally submerged for a few seconds in its attempts to reach an objective.

Breeding birds begin to congregate at the nesting islands about August to prepare for the eight month long breeding cycle. Courtship display involves much neck stretching, wing movement and bleating calls as the male presents himself to his intended mate. The nest is built on the ground and is formed by the female from mud and plant material gathered and brought to her by the male. This is piled and plastered into a solid mound with a depression in the top, into which the single egg, white with a few reddish markings, is laid.

Both parents share the task of incubation which lasts for nearly three months. The nestling takes a further four or five months to mature and become sufficiently feathered to be able to fly and start to find food for itself.

The sexes are similar but sub-adults can be distinguished from adult birds by the bill, which initially is completely black. The yellow ridge gradually developed as the birds approach breeding maturity.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#4). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Shy Albatross *Diomedea cauta* [now *Thalassarche cauta*]

This large and handsome bird is the only albatross to breed in the Australian region. Non-breeding birds range widely across the southern limits of the Indian Ocean, the seas around southern Australia and the South Pacific as far as the coast of South America. On the seas around Tasmania it is common and often approaches close to shore on its wandering flights in search of food. It breeds on several islands in New Zealand waters but its only other breeding places are in Tasmanian waters: on Albatross Island in western Bass Strait and on Pedra Branca and Mewstone, two almost inaccessible rocks off the southern coast.

In common with some other members of the albatross family the Shy Albatross once suffered at the hands of unscrupulous humans. The great number of birds which formerly congregated annually on Albatross Island to breed attracted the early seal hunters who slaughtered it for its feathers which were marketed in Launceston for “nine pence to a shilling a pound”.

This island was discovered and named by Bass and Flinders in December 1798 and Flinders later described it as then appearing to be “almost white with birds”.² In 1832 George Augustus Robinson visited there and, although he found the top of the rock covered with albatross, he stated, “originally those birds covered the whole surface of the island completely with their nests but destruction since has been very great amongst them”.³ This predation must have continued almost to the point of annihilation for when Le Soeuf and Ashworth, two eminent ornithologists, landed there in November 1894 they estimated only 400 occupied nests. The low point appears to have been at about the turn of the century when other observers put the population at between 250 and 300 breeding pairs.

I have been fortunate enough to visit the island on two occasions, firstly in January 1960 when an estimated 576 nests were occupied by downy young. My second visit was in January 1973, by which year the nest count had risen to 1505. The birds and the island now have official legal protection and the population of albatross has continued to grow.

Nesting starts about September and from then on the adjacent waters are alive with birds. Nests are composed of earth and guano formed into a firm cone with a concave egg chamber on top. There one of the adults, which are similar in appearance and share in the duty of incubation, sits on the single white egg. The bird’s large bulk overhangs the edges of the nest to such an extent as to give the impression of precariousness. Incubation lasts for about nine to ten weeks, during which time there is much coming and going of birds as shifts change, usually with a great deal of ceremonial display and cackling. The nestling is covered with

² Matthew Flinders, *A voyage to Terra Australis: Undertaken for the purpose of completing the discovery of that vast country, and prosecuted in the years 1801, 1802, and 1803, in His Majesty’s Ship The Investigator* (G & W Nicol, 1814).

³ Norman J B Plomley (ed), *Friendly mission: The Tasmanian journals and papers of George Augustus Robinson, 1829–1834* (Tasmanian Historical Research Association, 1966).

fluffy white down and is about four or five months old by April when, fully fledged, it takes its first flight.

The Shy Albatross, or White-capped Albatross as it is also called, eats mostly squid and scale fish, swallowing its catch at sea. To feed its nestling it regurgitates the partly digested food, which the young bird takes by inserting its beak crosswise inside that of the parent. Regurgitation is also used as a means of defence by the nestlings. If approached they all nervously pivot on their mounds to face the intruder and, if the latter is within range – about one or two metres – they will forcefully project the repulsive smelling oily vomit over the tormentor. At this time of the year the breeding ground can be smelled from a considerable distance as discarded food and accumulated bird dung putrefy in the hot sun.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#5). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Light-mantled Sooty Albatross *Phoebetria palpebrata*

Despite the all-over dark plumage, which is in contrast to that of most albatross and might at first confuse an observer as to the identity of this bird, doubt as to the family to which it belongs is soon dispelled when one considers the graceful ease of its flight. Like all albatross it is a master of the air as it operates its great wings, which span about two metres, to perfection in order to use the winds to the fullest advantage.

It has an extensive, circumpolar distribution, ranging from the icepacked shores of the Antarctic continent to the southern limits of the Atlantic, Indian and Pacific Oceans. Over these seas which are noted for the severity of their storms its grace and aerial buoyancy are magnificently demonstrated as it wheels into the wind to hover while scanning the water below or rises high above the waves before turning to sail downwind at tremendous speed.

Also known as the Grey-mantled Albatross, this bird has a near relative, a somewhat similar bird, the Sooty Albatross *Phoebetria fusca*, with which it can be easily confused. The Sooty Albatross, however, is but rarely seen over Tasmanian seas and it is therefore not illustrated here. Adult “sooties” can be distinguished from the Light-mantled Sooty Albatross by their more even, darker mantle and a yellow lateral line on the beak. Sub-adults of the two species, on the other hand, are virtually indistinguishable from each other.

The Light-mantled Sooty Albatross breeds on a number of remote islands throughout the sub-antarctic, the nearest to Tasmania being Macquarie Island, where it is relatively common. It is mostly a solitary bird when not engaged in breeding, but with the approach of Spring it instinctively returns to its ancestral breeding grounds to congregate and select a nest site and a mate.

The nests are generally more dispersed than those of other albatross species, the pairs being apparently less tolerant of close neighbours than are most seabirds. The chosen site is usually on a ledge on a steep slope, from where the birds can more easily drop into the wind and become airborne.

As with other species of albatross this bird has a highly developed and elaborate pre-nuptial display. This serves not only to attract a consenting partner but also to distinguish its own kind from possible interlopers of another species, for example the closely related Sooty Albatross, and thus prevent the occurrence of interbreeding. Much bill thrusting, facial display and mutual preening precedes copulation, which takes place on the nest, a well formed and solidified mound of earth bound together with grass and other vegetable matter.

On top of the mound a concave depression comfortably accommodates the belly of the sitting bird while it incubates its single white egg. This process takes about two months and is shared by both parents, who relieve each other in shifts which might extend for many days at a time.

The young is at first covered with soft grey down and is fed by the parents on squid, krill and fish which they regurgitate in an already partly digested state directly to their offspring's mouth. When it is about three weeks old the nestling is no longer brooded; the parents return only to feed and tend it until it is fully fledged and able to fly, by which time it has reached the age of about five months. It is then that mortality is heaviest, as the young are less experienced and proficient in the skills of survival. Consequently many recoveries of beachwashed carcasses which are passed to museums are of birds from that age group. In immature birds the lateral bill line is pale grey and at all stages of maturity the sexes are alike in appearance.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#6). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Southern Giant-petrel *Macronectes giganteus*

This giant scavenger of the southern oceans and subantarctic Islands has a circumpolar distribution which ranges from the continent of Antarctica to the southern Atlantic, Indian and Pacific Oceans. Its large size, with wings which span almost two metres and a body weight of three kilograms, together with its ability to sail and glide in high winds, might at first give the impression that it is one of the dark plumaged albatross. It can, however, be easily distinguished by its plumper form, heavier appearance and its large, yellowish beak topped with a tube-nose, a characteristic of this family of birds.

It is an opportunistic feeder and congregates in locations where food is abundant, but it also hunts, solitary individuals flying over the vast expanse of ocean in search of fish, cephalopods, krill and sick or injured small birds. As well, it comes ashore to scavenge on the carcasses of dead marine mammals and birds, and squabbling groups will gather around to tear at the flesh and offal with their powerful beaks until they are gorged. In this way, like all scavengers, it carries out the natural service of “cleaning up” before carcasses become putrefied. It has been actually described as “the Vulture of the sea”.

Also known by a variety of alternative names such as Giant Fulmar, Nelly and Stinker, it was a bird well known to those who sailed on the whaling ships for that industry provided it with a huge and easily obtainable food supply, in the form of both galley scraps and discarded animal remains. John Gould, who visited Tasmania in 1838, later wrote in his massive, eight volume *Birds of Australia*, “On visiting Recherche Bay in D’Entrecasteaux Channel, Van Diemen’s Land, I found thousands of this species sitting together on the water and feeding on the blubber and other refuse of the whaling station.”⁴

The Southern Giant-petrel breeds on sub-antarctic islands, of which the nearest to Tasmania is Macquarie Island where it is very common. Leg banding of nestlings with individually numbered rings has provided much important information on its dispersal pattern and chicks banded on Macquarie Island have later been discovered from southern Australia, New Zealand, Fiji, South America and Antarctica. Moreover, nestlings banded at South Georgia have reached here within three months. Most such discoveries have been made when beachwashed carcasses were examined by interested members of the general public, which shows the importance of always reporting such finds to a relevant authority.

The breeding season extends from August to March, with pairs often returning to the same nest site in successive years. The nest is a mound of grass and other vegetable matter gathered by the male for his mate to arrange. There she lays the single white egg which is incubated in shifts by both parents over a period of about two months. The nestling is a little over three months old when it takes its first flight.

⁴ John Gould, *Birds of Australia* (John Gould, 1848, vol VII) entry for *Procellaria gigantea* <<https://www.biodiversitylibrary.org/item/189241#page/189/mode/1up>>.

The sexes are of similar plumage, but males are somewhat larger than females. Some Southern Giant-petrels are almost pure white, but this type is far less common than the brown-plumaged which is illustrated here.

A second species, the Northern Giant-petrel *Macronectes halli* was discovered in 1966, following studies of breeding birds. It is so similar in appearance to its near relative that it had been unrecognised until then. A distinguishing feature of this species is a pink-tipped bill, and the occasional white morph never occurs. It has a much more restricted distribution in the more northerly reaches of the sub-antarctic region and only rarely have individuals been recorded around Tasmania.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#7). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Cape Petrel *Daption capense*

A spectacular and distinctively coloured little bird of the southern oceans, the Cape Petrel is well known to all seafarers. It congregates at locations of abundant food and its rather tame and trusting nature leads it to approach close to ships where it will wait for a handout of fish offal or galley scraps. This behaviour is almost the marine equivalent of “pigeons in a park”. Its body size approximates that of a domestic pigeon and its mottled plumage, too, is similar to that of some pigeons. In fact one of its nick-names is Cape Pigeon, for it was a most familiar bird to those earlier travellers who journeyed from England to Australia via the Cape of Good Hope, whence its specific name, *capense*, is derived. *Daption*, the generic part of the name, is simply an anagram of *pintado*, a Portuguese word meaning “painted”. Another name sometimes used for it is Pintado Petrel.

With its wide-ranging circumpolar distribution the Cape Petrel can be found throughout the world’s southern oceans, from the icy shores of Antarctica to South America, southern Africa and southern Australia. It occurs commonly in the seas around Tasmania and beachwashed carcasses are periodically found on the shore.

In addition to the food it scavenges, it feeds upon small fish, cephalopods, krill and plankton during its long oceanic voyages between breeding seasons. Flying with short bursts of wingbeats and using wind currents, it soars and glides over the waves, occasionally dropping to the surface to secure food. This it does either by diving from flight or from the surface as it paddles around peering into the water for edible items.

In feeding congregations it squabbles in noisy competition, in this way alerting other species which also visit the location in the hope of finding food. In the boom days of the whaling industry many species of sea birds learn to scavenge on the excessively plentiful food supply generated by waste matter discarded from flensing depots. In such sites very large numbers of birds gathered, the Cape Petrel being the commonest.

Although perfectly proportioned and equipped for its oceanic lifestyle, it is greatly disadvantaged on land. John Gould in his *Birds of Australia* recounted experiences during his voyages between England and Australia and, in part, stated, “It is easily taken with a line and a hook baited with any kind of fat, and when captured may be placed on the desk without risk of it escaping, as it cannot rise from a flat surface”⁵ and, again, “when other resources of amusement for the passengers fail, the capturing of this bird frequently affords them occupation for hours together, and often serves to while away the time and break the

⁵ John Gould, *Birds of Australia* (John Gould, 1848, vol VII) entry for *Daption capensis* <<https://www.biodiversitylibrary.org/item/189241#page/221/mode/1up>>.

monotony of a lengthened voyage.”⁶ Thankfully such “entertainment” for overseas travellers is no longer necessary.

The Cape Petrel is a colonial breeder, congregating to nest in Summer on many islands in the far southern oceans and along the shores of Antarctica. The nest is a mere scrape among pebbles and debris on a ledge on steeply sloping ground overlooking the sea where the bird can easily drop off to become airborne. A single white egg is incubated by both parents in shifts and takes about six weeks to hatch. The nestling is clothed in soft grey down, is brooded and fed by both adults, and flies when it is about seven weeks old. Both sexes and the sub-adults are of similar plumage, and it is believed that birds do not attain breeding maturity until they have reached the age of at least four years.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#8). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Great-winged Petrel *Pterodroma macroptera*

This large, almost black petrel, with a wing span of about a metre, is relatively common on the seas around Tasmania. Two sub-species have evolved, one of which ranges over the South Atlantic and Indian Oceans where it breeds on remote islands, including some off the coast of south-western Australia. The other sub-species breeds on islands and cliffs around the North Island of New Zealand, and it is these birds which are found in south-eastern Australian waters.

Here it is usually seen as solitary individuals flying far out at sea but dead, beachwashed birds are sometimes found along our coast and brought to museums. Such recoveries, which are more common after periods of stormy weather, can provide valuable data on the species and its movements.

The Great-winged Petrel does not follow ships to scavenge scraps of food as do many other species, but prefers to hunt quite independently. It is possessed of great powers of flight and fully utilises the wind currents to rise steeply before wheeling away with the wind to sail at high speed in long, gradual descent. These manoeuvres enable it to cover vast expanses of ocean with relatively little effort.

It feeds mostly on squid which it picks from the surface of the water while in flight, but will also take small fish, crustaceans and krill in the same manner. As it does not dive into the water to take its prey, most of its feeding activities take place at night when its potential food becomes more accessible by rising to the surface.

A winter breeder, the Great-winged Petrel begins to congregate around its breeding grounds in Autumn, in some instances in huge numbers. Colonies off south-western Australia have been estimated to contain from 10,000 to 40,000 breeding pairs. With the approach of dusk the pairs engage in active and noisy aerial display which may continue into the night. The pre-nuptial behaviour is continued on the ground and entails much beak contact, preening of the feathers of each other's head and neck and social chatter in the form of braying, cooing and hissing.

To select a nest site the birds excavate a short, shallow burrow in the sandy soil or find a well sheltered place beneath a rock or dense vegetation and there the female deposits her single large, white egg. Among the western sub-species this starts to happen about May, but the New Zealand birds do not lay until July.

Incubation, which extends over about two months, is undertaken by both birds in shifts and each shift can last up to two weeks while the other partner exercises and feeds at sea. After the effort of producing such a large egg, which is equal to approximately 15 per cent of her body weight, the female is relieved by the male for the first shift. The chick is covered with dark, soft down and after a few days is left alone in the nest while both parents feed at sea.

From then they return only to feed the slowly developing nestling, which fledges and flies when it is about 18 weeks old.

The immature birds closely resemble the adults and the sexes are alike.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#9). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-headed Petrel *Pterodroma lessonii*

This is one of the most handsome of the petrels. Its pale forehead and the white plumage on its breast and belly contrast with its dark back and underwings and help in distinguishing it from others of the genus. This appearance is common to both sexes and to sub-adults as well as adult birds. With a wingspan of about a metre it commands the winds of the sub-antarctic seas over which it roams with perhaps greater aerial skill than any other seabird of its size. A highly pelagic petrel, it is seen mostly as solitary individuals, wheeling in great circles and rising high above the waves before turning to sail with the wind in long, gliding flight.

In many physical features, except its colouring, it resembles the Great-winged Petrel, to which it is closely related. Like that species it ranges with a circumpolar distribution over the southern oceans and is common in the regions of pack ice near the Antarctic continent. The southern Indian and Pacific Oceans are believed to be the areas where it is most abundant and, although it may not be well known to those who sail within sight of land, a degree of prevalence in Tasmanian waters is indicated by the regularity with which beachwashed individuals are found along our shores.

Another feature it shares with the Great-winged Petrel is its method of picking its food from the surface of the sea while in flight. This food is for the most part squid, but its diet also includes small fish and crustaceans.

In one matter, however, it is unlike its near relative. The White-headed Petrel breeds much later, during the summer months, and the young do not fly until April or May. This alternating of breeding seasons is, no doubt, advantageous to both species as it spreads the period of heavy demand on resources.

Birds begin returning to the breeding grounds on islands in the Southern Ocean and south of New Zealand towards the end of August and engage in high speed aerial courtship displays, calling excitedly with a rapid chatter which has been described as “wik-wik-wik”. Visits to the colony are invariably made under the cover of darkness as is the practice of all burrowing sea birds in order to lessen the risk of attack from predators.

The nest is in a chamber at the end of the burrow which is a metre or more long and which has been scratched out by the pair in soft soil on a vegetated slope. There, in late November or December, on a mat of plant matter carried in by both birds, the female lays her single white egg. With many species of burrowing sea birds there is an extended break in time between nest preparation and egg laying. This period spans several weeks and the time is spent at sea while the birds feed up in readiness for the long shifts of incubation and tending to the young. This is believed to be the case with the White-headed Petrel, which would account for the late egg laying.

Incubation is shared in shifts by both parents and extends over about two months. The chick is covered in soft grey down and is brooded for only the first one or two days. After that it is deserted while both the adults fly out to sea to gather food and it is dependent on its body down and the deep, sheltered borrow to keep warm. The parents return only to check and feed their nestling, which fledges and flies when about 100 days old. As with some other sea birds the young will defend itself by vomiting the oily content of its stomach as a means of repelling intruders.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#10). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Kerguelen Petrel *Pterodroma brevirostris*

Only in recent years has this small, dark petrel, with a wingspan of about 80 centimetres, a dumpy body and seemingly large head, become a feature of Australian sea bird fauna. Breeding on islands in the South Atlantic and Indian Oceans, including Kerguelen Island from which it takes its name, it ranges widely over the antarctic and sub-antarctic seas during its non-breeding winter months.

Although occasional individuals had previously been found on the shores of other Australian states, it was not recorded from Tasmania until July 1972 when a beachwashed bird was found on King Island by Max McGarvie and Malcolm Templeton. This was followed, in the next few years, by further recoveries, including the remarkable appearance at Mount Field National Park of one exhausted, starved and dying bird which had been driven far inland and away from its natural environment.

Subsequently, the winter of 1984 brought more records when massive numbers of sea birds of many species were cast up dead on the shores around southern Australia. Tasmania was not excluded from the range of this wreck, and from the east coast and King Island twenty Kerguelen Petrels were picked up, along with 92 other sea birds of 16 species, and forwarded to the Queen Victoria Museum over the three weeks following 19 August. Some were found with squid beaks in the stomach, but all lacked the usual heavy fat reserves of healthy sea birds.

Why such wrecks should occur in some years and not in others is not yet fully understood. It is simplistic to state to say, "They died as a result of storms", for birds with an oceanic distribution have evolved over countless generations with physical qualities which equip them to withstand such conditions. One probability is that a scarcity of food at a crucial time leaves the birds somewhat weakened and thus less able to survive prolonged storms. This is particularly likely to be the case among the immature sub-adult age group. Studies by J M Imber⁷ of birds washed up in New Zealand in the same Winter showed that most were immature.

The division of the oceans' resources between so many species of sea birds is a complex matter, with each having evolved to live and feed in its own special niche in the same way as terrestrial species have. Just as land birds have evolved to become seasonal migrants or opportunistic nomads when not engaged in breeding, so have birds of the ocean likewise.

Tasmania, being on the edge of the Southern Ocean and near to the Roaring Forties, has its fair share of sea bird fauna, some of which breed locally or occur with regularity and are illustrated in this volume. In addition about ten further species of petrels have been only rarely recorded here. For this reason we have chosen to omit them.

⁷ [Almost certain this should be M J Imber]

The Kerguelen Petrel breeds during Summer on remote oceanic islands where it forms colonies on steeply sloping ground overlooking the ocean. In soft soil it excavates a borrow which is up to two metres in length and which terminates in a debris lined chamber where, during October, the female lays her single white egg. Both sexes take turns in the incubation, which lasts about 50 days. The nestling is clothed in sooty-brown down and is about two months old when, fully fledged, it leaves its burrow to fly at sea. The sexes are alike and the sub-adults resemble the adults.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#11). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Blue Petrel *Halobaena caerulea*

This dainty little petrel can easily be confused with the prions for in size and general appearance it closely resembles the birds of that genus. It is believed, however, to be more nearly related to birds of the genus *Pterodroma*. Because of the uncertainty of its ancestry it is placed in a genus of its own.

It is a pelagic species with a broad circumpolar distribution extending from the southern icepacks to South America, southern Africa and southern Australia. It breeds during Summer on many remote islands in the sub-antarctic and moves to the most northerly part of its range during the coldest winter months, which is when we find it in the seas around Tasmania.

The numbers which reach here seem to vary from year to year and on occasions it is included in wrecks of dead sea birds which wash ashore after cyclonic storms. A notable example of this was experienced in 1984. During August of that year hundreds, perhaps thousands, of sea birds of many species were found dead at various localities along the coast of southern Australia. Among these the Blue Petrel featured prominently. The wreck extended from Perth, Western Australia, to Tasmania and many carcasses were collected for research.

In the three weeks following the first local report on 19 August the Queen Victoria Museum received 112 dead sea birds of 16 species which had been collected along the coast of King Island and eastern Tasmania, and amongst which were 29 Blue Petrels. All the birds were found to be underweight and lacked the usual fat deposits of healthy sea birds. Some were found with a few squid remains in their stomachs and some Blue Petrels were discovered to have eaten Cockchafer Beetles which must have been blown out to sea and fallen into the water during their mating flights.

The usual food of the Blue Petrel is believed to be small fish, squid and krill, and the cutting edges of its beak are equipped with comb-like lamellae to enable it to sieve the tiny animals from the water. It will follow ships at sea and often occurs in flocks. While swimming on the surface it dips to take its food and it launches itself into flight by first pattering with wings outstretched for some distance over the water.

The nearest breeding grounds to Tasmania are on Macquarie Island, where it was first found breeding in November 1898 by J R Burton, an employee of the lessee, Joseph Hatch. Burton then collected the eggs for A J Campbell, who was ornithologist at the Museum of Victoria. In his book, *Nests and Eggs of Australian Birds*, Campbell states: "Mr Burton observed that the small burrows of the Blue Petrels were exceedingly numerous in the peaty ground under the tussock grass, anywhere on the lower levels but chiefly on the East coast. The tunnel is

usually torturous and invariably on the incline before the egg chamber, which is about six inches in diameter, and lined on the floor with portions of tussock grass, is reached.”⁸

Continued breeding that was proven in 1976 when, while undertaking biological studies on birds of the island, Nigel Brothers and Geoff Copson found five separate breeding colonies totalling about 200 pairs.

Birds mostly return to the colonies about September and come ashore only under the cover of darkness to establish burrows and prepare nests. A single egg is laid in November and incubated by either parent for about seven weeks. Most nestlings are fully fledged by the end of February, after which the adults and their offspring, which are alike in appearance, progressively leave the breeding grounds.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#12). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

⁸ Archibald J Campbell, *Nests and eggs of Australian birds: Including the geographical distribution of the species and popular observations thereon* (A J Campbell, 1901, Part II) 914.

Broad-billed Prion *Pachyptila vittata*

Prions are small petrels and belong to a family called the Procellariidae, which also includes the fulmars and shearwaters. The actual number of species is in doubt as authorities still debate the relative taxonomic values of features which have been cited to separate the numerous possible races, hybrids and fixed species. Differing mostly in the shape of the beak, the group appears to be a clear example of divergent evolution from common ancestral stock, the differences have evolved and strengthened in response to living requirements and from the habitat, common to most oceanic birds, of each successive generation returning to breed on the ground from which they themselves fledged.

Of the four species illustrated here, the Broad-billed Prion is perhaps the most striking because of its remarkable wide beak which gives it an almost frog-like appearance and which helps to distinguish it from the other prions. The beak gives an obvious advantage when gathering food, principally krill, in quest of which it hydroplanes with outstretched wings along the surface of the water. Propelling itself with its broad, webbed feet, it scoops up food and water in its beak and holds it in a chin pouch around the base of the tongue. Then, by closing the beak and compressing the pouch, it expels the water through fine, comb-like lamellae at either side of the mouth but retains the marine organisms for eating.

The Broad-billed Prion is a social species, congregating sometimes in great numbers both at sea and on the breeding grounds. It does not follow ships but prefers the company of its own kind, flocks passing over the ocean in unison, rising and falling, twisting and turning in response to the dictates of the wind and as if under the direction of a leader.

It breeds on islands in the South Atlantic and Indian Oceans and in southern New Zealand and adjacent islands. Each year huge numbers return to re-establish the breeding colonies about July and gather to nest in close proximity to each other. Coming ashore after dark, so as to avoid predators such as skuas and giant-petrels, birds squabble noisily as they fight for possession of a territorial burrow. Just how each individual can locate its own nest in darkness, among such a great numbers and in apparently adverse conditions is always a source of amazement. It demonstrates the remarkable homing instincts which birds have developed and use so efficiently.

The nesting burrow is prepared by both sexes. It is usually an old one used in previous seasons, but the bird also nests in crevices and burrow-like sites beneath dense vegetation. Only a single white egg is laid in the terminal nesting chamber. It is incubated by both parents in shifts over a period of about two months. The young become fully feathered and fly when approximately seven weeks old. The sexes are alike, as are sub-adults and adult birds.

Strangely, despite its great numbers on the breeding grounds, the Broad-billed Prion is rarely found around Tasmania and dead beachwashed individuals are always considered noteworthy.

Included within the species is the Medium-billed Prion or Salvin's Prion *Pachyptila salvini*, as it is now generally accepted as merely a race of *Pachyptila vittata* or the result of hybridisation.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#13). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Fairy Prion *Pachyptila turtur*

This is the only one of the four species of prions illustrated here which breed in Australian waters. Ranging from the sub-antarctic islands with a circumpolar distribution, it also breeds on the Falkland Islands, on Marion Island in the Indian Ocean and islands off southern New Zealand. Around Tasmania and in Bass Strait there are many islands which annually support breeding colonies of the Fairy Prion, some in very large numbers, and over these seas it is a common and well known bird.

Although it is of a similar size and general appearance to other prions and to the Blue Petrel, it can be distinguished by the broad, black tail band which extends from the tip to almost the entire terminal half of the tail feathers. Other prions also have a black terminal tail band, but a much less extensive one. In the Blue Petrel the terminal tail band is white. Dead individuals are often found washed up along the shore and this feature is then useful in establishing identification.

At sea the Fairy Prion, or Dove Prion as it has also been called, might be found either thinly dispersed or congregated in considerable numbers. It flits over the waves with fluttering wing beats as it searches for its prey of small cephalopods, krill and plankton, circling to examine more closely any prospective source of food. Mostly it takes this food by picking it from the surface while fluttering, almost like a butterfly, just clearing the water with its feet dangling. Sometimes it settles on the surface, its buoyant little body bobbing on the waves as it rests between feeding sorties. It patters over the water on broadly webbed feet as it takes flight into the wind.

In stormy weather it has to support flight by a more vigorous wing action, flying in zig-zag motion as it lifts above the swell only to descend again into the partial shelter of the following trough. Here it perhaps feeds briefly from the slanting surface of the waves on items tossed up by the disturbed movement of the sea.

A gregarious bird, it breeds in colonies where its rat-like nesting burrows are close to each other. They are excavated in loose soil some metres back from the shore line. Birds return to the breeding islands from August and then spend some weeks in courtship and the selection of nest sites. Egg laying does not begin until November.

In my field notes of 26 November 1959, made following a visit to Mutton Bird Island of the south-west coast of Tasmania, I recorded that the species had just commenced to incubate eggs. The nest was in a chamber, occasionally lined with some vegetable matter, at the end of a crooked, rat-like burrow, about five centimetres in diameter and up to a metre in length. Many hundreds of birds were then nesting in close proximity to brooding muttonbirds.

Nesting chambers are sometimes formed beneath densely growing vegetation or in crevices under stones. In fact any site which will provide seclusion and protection from predatory

gulls might be used. Unfortunately in some colonies the Fairy Prion is preyed upon by rats which can decimate its numbers.

After the single white egg is laid the female goes to sea to feed and recuperate and the egg is then incubated for six or seven days by the male until her return. The task from then on is continued by both parents in shifts. The egg hatches after about eight weeks and the chick is covered in dense blue-grey down. It fledges and flies when it is about two months old, at which age it resembles its parents, both of which have similar plumage.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#14). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Slender-billed Prion *Pachyptila belcheri*

This little prion was not recognised until 1912 when it was described and named by the eminent ornithologist Gregory M Mathews in his comprehensive *Birds of Australia*.⁹ This came about as the result of the collection, by another prominent bird researcher, Charles F Belcher, of twenty beachwashed prions on the beach at Torquay, Victoria, following a “heavy tempest in June 1911”. Two of these subsequently proved to be of this species and Mathews named them in honour of the collector.

It is interesting to note in *Reader's Digest Complete Book of Australian Birds* (1st Edition)¹⁰ the following entry: “In 1769 the great naturalist Sir Joseph Banks, while sailing with Captain Cook in HMS Endeavour, collected a Slender-billed Prion in the western approaches to Cape Horn. Sydney Parkinson, the artist selected by Banks to draw specimens collected on the voyage, made a sketch of that bird. In 1820 an ornithologist based on this sketch a description of a bird he called *Pachyptila turtur* – the Fairy Prion. Later Parkinson's sketch was re-examined and it was found that the bird he drew had a very narrow bill and must have been a Slender-billed Prion.”

Also known as the Thin-billed Prion and Narrow-billed Prion, this bird breeds only at the Falkland Islands off South America and on the Crozets [Islands] and Kerguelen Island in the southern Indian Ocean. From here it ranges widely and frequently reaches Australia. I have found it to be fairly regularly represented among the carcasses of beachwashed prions which have been passed to the Queen Victoria Museum during my thirty years of office there, although it is not often recorded at sea. No doubt this is a reflection of the difficulty in identifying with any degree of certainty the several species of this genus, especially when seen on the wing and usually in less than ideal conditions.

Its general behaviour closely resembles that of other prions but its diet is said to differ markedly. Research by Peter Harper has shown that it feeds largely on a small pelagic crustacean which it takes mostly at night and the known distribution of which correlates well with that of the bird. While the prion is in gliding flight, just clearing the water, “the zooplankton is deftly picked from the sea with such speed as to frequently deceive the observer's eye.”¹¹ A gregarious bird, it feeds in dense congregations but does not follow ships at sea.

Returning to its ancestral breeding grounds in August, the pairs form and together clean out and prepare nesting burrows. As with other prions, only a single egg is laid. This is done in a nest chamber which usually is lined with local vegetable matter, situated at the end of a short

⁹ Gregory M Mathews, *The Birds of Australia* (12 volumes, Witherby: London, 1910–27).

¹⁰ H J Frith (ed), *Reader's Digest Complete Book of Australian Birds* (Readers Digest, 1976).

¹¹ Peter C Harper, ‘The field identification and distribution of the Thin-billed Prion (*Pachyptila belcheri*) and the Antarctic Prion (*Pachyptila desolata*) (1972) 19 *Notornis* 140, 149.

tunnel in soft soil. The incubation, feeding and care of the nestling is attended to by both parents. The size and plumage of both sexes and those of the flying young are similar.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#15). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Antarctic Prion *Pachyptila desolata*

This is a relatively common bird in the oceans around Tasmania, judging by the regularity with which it turns up in beachwashed wrecks. It is not often, however, recorded at sea, probably because of its similarity to other members of its genus and the difficulty of identifying it positively. More tolerant of cold conditions than other prions, it ranges to the shores of Antarctica, where it has been recorded breeding at Cape Denison, as well as in islands in the southern Atlantic and Indian Oceans, Macquarie Island and some islands to the south of New Zealand.

A gregarious bird, it often feeds in dense congregations, mostly on krill but also on small cephalopods. To gather its food it hydroplanes across the surface, scooping up krill and water as it goes, then, by means of comb-like lamellae along each side of its mouth, it expels the water but retains and swallows the organisms, much in the manner of its near relative, the Broad-billed Prion. Like other prions it ignores ships, no doubt because its dietary requirements and method of feeding do not include garbage and scavenging.

Other English names which have been applied to it are Dove prion, Whale-bird and Snowbird, but because of confusion in determining actual species these names have also been used for other prions. The generic name is derived from Greek and means “thick feathers”, while the specific part of its name comes from the Isle of Desolation, by which name Kerguelen Island, where it still breeds today, was once known.

In his *Nests and Eggs of Australian Birds*, published in 1901, A J Campbell quotes Sir Walter Butler’s observation in New Zealand: “In boisterous weather it appears to suffer more than any other oceanic species from the fury of the tempest, and the sea beach is sometimes found literally strewn with bodies of the dead and dying. I have frequently watched them battling, as it were, with the storm, till at length, unable longer to keep to windward, they have been mercilessly borne down upon the sands, and, being unable from sheer exhaustion to rise on the wing again, have been beaten to death by the rolling surf, or pounced upon and devoured by a hovering Seagull.”¹²

The Antarctic Prion is a late breeder and birds do not return to the breeding grounds until about October. Like other prions it nests in dense colonies, in rat-like burrows in loose soil or beneath heavy vegetation. At the end of the burrow the enlarged brood chamber is formed and sparsely lined with local plant matter. The single white egg is not laid until December.

Incubation is undertaken by both parents in shifts of three or four days duration, and the chick hatches after about six weeks. The down-covered nestling is then fed by both parents carrying back and regurgitating semi-digested marine organisms until it fledges, leaves the shelter of

¹² Archibald J Campbell, *Nests and eggs of Australian birds: Including the geographical distribution of the species and popular observations thereon* (A J Campbell, 1901, Part II) 917.

its burrow and flies at about seven weeks of age. In May the colony is again deserted as the adults and their offspring, which are all of similar plumage, have left the area to journey on their annual oceanic travels until the following Spring.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#16). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Short-tailed Shearwater *Puffinus tenuirostris*

The privilege of witnessing the vast numbers in which this bird congregates, both while at sea and on its breeding grounds, is an unforgettable experience. No description, from the early account of Matthew Flinders to those of modern writers, can do it justice, for words cannot adequately impart the reality.

My earliest experience with the bird was in South-west Tasmania in November 1959 when I was fortunate enough to accompany Rupert Denne, a commercial crayfisherman, on one of his regular trips to the region. There I found it breeding on every suitable island and the total south-western population must have been numbered in the millions of birds.

In my notes of that trip I recorded: "At dusk on the evening of 25 November, while returning to shelter overnight in Port Davey, we encountered huge numbers of birds returning from feeding waters to their breeding islands. Near the Caroline Islands, rafts of birds were forming on the sea, like great black blankets, stretching for hundreds of yards, the birds settling, rising and resettling like dark clouds in the failing light of dusk. Some few minutes later the rafts commenced to break up and from the deck, silhouetted against the night sky, the birds could be seen streaming towards their breeding grounds in countless thousands." So impressive was the experience that I noted, "the sight will live in my memory for ever."

Those massive congregations occur annually in the seas around Tasmania and throughout the Bass Strait during the breeding season, which extends from the time when the adults return at the end of September until they, followed by their offspring, which are like them in appearance, depart on their northwards migration in April and May. The total population of the species, which breed only in this region, has been estimated to number about twenty million birds.

The nest is a chamber at the end of a small, rabbit-like burrow in loose sandy soil. Nests are often in such profusion as to make the surface difficult to walk across, as the ground breaks in beneath the walker's weight.

The Short-tailed Shearwater, also called the Slender-billed Shearwater or, more commonly, Muttonbird, from the days when it formed an important part of the diet of the sealers and first settlers, has remarkable powers of flight but is awkward and greatly disadvantaged on land. Coming ashore only for the purpose of breeding, something which does not occur until the birds are about five years old, it literally crash-lands with such clumsiness as to leave one wondering why it does not suffer injury. Although silent and peaceful at sea, on the colony at night it is raucous and squabbling as birds sort themselves out and locate and tend their nests. With the approach of dawn an exodus begins.

The birds have great difficulty in becoming airborne from flat ground, so they gather at cliff tops and ledges from where they can drop to gain momentum. A rock platform used for this

purpose for perhaps thousands of years becomes smooth, almost glassy, from polishing by the birds' breasts.

The single white egg, laid about 25 November, hatches in about 53 days and the fat, downy young reaches maturity at about three months. If it has not been included among the many thousands which are annually harvested for sale as a culinary delight, it then follows the adults on the yearly migration to circumnavigate the North Pacific and over-winter in the Aleutian Islands.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#17). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Sooty Shearwater *Puffinus tenuirostris*

This widely ranging shearwater occurs over most of the world's oceans, from the Antarctic to the North Pacific and North Atlantic. Its principal breeding grounds are on the islands off southern South America and New Zealand, but some also breed on Macquarie Island and on a few islands off the coast of New South Wales and Tasmania, usually in association with Short-tailed Shearwaters. Because of its great similarity to that numerically superior species, its presence can be easily overlooked. Seen in the hand, its slightly larger size and a pale underwing patch are features by which this otherwise black shearwater can be distinguished, but identification in the air is difficult.

Like the Short-tailed Shearwater it is strongly migratory and moves from its southern breeding ground to the Northern Hemisphere outside the breeding season. Studies of its movements, however, are as yet incomplete and its occurrence in Antarctica and other rather unexpected places suggest that young and non-breeding birds may have nomadic tendencies.

A gregarious species, it flies strongly and swiftly on stiffened, outstretched wings as it sweeps over the ocean, rising and falling as it uses the winds to maintain momentum. It flies with as little flapping as necessary.

It feeds on plankton, crustaceans, squids and small fish which it takes from near the surface by plunging or swimming, sometimes in huge concentrations, over waters where a shoal of prey has been found. At such times the mass of birds seems to "roll" over the ocean as those from the rear of the flock progressively leap-frog to the front of the raft, setting up a continuous motion. Items may be plucked from the surface or chased underwater, the bird using its wings and large webbed feet for propulsion.

The breeding season conforms to that of the Short-tailed Shearwater. Birds return to the breeding grounds in September, establish ownership of a plot and scratch out and prepare a burrow and nesting chamber in readiness for laying. They then temporarily abandon the site, taking a three week "honeymoon" at sea while the egg develops. From late November until well into December the birds come back to their prepared quarters and then the female lays her single, relatively large, white egg.

The responsibilities of incubation are shared by both parents in shifts of one or two weeks until, after about two months, the egg hatches. The nestling is clothed in thick grey down and is fed at night with food which is carried back by both sexes in their stomachs and regurgitated in a semi-digested state into the beak of the hungry, waiting young in such quantity as to sometimes almost double its weight.

As fledging nears completion the adults desert their offspring which must then survive in the nest on its reserves of body fat until it is able to fly. Encouraged by increasing hunger and supported by well-developed feathers, it finally leaves the burrow at night and flies to the sea.

This happens when it is about three months old, usually during the month of April. By the end of May the breeding grounds are completely abandoned until the following Spring.

As with its close relative, the Tasmanian “Muttonbird”, the nestlings of the Sooty Shearwater are sometimes taken from the burrows by humans to be eaten. It is, in fact, the Muttonbird of New Zealand, where the Maoris have for long used it for food. The sexes, as with the Short-tailed Shearwater, are alike, and sub-adults resemble adults.

Two other all dark shearwater species have been found in Tasmania waters. These are the Flesh-footed Shearwater *Puffinus carneipes* and the Wedge-tailed Shearwater *Puffinus pacificus*, but because of the rarity of local records they are not illustrated here.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#18). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Fluttering Shearwater *Puffinus gavia*

Four species of shearwater with a dark back and white ventral plumage occur in the seas around Tasmania, but of these only the Fluttering Shearwater can be regarded as common. Smaller than the Short-tailed Shearwater, it breeds only on islands around northern New Zealand during the summer months. In Tasmania it appears mostly as a winter visitor, although a few may be found at other times of the year, probably sub-adults which have not attained breeding maturity. It is for the most part a bird of coastal waters, without the highly pelagic habits and vast trans-equatorial migratory movements of the other shearwater species.

Around Tasmania it may be found as solitary individuals or in small flocks, flitting low over waves in swift flight with bursts of rapid wing beats broken by short glides. The name of shearwater is said to come from the bird's habit of skimming over the sea, barely clearing the water as it swoops down into the troughs between waves. The generic name was ascribed to shearwaters in 1760 in the mistaken belief that they were puffins, well known birds of the Northern Hemisphere. The specific name, *gavia*, simply means "a kind of gull" and is therefore almost as misleading.

The Fluttering Shearwater does not follow ships in quest of food but hunts for small squids, crustaceans and fish, which it takes from on or just beneath the surface of the water. While swimming it will plunge-dive, lunging forward with wings partly raised in an effort to reach less accessible food items.

Like other members of its genus it is a gregarious breeder, forming colonies at island locations where the species has in all probability been returning to nest for countless generations. Adults arrive back during September but apparently do not delay egg laying with a "honeymoon" at sea as do some other shearwaters. A single white egg constitutes the annual clutch. It is laid in September or October in a chamber littered with a few feathers from the bird's body and a little local vegetable matter, at the end of a short burrow in soft soil. Both sexes, which are alike in appearance, take turns at incubating the egg.

The young is covered with greyish-brown down and is brooded by one of the parents for several days before being left alone during daylight hours in the warmth and shelter of its burrow. From then on the parents visit only during darkness to feed it with semi-digested food which they carry back in their stomachs and regurgitate for it. The young fledge and fly by February or March, after which the breeding grounds become deserted. The birds then live completely on the sea and only return to the land for the next breeding season.

Three other species of black and white shearwaters which have been found around Tasmania are Hutton's Shearwater *Puffinus huttoni*, Buller's Shearwater *Puffinus bulleri*, and the Little Shearwater *Puffinus assimilis*. Records of these birds are usually the result of beachwashed

carcasses being recovered and examined, but because of the rarity of encounters we have chosen not to include the species among the illustrations.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#19). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey-backed Storm-petrel *Garrodia nereis*

The tiny, tube-nosed Storm-petrels are the smallest of the pelagic birds. There are over twenty species of them in various parts of the world and they are well known to seafarers because of their tiny size — little larger than a swallow —, their fluttering flight and their habit of sometimes following in the wake of ships. They have become the subject of much folklore and legend.

The group name is believed to have originated in the old sailors' superstitions that their presence foretold of impending storms. It is also believed that the nickname of "Mother Carey's chickens", which is still in use, comes from *Mater Cara*, the Divine Virgin, guardian of all seamen.

The Grey-backed Storm-petrel was described and named by John Gould in 1841 in the *Proceedings of the Zoological Society*, London.¹³ This was based on four specimens he collected in eastern Bass Strait in May 1839 and the skins of those birds are now in the Academy of Natural Science, Philadelphia, USA. From that time until 1968 there were few if any records of sightings from Australian waters, though no doubt this resulted from the bird simply not being recognised.

On 10 June 1968 a schoolboy found a number of dead birds around the base of the lighthouse at Eddystone Point in the north-east of Tasmania. They had apparently killed themselves by flying against the building. He was so interested as to collect one of what he later described as "all of the same kind" and send it to the Queen Victoria Museum where it was found to be of this species. A month later another was brought in from Priory, about 16 kilometres inland, having apparently died after striking overhead wires.

The condition of the carcasses indicated that both birds had died about the same time, which suggested the probability that numbers have been visiting the seas of north-eastern Tasmania at almost the same time of year as when Gould had collected his birds. These records demonstrate the importance of salvaging unfamiliar dead birds. On many occasions significant findings have resulted from such material.

Since then the Grey-backed Storm-petrel has been found and recorded quite regularly in seas around south-eastern Australia during the winter months, occasionally in flocks of a hundred or so. As it is primarily, however, a pelagic species it rarely comes close to shore, which probably explains the lack of early records.

Its flight has given it the image of "sea swallow" as it skips gracefully over the water, wheeling and turning to dip low into the troughs between waves where it picks from the

¹³ John Gould, *Thalassidroma Nereis* in *Proceedings of the Zoological Society of London*, (1836) Part IV, meeting held 8 December 1840 with W H Lloyd Esq in the Chair, 178.

surface tiny items of food such as krill. While feeding it seems at times to be almost running along the water with wings outstretched, paddling away on its broad webbed feet. In contrast to most sea birds, its legs are exceptionally large for its size, no doubt an advantage to a bird which feeds in this way and is reluctant to dive or swim to obtain food.

Little is known of its habits or biology. It breeds on islands in the South Atlantic and south of New Zealand during the Summer months, in small, rat-like burrows excavated in soft sandy soil, congregated in loose colonies. Both sexes share in incubating the single egg, which is white and finely freckled with brown around the larger end. Incubation time is as yet unknown but, probably, as with other storm-petrels, extends for up to two months. The pale grey, downy young fledges after a similar period and when it flies to sea it is like both parents in appearance. After abandoning the breeding islands the birds disperse and it is then that the species can be found wandering over the seas around Tasmania.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#20). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-faced Storm-petrel *Pelagodroma marina*

This is the only storm-petrel of the five species recorded from the Tasmanian region which breeds locally. It occurs widely over the warmer parts of the Atlantic, Indian and Pacific Oceans and is a truly pelagic little bird. Its generally paler dorsal plumage, white belly and breast and its distinctive facial markings distinguish it clearly from other storm-petrels.

It breeds on islands in the Atlantic Ocean and on many islands around Australia and New Zealand. Up to six geographic races are presently recognised, only one of which breeds in Australian seas. One of the smallest of sea birds, it is only a little larger than a swallow, which it resembles in its graceful, easy flight, even on the stormiest of days. Rarely does it follow ships or approach the shore.

Its flight is erratic as it skims the wave tops and seems almost to bounce or dance over the water with rapid wing beats interspersed with short glides, often touching the surface with its strongly webbed feet. Its legs are almost stilt-like and extremely long for its size in comparison to other oceanic birds, which swim or dive for food. Such legs and feet serve it well for its manner of feeding.

The White-faced Storm-petrel mostly feeds by picking planktonic organisms from the surface without actually settling on the water. Its weaving flight appears to be a response to impulse as it searches for food and repeatedly dips, with wings extended and legs dangling, to gather exposed items. While feeding at sea it may be found either as solitary individuals or congregated in small flocks.

Breeding colonies are formed on many small islands around Tasmania where there is sufficient sandy soil and cover under which it can burrow and make its nest. Laying happens later than is the case with most sea birds and eggs are usually produced during November.

When I visited George Rocks of the north-west of Tasmania in mid-November 1977 I found it had then only just started to lay, mostly in the recently abandoned burrows of the Common Diving-petrel, which had bred there earlier in the season. As the rat-like burrows were deserted by the young diving-petrels, so the storm-petrels came in, as if for the second shift. The burrows there, and at other colonies I have examined, were generally well concealed beneath such vegetation as *mesembryanthemum* and tussock grass. They were mostly about 50 centimetres in length and terminated in a nest chamber about 12 centimetres in diameter which was usually sparsely lined with a little local vegetable matter. Some searching was required to locate the nests, and the sitting birds conceal their presence by remaining totally silent during the day.

Only a single, pure white egg is produced and both sexes, which are alike in plumage, take turns in its incubation. This takes what, for the size of the egg, is a relatively long time, almost two months. The nestling is clothed in soft, blue-grey body down and is brooded for

only a few days before being left in the nest while both parents fly far out to sea to gather food. They return under cover of darkness and feed the young by regurgitating partially digested food from their stomachs. The nestling fledges and flies when a little over two months old. Pair bondage of breeding adults is believed to be maintained in successive years.

Three more species, not illustrated in this volume, are Wilson's Storm-petrel *Oceanites oceanicus*, White-bellied Storm-petrel *Fregetta grallaria* and Black-bellied Storm-petrel *Fregetta tropica*. All are rare in Tasmanian waters and unlikely to be encountered, which is why they have not been included here.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#21). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Common Diving-petrel *Pelecanoides urinatrix*

This stocky little black and white bird is in many ways quite unlike most of the sea birds. Its short wings and general build greatly restrict its ability to sustain long distance flight, so it does not wander far over the expanse of ocean or undertake long annual migrations in search of food on the surface of the seas as do the more pelagic petrels. Instead, it is much more sedentary, favouring mostly the coastal waters in the vicinity of its breeding islands where, as its name implies, it captures its food by diving. Often it has been likened in appearance and habits to the auks of the Northern Hemisphere, to which it is unrelated, but the two represent an example of convergent evolution.

It rarely rises more than a few metres above the surface and it flies with rapid wing beats alternating with short intervals of gliding. It dives into the face of oncoming waves in horizontal full flight as if to rise above them would take too much effort. Below the surface it uses wings and feet for propulsion and it is a highly efficient underwater swimmer, chasing and catching the small fish and crustaceans on which it feeds. To emerge from the water it bursts out of the waves like a flying fish and without the slightest hesitation beats its way on whirring wings for a little distance before again plunging into the sea. This underwater propulsion has been aptly described as “flying through the water”.

The nostrils on top of the short, stubby beak have evolved the better to equip the bird for this activity as they open upwards and are protected by flaps which reduce the entry of water into the nasal cavity when it plunges into the waves. The plumage likewise is suited to these submarine habits, being oily and extremely dense and thus providing the little petrel with almost total waterproofing and insulation from the cold.

To initiate flight from a flat sea in calm conditions it paddle-runs along the surface on its webbed feet, beating its wings vigorously until enough momentum is gained for it to become airborne. On the breeding grounds it has similar problems in taking off and so prefers steeply sloping areas where it can more easily “fall into the wind”.

The Common Diving-petrel is to be found breeding on islands in the seas around southern South America, in the South Atlantic and southern Indian Oceans, and around New Zealand and south-eastern Australia. A number of geographically separate races are involved, only one of which occurs here. It is an early breeder, congregating on small isolated islands to form nesting burrows in the soft, sandy ground.

On 26 November 1961 I was fortunate to be able, with three companions, to make a landing on precipitous Black Pyramid Island in the western approaches to Bass Strait. Although the main objective was to study and band gannets, we also found time to examine other areas, where rat-like burrows were noticed. These were the nesting places of Fairy Prions and Common Diving-petrels in a mixed colony numbering many hundreds. Many of the prions

were still incubating eggs, but the diving-petrels all had well advanced nestlings, their soft, fluffy body down being a deeper blue than that on the much smaller prion nestlings.

Incubation is said to last about two months and to be undertaken by both parents in shifts. The young become fully fledged and fly after another two month period, by which time they are similar in appearance to the adults of both sexes. From these data I estimate that, on Black Pyramid, eggs would have been laid about mid-August. A J Campbell in his *Nests and Eggs of Australian Birds* records the species as breeding on Macquarie Island with eggs being laid in late October and November.¹⁴ An egg in my private collection was taken from there by J R Burton for Campbell and is dated November, 1898.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#22). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

¹⁴ Archibald J Campbell, *Nests and eggs of Australian birds: Including the geographical distribution of the species and popular observations thereon* (A J Campbell, 1901, Part II) 920.

Royal Penguin *Eudyptes schlegeli*

Much confusion still exists as to the taxonomic status of this penguin. Some authorities consider it to be only a Macquarie Island sub-species of a greater population known as the Macaroni Penguin *Eudyptes chrysolophus*, which lives also in the southern Atlantic and Antarctic seas between South America, Antarctica and around remote islands in the southern Indian Ocean.

The population which breed on Macquarie Island, known as Royal Penguins, mostly have white throats whilst birds from elsewhere have black throats. As the birds which we find washed up on the shores of Tasmania, of which there are now numerous records, are all white throated, I have chosen to stay with the name of Royal Penguin. Mostly these beachwashed carcasses are found in late Summer and early Autumn and are of sub-adults which have failed to survive their weaning period and early independence after fledging and leaving their breeding grounds in February. They can be distinguished from mature adults by their slightly duller plumage and shorter, less-developed head tassels.

Like all other penguins the Royal is a superbly efficient underwater swimmer. Propelling itself with its flippers and steering with its feet, it darts along like a seal or dolphin and so can attain a much greater speed submerged than when swimming on the surface. Its body is protected from the cold southern water by its very dense waterproof plumage which holds a blanket of warm air in the underlying dry body down and thus provides excellent insulation.

It is believed to eat mostly krill and cephalopods and while at sea it does not call. However, when ashore on the breeding grounds it displays with loud trumpeting, barking, baying and chattering.

The Royal Penguin comes ashore only to breed and moult. Breeding males return to Macquarie Island in late September and select a nest site on exposed, gently sloping ground. They are followed a week or so later by the females. Gregarious by nature, they congregate in dense colonies and mostly in large numbers, travelling from the sea to the colony along established pathways with waddling, upright stance on the short, strong legs with flippers spread to assist balance.

The nest is merely a shallow depression lined with pebbles and a little local vegetation. Each breeding female lays two white eggs in late October, about four or five days apart, the first being considerably smaller than the second. Although both eggs hatch after about five weeks only one chick, invariably that from the second egg, is reared, the other being apparently left to die of starvation.

Both sexes take turns at incubating, but most of this is done by the female. The male takes responsibility for guarding the chick for the first three weeks, after which it joins with others to form a creche while both parents go to sea to gather food. The young is fledged and able to

go to sea when about ten weeks old, in early February, and after that the adults come ashore to moult on the breeding grounds. The sexes are of similar plumage and do not attain breeding maturity until they are at least five years old and mostly not until the age of seven to nine years.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#23). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Fiordland Penguin *Eudyptes pachyrhynchus*

About 18 species of penguins are presently recognised, ten of which have been recorded from Tasmania. Except for the Little Penguin, which breeds locally, all are vagrants which sometimes come ashore for brief periods or, as is more often the case, are found dead or dying. Of these the Fiordland Penguin, also known as the Thick-billed or Crested Penguin, which breeds in New Zealand, is probably the most regular visitor. The genus comprises six very similar species, all with yellow head plumes or crests, and these are difficult to tell apart, especially the sub-adults, to which age group the beachwashed birds usually belong.

The name “penguin” is said to come from two old Welsh words meaning “white headed” and was applied originally to the now extinct Great Auk. It was later given by the early seafarers to the somewhat similar but quite unrelated southern birds. The generic name means “good diver” and the specific name for the Fiordland Penguin means “thick-billed”.

This species is mostly restricted in its distribution to the seas around southern New Zealand, straggling westwards to south-eastern Australia. It eats fish, krill and cephalopods taken while it is swimming underwater, propelled by its powerful flippers. Its movement is such that it virtually flies through the water while the feet, trailing behind, act as a rudder. On the surface it rests with only its head and shoulders above the water and, although it can then swim well, its greatest speed is attained when submerged, moving rather like a seal and surfacing only briefly to breathe.

As might be expected in a bird which has evolved for an almost totally marine life, its feathers grow densely over the whole of its body and not just in distinct tracks as do those of birds with non-marine habits. This provides the penguin with waterproofing and retains a blanket of dry, warm down next to its skin as insulation. The firm, shiny outer surface of the feathers also contributes to the streamlining effect of its torpedo shaped body, listening resistance as it darts through the water.

The breeding grounds of the Fiordland Penguin are on the west coast of New Zealand’s South Island and on associated coastal islands. There John Warham, a noted ornithologist who has devoted many years to investigating the life of sea birds, has studied their breeding habits. The penguins return to their ancestral grounds during mid-Winter, often to the same nest site and with the same mate as in previous years. They gather in small, scattered groups among boulders or beneath heavy rainforest which provides protection from extremes of temperature and there they nest in a crevice or cave or among tree roots.

The nest is formed in a suitable depression with the addition of a few pebbles, debris and feathers from the bird and in it the clutch of two white eggs is laid, usually in early August. Incubation is undertaken by both parents in long shifts and extends over about five weeks. Rarely do both chicks survive for long, the smaller and weaker apparently dying of starvation. The surviving young is guarded by the male and fed daily by the female for about

three weeks, after which it joins with others in a crèche, to be fed by both parents until it is about 75 days old, at which age it is fledged and goes to sea with its parents.

After some two months the adults return to the breeding ground to moult and remain there, fasting, for about 25 days, by which time their new plumage is sufficiently developed to enable them to take to the sea again. They spend the next four months in the water, feeding in preparation for the next breeding season.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#24). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Little Penguin *Eudyptula minor*

A rather pugnacious bird, the Little Penguin is the smallest member of the family and the only penguin to breed in Australia. Its distribution extends to waters around New Zealand where it also breeds, the population there being believed to comprise several localised races. It lives mostly in coastal waters although long term, dedicated studies by Pauline Reilly and others have shown that young birds wander far from their natal islands. Birds identified by a small, numbered metal tag attached to the base of a flipper have been recovered about 1800 kilometres from where they had been tagged as nestlings. Adults are inclined to be much more sedentary and are believed to remain in the vicinity of their breeding grounds throughout the year.

The Little Penguin, also known as the Little Blue Penguin or Fairy Penguin, is, like other members of the family, beautifully adapted to life at sea. With a torpedo shaped body and warmly clothed and waterproofed with dense, stiff feathers that lie close and provide streamlining, it virtually “flies” through the water. Propelled by its strong flippers it chases the small fish upon which it feeds, steering by using its feet and tail as a rudder.

On land it is far less agile as it trundles along, walking upright but with a slight stoop and often stumbling over objects. It comes ashore only when breeding and then usually follows a predetermined course or pathway by which it can gain the most convenient access to its nesting ground. Such landings are always made at night and it is never found on open ground during daylight.

Gregarious by nature, it congregates, at some places in great numbers, to breed in rabbit-like burrows which it digs out in soft, sandy soil. These are situated beneath boulders, in dense vegetation or even under boatsheds along the shore. Breeding grounds are ancestral and most have been used for countless generations, with established pairs tending to return to the same burrow in successive years.

During the last two weeks of November 1959 I was fortunate enough to be able to land on and explore a number of small islands off the south-west coast of Tasmania, by the kind courtesy of Rupert Denne, a local fisherman. There I found the Little Penguin breeding in great numbers, in burrows and in rocky clefts. Because of the rugged shoreline the penguins' entry to their breeding grounds was often restricted to a few points, such as the head of a narrowing gulch. In one gulch I found a well worn pathway leading to a place where the birds' ascent was impeded by a rock ledge 30 centimetre or so high, over which they were forced to scramble. The antiquity of the access was strikingly illustrated by the degree of wear on the lip of the ledge where the hard stone had become polished as smooth as glass by the birds' breasts rubbing against it over countless years and by the deeply scribed vertical grooves worn in the face by their claws as they had clambered up and over.

In Tasmania the Little Penguin begins to breed in September and may continue to do so throughout the Summer when a second brood may be produced. Two white eggs form the clutch with incubation, which lasts about five weeks, being undertaken by either parent while its partner feeds at sea. When they are about two weeks old the chicks are usually left in the nest while both parents gather food, bringing it back in their stomachs to be regurgitated directly into the chick's mouth. The young fledge and go to sea at about two months of age. The sexes are similar in appearance.

On the breeding grounds the penguins are noisy, yapping and braying loudly as they display and squabble. They defend the burrows vigorously against intruders, fighting with beak, feet and beating flippers in a flurry of indignation.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#25). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Australasian Grebe *Tachybaptus novaehollandiae*

“Rump-footed” is the meaning of the name of the Order of birds, Podicipediformes, to which grebes belong. Their legs are positioned at the rear of the body, a feature which equips them exceptionally well for their aquatic life, but means that out of the water they have an awkward and unbalanced appearance.

Grebes are found on every continent except Antarctica and the Australasian Grebe is one of three species which occur in Australia. A bird of the more sheltered freshwater ponds and lagoons, it ranges widely and reaches many islands in the south-west Pacific region. It has strong nomadic tendencies, appearing overnight on a body of water, remaining a while and again moving on. It is rarely seen in the air as it does all its flying under the protection of darkness.

During daylight hours the Australasian Grebe rests on the surface over deeper water, usually well away from the shore, where it is less likely to be suddenly disturbed and has a greater view of its surroundings. Feeding is carried out mostly in the mornings and evenings by diving from the surface and swimming underwater for up to a minute before resurfacing some little distance away. Its food consists of a variety of items, including tiny fish, molluscs, crustaceans and aquatic insects which it hunts and eats during its underwater foraging.

Unlike most diving and swimming birds, grebes do not have webbed feet, but the toes are equipped with stiffened flaps, somewhat similar to those of coots, which serve as paddles to assist propulsion. As well as for the purpose of feeding, diving is resorted to in order to escape from predators such as raptors, or in response to the approach of humans. Then the grebe quickly and silently dives underwater and swims perhaps 30 metres before cautiously rising to the surface a minute or so later.

Once called the Black-throated Grebe and sometimes referred to as a “dabchick” or “diver”, the Australasian Grebe is far more numerous on the mainland than in Tasmania. Here it is more a nomadic visitor and had not been recorded breeding on the island until 1965 when, during October, James Napier found a pair nesting among water weeds on a pond near Campbell Town. In that year there was a greater than usual influx of water birds into Tasmania and Napier’s deductions and diligent persistence eventually lead him to the discovery.

The nest is formed by the birds gathering a quantity of aquatic weeds and piling the material together in a quiet and semi-secluded site, well out from the shore. In deeper water the nest actually floats, being only slightly attached to the surrounding or sub-surface vegetation. Four to six bluish-white eggs, often lime coated and nest stained, are laid in a slight depression on top only just above water level. Both parents share in incubation, which lasts for about three weeks.

The sitting bird sometimes camouflages itself with bits of surrounding vegetation and when leaving the nest will quickly flip material over the eggs to conceal them before silently gliding into the water and swimming away, submerged, so as to prevent detection of its presence near the nest. The sexes are similar in appearance, but they are more strikingly coloured about the head when breeding than at other times of the year, such as during the Winter months, when they greatly resemble Hoary-headed Grebes.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#26). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Hoary-headed Grebe *Poliiocephalus poliocephalus*

The hoary head which has prompted the English name given to this bird is not often seen in Tasmania. It is caused by the elongated white plumes which adorn the head of both sexes when the birds are in breeding condition. At other times the head is a plain dark grey. Although it is a common bird in Tasmania there are a few records of it breeding here and the population fluctuates with periodic movements to and fro across Bass Strait.

It occurs widely over most of Australia, but mostly in the more southerly regions, living on lakes, lagoons and estuarine waters. It is a highly nomadic species and individuals or pairs will sometimes visit small farm dams for a few days before moving on, while greater numbers are often found on larger bodies of water where they scatter and feed independently.

Rarely is the Hoary-headed Grebe seen to fly except when, with laboured, rapid wing beats, it appears almost to run across the surface or to flap, just clearing the water, for a few metres. Transitory or long distance flights are almost always made during the hours of darkness, probably so as to avoid predation by raptorial birds.

As is the case with other species of grebe it dives for its food, which comprises small aquatic invertebrates, caught and swallowed while the bird swims underwater. At other times it rests, floating on the water, but when disturbed or alarmed it will dive beneath the surface, to emerge some distance away and cautiously survey its surroundings.

It breeds in late Spring on weedy lagoons, sometimes in communities made up of dozens of pairs. It builds its nest by gathering the foliage of water plants and piling it amongst floating vegetation, usually well away from shore and on an otherwise exposed stretch of water. On top of this pile the clutch of three to five pale bluish-white, limy and heavily nest-stained eggs is laid in a slight depression, sometimes barely out of the water.

The strongest breeding congregation I have ever experienced in Tasmania was in mid-December 1967. About a hundred birds had gathered on Little Cask Lake, a lagoon at the northern end of King Island. Breeding had then only just commenced and nests were in various stages of completion, spread out over a weedy section of the water. Six nests were found to contain eggs and several other platforms of green weed seemed ready to receive eggs. The birds were shy and upon my approach near to the water's edge the breeding birds partly covered the eggs with wet nesting material, slipped quietly into the water and swam away beneath the surface to join the others on the more distant parts of the lake.

Max McGarvie, an ornithologist and long term resident on the island, has also found this species breeding on other lagoons in other years. On Flinders Island J B Neild, who observed birds there for many years, found it breeding on a lagoon near Trousers Point in October 1938. Most records of nesting on the mainland of Tasmania are only of isolated pairs.

Both sexes, which are of similar appearance, take turns in incubation, which probably last about three weeks. The young swim with their parents and often ride on their backs, concealed and protected among the feathers. They may even be carried in this way when the adults dive.

As with other grebes, the Hoary-headed Grebe lacks a developed and functional tail, thus adding further to its unbalanced appearance on those rare occasions when it climbs out of the water. Instead, the prominent feet serve to aid steering, both underwater and in flight.

An example of the nomadic habits of this bird was the discovery of two living on Macquarie Island from August to November in 1975 by biologists of the State Parks, Wildlife and Heritage Service.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#27). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Great Crested Grebe *Podiceps cristatus*

Considerably larger and more impressive than the preceding two species, the Great Crested Grebe is, except when it is breeding, a bird of the larger and more exposed expanses of water. Known also by the name of Tippet Grebe, it is found in Eurasia, Africa and New Zealand as well as southern and eastern Australia.

It is not often seen in Tasmania and its appearance here is mostly a result of periodic movements across Bass Strait. Most sightings have been of a single bird, swimming and occasionally diving, the crested head adornment, from which the second part of its scientific name is derived, standing out and so helping distinguish it from other grebes or indeed from ducks. It has been recorded from several highland lakes, on parts of the Tamar and Derwent Rivers and at Pittwater near Sorell where in excess of 200 were living during the Winter of 1960.

Not until 1971 was it found breeding in Tasmania. In December of that year J R Napier's experience and diligence resulted in him finding seven nests, all occupied by incubating birds and partly hidden amongst a luxuriant growth of Water Ribbon on Lake Dulverton. The nests were within eight to thirty metres of the shore and in Napier's words: "an investigation in a small boat to two of these nests revealed five eggs in each, one egg of a clutch been chipped. The adults were extremely quiet, not leaving their eggs until the boat was within 15 feet and then swimming close by, uttering guttural oaths of indignation."

Napier and others revisited the area on numerous occasions for the following six months and found further nests, some as late as March. These were considered to be a second nesting of the colony. Over the time many young were found in the company of their parents, sometimes feeding amongst the Water Ribbon and sometimes far out in the open waters of the lake. On several occasions adults were seen swimming with chicks carried on their backs, a charming habit which is characteristic of grebes.

The eggs are a dull green and soon become heavily nest stained. Incubation is believed to be done mostly by the female, the male relieving only for a while when she leaves to feed. Eggs take up to 28 days to hatch, after which the chicks swim and start their aquatic way of life.

Grebes have a remarkable habit of eating their feathers and will even feed them to the young. This is thought perhaps to help in protecting the digestive tract from the spines and bones of fish which form a great part of their diet, the feathers trapping and binding solid sharp fragments until they pass through. This theory, however, still remains to be proven.

The Great Crested Grebe eats mostly fish, which it chases underwater and catches in its beak. Propelled by kicking with its short legs and flanged toes, it has a good turn of speed and great agility, and will dive to a considerable depth in pursuit of its prey. In addition it takes aquatic insects, molluscs, crustaceans, tadpoles and a little plant material.

When the bird is not breeding the tippets, or neck adornments, are greatly reduced in length, the forehead crest is less prominent and the crown is browner. At this time it is more silent as its shrill and varied calls are primarily associated with courtship display and territorial defence.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#28). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Black-faced Shag [formerly Black-faced Cormorant] *Leucocarbo fuscescens*)
[*Phalacrocorax fuscescens*]

Confusion has arisen in the past from the naming of this bird, which was once known as the White-breasted Cormorant. As there are four species of cormorants with white breasts living in Australia, the appellation, "Black-faced" has more recently and more appropriately been used for this, the only one of them in which the black feathering of the head extends down to below the eye line. As well, it is now called a shag rather than a cormorant, in conformity with the use of the terms in Britain, where the former refers to marine species and the latter to those which favour a fresh water habitat.

The Black-faced Shag is restricted in its distribution to the south coast of Australia and it is a common bird all around Tasmania. A coastal species, it enters sheltered bays and estuaries, but seldom if ever moves far up rivers to feed in fresh water.

Its diet consists of small fish and squid which it catches while swimming under water, having initiated a dive with a little leap from the surface as if to provide greater momentum. It may stay beneath the surface for up to half a minute before resurfacing for air or to manage and swallow its catch. After a similar time it will dive again to repeat the procedure. It swims underwater by propelling its elongated and streamlined body with repeated kicking of its large, webbed feet, its wings and tail partly spread to guide its direction.

Flight is laborious and to rise from the water it runs along the surface, wings flapping vigorously, for some distance before eventually becoming airborne. Rarely does it ascend to any height, preferring usually to pass a few metres above the water.

There are numerous breeding colonies on rocks and small islands all around the Tasmanian coast. Some are on a relatively flat, rocky shore, while others are on ledges or in crevices of a steeply sloping cliff face. Such sites usually stand out from a distance because of the whitewashing effect of the birds' excreta. Breeding congregations can number from a dozen or so pairs to hundreds. The first pairs to establish themselves and lay choose the prime nesting positions and later arrivals occupy sites on the perimeter, gradually adding to the extent of the colony.

The shags carry seaweed and other marine debris and pile it in a mound to form a rough nest on the rocks just above the reach of high tide. Egg laying starts in August and continues into October. Three or four elongated, oval, bluish-white eggs form the usual clutch, the shells having a limy appearance and tending to become heavily nest stained.

In areas where they are not often disturbed, the brooding birds sit tightly, allowing a visitor to approach to within a few metres before taking flight and settling some little distance away, either ashore or afloat and partly submerged. The shag is mostly voiceless except during courtship when it makes guttural noises.

When first hatched the nestlings are quite naked but within a few days they begin to develop a covering of down which is dark except for the under parts, where it is a dirty white. They are fed by both parents, who regurgitate partly digested fish for them to take from the throat. As fledgelings develop they tend to congregate near the water's edge.

These sub-adults can be recognised by their plumage which is significantly less brilliant than that of the adults. Both sexes of the adult Black-faced Shag when in full breeding plumage present a strikingly handsome appearance, the pure white breast contrasting with the black back.

A somewhat similar bird, the Pied Cormorant *Phalacrocorax varius*, has been found in Tasmania on only one or two occasions.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#29). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Great Cormorant *Phalacrocorax carbo*

This is the largest cormorant in the world and occurs widely in the Northern Hemisphere, where it is known, appropriately enough, as the Common Cormorant. It ranges from Nova Scotia and Labrador through Greenland, Iceland and Eurasia, and south to Africa, Australia and New Zealand. The Australian birds form a separate race and are found all over the continent. The Great Cormorant was for many years known by the local name of Black Cormorant, in keeping with the meaning of its scientific name.

In Tasmania it might occur almost anywhere, from the coast to the highlands, but it favours a fresh water over a salt water environment. On occasions I have found it in areas of highland forest where it has followed rivers in search of fish. The introduction of trout into our lakes and rivers has provided it with a welcome addition to its diet and its appetite for this delicacy has brought it into disfavour with many anglers. Likewise it has benefited from the introduction of European perch and tench which are now in many small lakes and streams and which supplement the few species of native fish and eels previously available to it.

The Great Cormorant is an underwater hunter. It floats and swims low on the surface, from where it dives to search for its prey. Propelling its streamlined body by kicking with its large, webbed feet and assisted by slight movements of its wings, it chases fish to a considerable depth. The hook on the top of its beak aids in securing its slippery catch which is then carried to the surface and juggled around in the beak until it is turned the right way so as to be swallowed head first.

The bird might stay under water for up to a minute if necessary, re-emerging again some distance from where it dived, then resting and breathing again before returning to the hunt. It is capable of catching fish which are too large for its distensible mouth and throat to accommodate. When this happens, such specimens have to be reluctantly released as cormorants can not or will not dissect their prey. Often, however, injury and trauma have been inflicted on the fish, resulting in its death.

One large fish or several smaller ones will satisfy as a meal and a number will stack up, head to tail, in the cormorant's short digestive tract waiting to be gradually "dissolved" as they pass through. I have examined some birds in which the head region of a large fish was almost completely digested while its tail, still perfectly fresh, was high up in the bird's throat.

The Great Cormorant, like other members of the Family, roosts and nests communally, usually in a quiet and well secluded location among trees along a river bank or the edge of a lake. The nest is formed with twigs and leaves and is placed in a tree or low bush overhanging water, the slightly concaved egg chamber sometimes being lined with aquatic plants.

Three or four limy, bluish-white eggs are laid, mostly during the Winter months. They hatch after about four weeks incubation by both parents. The young fly when about seven weeks old. There are few breeding records from both King and Flinders Island as well as from the mainland of Tasmania, but the majority of the Tasmanian birds are probably nomadic visitors.

Males are slightly larger than females but otherwise the sexes are similar in appearance.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#30). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Little Black Cormorant *Phalacrocorax silcistrotris*

Perhaps the best way to describe this bird is as a small edition of the Great Cormorant. Not only its plumage but also many of its habits are similar to those of its larger relative. It occurs widely over much of Australia, including all of Tasmania and the larger islands of Bass Strait. It is all also found in Indonesia, Papua New Guinea and New Zealand.

Except for the Pied Cormorant, it is the least common of the Tasmanian cormorants and is seen mostly as individuals or in groups of two or three in estuarine waters, along rivers and creeks and on lakes and lagoons, where it feeds on aquatic invertebrates and fish of a lesser size than those taken by the Great Cormorant.

Like other members of the Family of cormorants it catches its food under water. It floats low on the surface with only its head, neck and the top of its back exposed, and dives gracefully by rolling forwards. The catch is brought to the surface to be eaten and fish are swallowed head first so that the spiny fins do not injure the bird's throat or lodge in its digestive tract. After fishing and feasting it flies heavily to some vantage point such as a pile or a dead limb, or on to a bank at the water's edge where it rests to digest its meal and hangs out its wings to allow the feathers to dry.

Its form is elongated and streamlined and might be described as shaped like a submarine. The large, webbed feet on short legs are positioned well back beneath the body, so much so that, when the bird is at rest on the bank, it appears to be propping itself up on its short, stiff tail. It walks with a clumsy, waddling gait and on taking flight from water or land it flaps along with a laboured wing beat for some little distance before gaining enough momentum to become properly airborne.

Full flight is maintained by a series of wing beats alternating with a series of glides, sometimes in company with other cormorants. Trans Bass Strait movements are indicated by its fluctuating numbers and a scarcity of local breeding records. On long distance journeys it will fly in "V" formation or in skeins, head to tail, each bird being assisted by the slipstream of its predecessor.

The only Tasmanian breeding record of the Little Black Cormorant of which I am aware was from the Forrester River near Bridport during Easter 1914 following an expedition by A W Swindells and Jane Fletcher. They found numerous nests of this bird, built among tea trees overhanging the water and in company with those of the Great Cormorant. As eggshell fragments were found in the stick nests and many birds of both species were living along the river, the two ornithologists concluded that the cormorants had bred there during the previous Spring. Land clearing in the area has long since dissuaded these birds from breeding there and the Tasmanian population appears to be maintained by visits of nomadic birds from mainland Australia.

The Little Black Cormorant generally lays four or five elongated bluish-white eggs which have a limy coating and are usually nest stained. The two sexes' appearance is similar and both are believed to share in the task of incubation, which might take up to four weeks. When changing over at the nest they greet each other with a guttural croaking, but at other times they are voiceless.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#31). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Little Pied Cormorant *Phalacrocorax melanoleucos*

Widely distributed and adaptable, the Little Pied Cormorant is here the most numerous and successful member of the Family. It ranges over most of Australia and reaches Indonesia, Papua New Guinea, New Zealand and some islands in the south-west Pacific.

In Tasmania it can be found both on the coast and well inland, in estuaries, along rivers and creeks, on farm dams, lagoons and lakes, in fact anywhere it can find a good supply of food. In addition to small fish it takes crustaceans and other aquatic invertebrates and is a stealthy and clever opportunist.

I had first-hand experience of its instinct and guile in the 1950s after having introduced a large number of tiny Brown Trout to a Midlands water course. Within a year the fish had grown to about five to ten centimetres long and it was then that the cormorants began to arrive. In ones and twos they worked the section of stream in which the little fish were thriving and in the mistaken belief that I could protect my asset I endeavoured to shoot the birds on their arrival.

To my amazement I no sooner shot the one or two new arrivals than another one or two arrived, the very next day. How so many individuals had located the little stream with its abundant supply of fish was a mystery, for until then I had not found cormorants in the vicinity. Although the Little Pied Cormorant was by far the most prevalent visitor, individuals of the other three species also arrived occasionally. I now look back in horror on this, for over some months I probably shot several dozen as they fed in the water or rested ashore.

I examined the stomach of each carcase and invariably found it filled with fish about seven centimetres long, the samples including both Brown Trout and the introduced European Perch. Eventually, with the fish population drastically depleted or possibly wiped out, the cormorants stopped coming and in disappointment I believed that to be the end of my trout. Several years later, however, I found to my pleasant surprise that a number had survived and grown to a considerable size.

This was one of my early lessons in ecology for I then realised that the cormorants had done a great service. They had themselves benefited from a seriously overstocked stream and had fed there until the fish population was too low to warrant further attention. At such a level there was sufficient space and food for the surviving fish to mature. Had it not been for the cormorants they probably would all have starved.

Despite its prevalence in Tasmania there are relatively few records of it breeding here and the population is maintained by infusions of mainland bred birds. Alfred North, quoting R N Atkinson in his 1912 *Nests and Eggs of Birds*, details a breeding colony in tea tree on the

edge of a swamp on Flinders Island on 20 October 1909 which contained eggs,¹⁵ and David Rhodes, a keen bird observer and long term resident at on the island, showed me where the species had bred for thirty years up to 1966, in which year severe fire destroyed much of the habitat. Max McGarvie of King Island has records of it breeding there over a number of years.

It nests in colonies, usually in close association with other common species, building a rough, bulky stick nest in tea tree leaning over swampy water. There it lays three to five bluish-white eggs which are incubated by both parents for about four weeks. The young fly when about seven weeks old. Females and sub-adults of both sexes are slightly duller and less glossy than adult males.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#32). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

¹⁵ Alfred J North, *Nests and eggs of birds found breeding in Australia and Tasmania* (Australian Museum, Special Catalogue No 1, Vol III, 1912) 335, detailing observation of the Little Black and White Cormorant.

Australian Gannet *Morus serrator*

Gannets are close relatives of boobys and both are oceanic fishing birds, but whereas boobys live in tropical seas the gannets inhabit temperate waters of both the Northern and Southern Hemisphere. The Australian Gannet and the Northern Gannet, which lives in the North Atlantic, occupy similar ecological niches on their respective sides of the equator. Our bird ranges over the seas off southern Australia and across to New Zealand, with breeding colonies on rocks and headlands on both sides of the Tasman Sea.

The gannet has, over the generations, developed a highly specialised and efficient fishing technique. Scanning the ocean from a height of up to thirty metres while patrolling in leisurely flight, it searches for suitable fish. On spotting an acceptable target it dives almost vertically, streamlined with wings folded back, to plunge into the water and disappear. It resurfaces a few seconds later after catching and swallowing its prey beneath the surface and might then rest for a short time before flying off to repeat the action. Because of the great force with which it strikes the water it has evolved with the nostril permanently covered so as to prevent the forced intake of water. It breathes in through the corners of its beak instead.

There are few breeding colonies in Australian waters and the once prolific site on Cat Island in the Furneaux group in Bass Strait has long since been destroyed by the depredations of fishermen. Today the gannet breeds on Pedra Branca, a precipitous rock off the south coast of Tasmania, on Black Pyramid, a similar such outcrop off north-west Tasmania, and on Lawrence Rocks off the south coast of Victoria.

It was my good fortune on 24 November 1961 to be able to land on Black Pyramid, a difficult and, from many aspects, precipitous, barren island. There was no record of a previous landing there. It was indeed a perfect site for birds to breed without molestation. About 250 breeding pairs of gannets were then in residence there, sitting peacefully on the nest mounds which were composed of rotting pigface and other vegetable matter. Piled to a depth of about 20 centimetres with a five centimetre depression in the centre, these structures were heavily cemented with guano.

The clutch was found to be invariably of a single egg or nestling, and all the nests were tended by a sitting bird and were spaced so that each was just beyond pecking reach of its neighbours. Eggs were found in various stages of incubation and nestlings ranged from the newly hatched to those almost half grown. The adults were extremely tolerant of our presence, allowing members of the four man party to move amongst them as we caught each sitting bird to leg band it and any nestling. This was done with individually numbered rings as part of a national study of the birds' movements. Upon release the adults would fly seaward and circle for a few minutes before returning to resume brooding.

Studies elsewhere have shown that both parents participate in the incubation, which takes about six and a half weeks. The young are fed on semi-digested fish carried back and

regurgitated by the parents. They fly when they are about three months old. The sexes are alike but immature birds differ greatly from adults, being mottled brown above with only the belly white. Gannets are mostly silent outside the breeding season but on the colonies they cackle and croak with a variety of sounds, both in courtship and in threat display.

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Australian Pelican *Pelecanus conspicillatus*

Few birds readily attract more attention than the pelican, for its conspicuous form, which prompted the scientific name, together with its grace on the water, ensure that it has great appeal to adults and children alike.

The children's rhyme which runs, "a wonderful bird is the pelican; its beak can hold more than its belly can ..." is, in fact true when the beak is fully, albeit briefly, distended with fish and water. It is used, however, more as a dip-net, to scoop up the fish on which the bird feeds, than as an extra storage compartment prior to swallowing and digestion. Compressing the throat pouch discharges excess water and the catch is then immediately swallowed.

Pelicans occur over most of the world. There are six living species and numerous additional species among fossil records, some of which dates back almost 40,000,000 years. The origin of the bird's name has been lost in antiquity but it was used by the ancient Greeks and Romans and subsequently by most Europeans. The pelican has been the subject of many old beliefs and legends and it has been used as a symbol in heraldry.

The Australian Pelican is restricted to Australia and New Guinea, occasionally reaching New Zealand and some south-west Pacific islands. It is found over most of the continent and, although some localised populations appear rather stable and sedentary, huge numbers will sometimes move far inland to live and breed on the temporary waters of Lake Eyre when it floods following unusually heavy rains and supports an abundance of food.

For such a large and heavy bird it is remarkably graceful both in flight and on the water. Following a laborious, flapping take-off it can soon gain height and will fly in line or in "V" formation as birds position themselves to take advantage of air currents created by the leaders. With the head held back and resting on the shoulders, its flight is promoted by leisurely wing beats interspersed with periods of gliding on outstretched wings. It also makes use of up-welling currents of air to lift it to great heights as it soars and circles in the sky.

In Tasmania pelicans do not venture far inland and the greater number are to be found along the north and east coast where they live in estuaries and sheltered bays. A few follow the Tamar River as far upstream as Launceston and I have seen individuals cruising high over the city. To watch a pelican land on water is to witness a wonderful example of bodily control for such a heavy and slow bird. Setting its two huge webbed feet like floats it glides in with wings outstretched to skim the water surface and settle in a manner which always reminds me of the landing of an old Sunderland flying boat.

The pelican breeds in colonies, of which several small ones on islands in Bass Strait are regularly used. The nest is a scrape in the sandy soil, lined with herbage. Two or three white eggs form a clutch and are incubated by both parents for about five weeks. Both parents also share in feeding the young birds by regurgitating partly digested fish which the young then

takes from the adult's gullet. Once they begin to develop feathers and grow strong enough to walk, they gather in crèches and will take to open water for escape from danger. They fly when about three months old. The sexes are alike in appearance.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#34). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Pacific Heron [now White-necked Heron] *Ardea pacifica*

This large and impressive heron's habitat is the shoreline of rivers, lagoons and swamps. It occurs over most of Australia and occasionally straggles as far as southern New Guinea and New Zealand. Its appearance in Tasmania is irregular and probably the result of nomadic movements by mainland birds responding to seasonal conditions, as happens with most members of the Order to which the Pacific Heron belongs. Though congregations sometimes form on wetlands in various parts of the Australian continent, such has never been found to be the case here. It has been recorded from both King and Flinders Island and locations throughout Tasmania, but mostly as single birds which appear, stay for a short time and then move on again.

It has a timid disposition and is always wary, stalking cautiously in exposed, weedy shallows or along grassy verges. Standing erect, as if to gain better vision, it searches for the small fish, frogs, crustaceans and insects upon which it feeds. Having sighted potential prey it crouches and carefully approaches until within reach, when it strikes suddenly to secure its objective in its long break.

This species might be found in company with the White-faced Heron, as both feed over similar wetlands, but the Pacific Heron's stately stance and long, elegant white head and neck readily distinguish it from other water birds. If disturbed it rises from the water with dangling legs to fly some little distance and perch on a dead limb or other such vantage point from where it can survey its surroundings. After this it might return to feed or fly further afield on its nomadic wanderings. Several deep, guttural croak-like calls maybe added on take-off, and it flies with a slow and steady wing beat, neck folded back against its breast. When well airborne it trails its long, thin, black legs straight out behind its tail.

The Pacific Heron, also known as the White-necked Heron, has not been recorded as breeding in Tasmania. On the mainland it has been found to breed in most months of the year, but mainly from September to March, sometimes as solitary pairs, sometimes in association with other water birds and sometimes in small colonies of its own kind. The nest is simply an unlined and apparently frail platform of sticks on which the four pale bluish-green eggs, which form the most usual clutch, are set. It is situated high up in the branches of a tree, usually over water.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#35). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-faced Heron *Ardea novaehollandiae* [*Egretta novaehollandiae*]

Also known as the Blue Crane, this bird is commonly and widely distributed. Living on wetlands throughout Australia, its range extend also to Indonesia and other islands to our north. In Tasmania it is found in both salt and fresh water, on small offshore islands, tidal flats, along river banks, on the margins of lakes and lagoons, on farm dams and small creeks and on green grassland.

To any person so fortunate as to see it at close quarters in its mature plumage it presents an impressive sight. Its snow white face contrasting with an immaculate blue-grey body which is ornamented with elongated grey plumes.

It has a shy and timid disposition and is always alert, whether engaged in feeding or quietly resting while perched on some vantage point from where it can maintain a clear lookout. Mostly it is found singly or in pairs, but occasionally, in late Summer, nomadic invasions of birds from the Australian mainland take place and at such times, especially in the north of the island, it can be seen in dozens before the birds disperse. These birds wander peacefully about on green pasture picking up insects and, although such congregations have been known to number over one hundred birds, they spread out over a wide area and pay little apparent attention to each other. The invasions seem to be of relatively short or seasonal duration as by Spring the population returns to normal.

The White-faced Heron is an opportunistic feeder and will take a wide variety of prey including intertidal fish and invertebrates and a variety of terrestrial and freshwater animals. Some individuals visit city and suburban parks and gardens and will raid fish ponds to take goldfish, to the astonishment and dismay of the owners.

It is intriguing to watch this heron hunting in weedy shallows. With extreme care it slowly stalks, half crouched and ever alert for the slightest movement from beneath the surface. Once an item is located the bird cautiously approaches to within reach and, taking full advantage of its long, partly recoiled neck, darts with its beak, arrow-like, to seize its prey. Larger items may be carried ashore for more convenient handling and I have seen the edge of a reedy lagoon littered with half-eaten remains of large marsh frogs, some still alive. They have been caught while mating and producing their frothy egg masses among the aquatic growth, brought ashore and then mutilated by a heron.

When suddenly disturbed the White-faced Heron rises laboriously with its long legs dangling, but once clear of obstructions it soon settles into a flight with slow and easy wing beats, its neck recoiled against its breast and its legs carried straight out behind its body.

Breeding occurs from September to the end of the year and about August pairs engage in a complex pre-mating performance, the male dancing around the female in an exaggerated display of its form and plumage. The nest is merely a frail platform of sticks, usually placed

high up in the small branches of a eucalypt, although I have also found them built in pine trees. The same nest may be used repeatedly by the one pair or a new one constructed in close proximity, apparently by the same birds returning in successive years.

Four or five pale blue eggs make up the usual clutch and they hatch after about three and a half weeks incubation. The young stand about the nest as they develop, moving out onto adjoining branches in the last days before flying, which begins when they are approximately six weeks old.

The sexes are alike, but sub-adults have little white around the face and lack the decorative plumes of breeding adults.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#36). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Cattle Egret *Ardea ibis*

From its ancestral homeland in Africa the Cattle Egret has, during the present century, emigrated to many parts of the world to become established and to populate with remarkable success. Eighteen birds were said to have been brought from India and liberated in the Kimberley region of Western Australia in 1933 in the hope that they would eat cattle ticks and so help in the control of that pest. It is now believed that the bird might have reached northern Australia by itself well before that date. Since then it has bred up and moved southwards, first appearing in Tasmania in 1965. It is now a regular trans Bass Strait migrant, arriving over Winter and departing again by November.

The English name is apt because, unlike other egrets which tend to favour wetlands, the Cattle Egret is mostly a bird of the grasslands. It learned long ago to feed in association with cattle and buffalo by following to pick up insects disturbed by the animals as they graze. The beasts pay little heed to the egrets' presence and even tolerate them perching on their backs. Although it is now doubted that they actually eat cattle ticks, they do take insects which cattle and buffalo attract.

Occasionally this bird is found feeding in scattered groups well away from domestic livestock, wandering about in pasture paddocks searching for insects such as grasshoppers. Relatively tolerant of humans and motor vehicles, it will sometimes feed along mown roadside verges, paying scant attention to the passing traffic, its immaculate white plumage presenting a striking picture in contrast to the green grass.

Congregations can number up to several dozens, but usually they do not remain for long in the one area. As well as the Tasmanian mainland, it visits both King and Flinders Islands and, surprisingly, in 1975, the remains of one bird were found on Macquarie Island.

Like that of other egrets its flight is unhurried as it passes from one location to the next and rarely if ever does it vocalise, except during breeding, when a variety of harsh croaking sounds may be uttered.

To date it has not been found to breed in Tasmania, the conditions apparently being unsuitable for its requirements. However, in October and November some birds can be found with cinnamon plumes on the head, neck and back, a feature which develops in both sexes – which are also like in other aspects of their appearance – with the approach of breeding and which is absent in the non-breeding season.

The Cattle Egret breeds in colonies, sometimes in thousands and often in company with other waterbirds. The nest is a concave platform of fine sticks placed in trees or shrubbery over or beside a swamp. It is normally built between November and January. From three to six white eggs slightly tinged with bluish-green constitute the usual clutch. Incubation, which is

performed by both sexes, takes about three and a half weeks and the young fly when they are about a month old.

Among people unfamiliar with this bird it is sometimes mistakenly referred to as a “white crane”.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#37). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Great Egret *Ardea alba*

Among the larger birds of Tasmania there are few, if any, which displays such spectacular grace and elegance as the Great Egret. It is the largest of the five species of egrets which visit the island, which it does when, in its nomadic wanderings, it crosses Bass Strait to live and feed in wetland areas.

It has a world-wide distribution and occurs primarily in the tropical and temperate regions, but vagrants have been found on several occasions as far south as Macquarie Island. In Tasmania it is seen mostly as solitary individuals whose conspicuous, tall white form creates an impressive image when cautiously searching for food with always a wary watch for possible danger or disturbance. Though it sometimes visits inland marshes, its favourite part of the island are tidal swamps and wetlands near the coast, such as along the shores of the Derwent and Tamar rivers and in Georges Bay on the east coast.

The Great Egret feeds on a range of aquatic animals, which it catches in the tip of its long, slender beak. This it does on the edge of the shore or in the water where it will wade in depths almost up to its belly. Small fish are believed to form the greater part of its diet, but it also takes frogs, insects and other invertebrates. With legs and neck longer than other egrets, it can feed in waters of a depth beyond the reach of competitors.

Sometimes it is mistakenly referred to as a “white crane” or even a “white ibis” and although those birds live likewise in wetland areas they are only remotely related to egrets, the striking white plumage being, perhaps, the most confusing factor.

To watch an egret cautiously and patiently hunt for its food is to experience an example of the great stealth and guile with which nature has, by the process of evolution, so finally trained its creatures for successful competition. It, perhaps more than most marsh birds, emulates the patience of a true fisherman as it stands perfectly still, knee deep in water, waiting and watching for unsuspecting prey to approach. Periodically it walks stealthily for a few metres to try its luck in an alternative location. When prey is within reach it crouches slightly before striking with its arrow-like beak, dexterously turning the item so as to swallow it head first.

None of the five species of egrets recorded from Tasmania breed here, the island's birds being vagrant nomads which return to the mainland where they nest in colonies, often in association with other species such as ibis and cormorants. The breeding colonies form in trees and shrubs over swampy waters and the rough stick platforms which serve as nests are used in successive years. The clutch is usually from three to five bluish-green eggs which are incubated by either parent for three to four weeks. The young fly at about six weeks of age. The sexes are alike.

In addition to this species and the Cattle Egret, two others, the Little Egret *Ardea grazetta* and the Intermediate Egret *Ardea intermedia* might, on rare occasions, visit Tasmania and could be confused with their near relatives. Records of these species are, however, so few as not to warrant their inclusion among the illustrations. The Eastern Reef Egret *Ardea sacra* has also been recorded on one or two occasions, but it, as its name implies, is a bird of the coastal regions and feeds in the intertidal zone. Thus it is unlikely to be confused with any of the species treated above.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#38). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Rufus Night Heron [now Nankeen Night Heron] *Nycticorax caledonicus*

This handsome bird, also called, because of its cinnamon coloured back, the Nankeen Night Heron, is, as its name implies, a nocturnally active species. It rests, partly hidden in the sub-canopy of trees, during daylight and emerges as dusk settles to fly off to its feeding grounds.

It occurs widely throughout the island chain from Borneo to Australia and as far east as the Philippines and New Caledonia. Its scientific name in fact means “night crow of New Caledonia”. It is a common bird in some areas of the Australian mainland, but always in the vicinity of fresh or brackish water, in particular the Murray-Darling basin, where many breed.

On the Tasmanian mainland it is not often encountered, although its nocturnal nature and habit of hiding quietly by day might cause its presence to go undetected. Most records are of individuals or pairs and it has not been found breeding this far south. However, on King Island it is a common species with a strong breeding population which has for many years congregated each Spring to nest and rear young high up in the canopy of dense, tall tea tree which line a creek on the west coast.

I visited this colony on 13 December 1967 and found that all the young had by then fledged and dispersed and the area was deserted. When, however, I re-visited it at the end of September the following year breeding was at its peak with an estimated hundred or so occupied nests concentrated in an area of about 300 by 50 metres. The nests were composed solely of small sticks formed into a concaved platform, the contents ranging from fresh eggs to almost fully fledged young. Of the many nests examined, three was the maximum complement with the nestlings of any one nest varying considerably in size.

This age based hierarchy in nestlings also occurs among some species of birds of prey and provides for the survival of at least one strong and well fed offspring if there is insufficient food to feed a full brood. The stomachs of members of one half-grown brood of three were found to contain beetle remains, a cockroach and three undigested and whole house mice, indicating that the adults had been gathering food from areas of grassland.

During daytime the colony was peaceful and silent, but near to dusk the adults began to leave the nests and fly, with slow wing beats, rising high in the air and moving out in all directions singly or in small parties. Local farmers informed me that the colony had been known to be there for at least the previous thirty years and according to Max McGarvie, a long term resident of King Island and a keen ornithologist, it is still seasonally occupied with similar success.

The night herons disperse after breeding and an almost complete lack of Summer or Autumn sightings suggests that many move off the island, probably to the Australian mainland, and do not return until the following Winter, when egg laying commences about July. The eggs

are a pale green colour and the nest and young, which hatch after about three weeks, are tended by both parents.

The chicks are covered with brown down and fledged and fly at about seven weeks. The plumage of the juveniles in no way resembles that of the parents, as they have streaked brown feathering, somewhat like that of a bittern. The sexes are alike and both adults have the characteristic two or three ornamental plumes on the back of the head.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#39). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Australasian Bittern *Botaurus poiciloptilus*

The reed beds of lakes, lagoons and riverbanks of the home of this shy and secretive bird. There it hides, its beautifully striped and mottled brownish plumage blending with its surroundings.

While all is peaceful it rests at ease and sometimes quietly weaves its way among the stems, wading in the shallows as it searches for food. When danger threatens, however, its first inclination is to stand tall and motionless with its beak pointing skywards like the reeds around it in the hope that any intruder will overlook its presence and pass on by. Only when pressed to do so will it resort to flight in order to avoid its adversary. On heavy and rather clumsy wings it flaps its way for perhaps a hundred metres or so, to drop again into its reedy cover and disappear.

On several occasions I have had brought to me bitterns which appeared healthy but were, for some reason, unable to fly. Without exception, each would adopt a defensive and threatening posture, crouching on the ground with body feathers fluffed, wings partly spread and head withdrawn onto the back. From that pose it closely watched as if assessing the danger and when its adversary came within reach it would strike with great speed to drive the tip of its sharp beak like a dagger at the intruder. Such attacks seem to be directed at the face and in particular the region of the eyes, so great care is advisable should it ever be necessary to handle these birds.

The Australasian Bittern occurs, in suitable habitat, in south-western and south-eastern Australia and also in New Zealand and New Caledonia. There appears to be no difference between the geographically separate populations. There are numerous other species of bittern in Australia and other parts of the world, but this is the only one which has established itself in Tasmania.

Here it is not uncommon but because of its secretive habits it is not often seen. It rests or skulks among the reeds by day and feeds mostly at night. It eats a range of animals, but has a pronounced liking for fish, especially eels. Small mammals, birds and reptiles are also said to form part of its diet, as well as frogs and various aquatic arthropods.

Although this bird is voiceless for most of the year, the approach of Spring and breeding prompts the males to announce themselves with a long and drawn out booming call. The sound can carry for over a kilometre on a still night and has been likened to the roar of a bull. Consequently the nicknames of “boomer” and “bull-roarer” are sometimes applied to the bittern.

Unlike most other members of the Order to which it belongs, the bittern makes its nest not in a tree but, as might be expected, in the shelter of densely growing reeds either over or close to shallow water. Sometimes it is shielded from view but in other instances it might be quite

exposed, the birds depending on camouflage for concealment. It consists of a platform with trampled reeds on which are laid four or five olive-brown eggs, usually during the month of October.

Incubation is believed to take almost a month and the young remain on the nest until partly fledged, from when they might wander a little distance until, at about one month of age, they start to fly. The sexes are similar in appearance, but immature birds are slightly paler than adults.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#40). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Sacred Ibis [now Australian White Ibis] *Threskiornis aethiopicus* [now *Threskiornis molucca*]

Not until May 1957 was the Sacred Ibis found in Tasmania. In that month over three hundred birds arrived in the north of the island. In some agricultural districts in the north-west congregations numbering dozens were found feeding on pasture paddocks but within a week or so they had broken up into smaller parties which dispersed to other parts of the state, mostly to wetlands along the banks of tidal rivers and on reedy lagoons.

This influx had apparently occurred in response to adverse seasonal conditions which had increased the birds' need to wander further afield than before in their annual post-breeding dispersal. By the following Spring most had vanished, having presumably returned to their breeding grounds on the mainland. In subsequent years a few more sightings of small parties have been recorded but all have been, like their predecessors, only short term visitors. The species has also been found visiting both King and Flinders Islands.

It feeds mostly by probing in muddy water with its remarkable beak, searching for yabbies, crabs and molluscs. When, however, plagues of insects such as grasshoppers or locusts occur it congregates in considerable numbers which spread out over the grassland to feast on the temporary banquet.

Also called the White Ibis, the species has acquired the name "sacred" because of the reverence in which it was held by the ancient Egyptians. It has a wide distribution, living in Africa and Europe and throughout southern Asia to New Guinea and Australia. Up to six geographical races are recognised, one of which is in Australia.

Here it ranges widely over much of the continent, its nomadic and opportunistic habits meaning that it moves over considerable distances to avail itself of alternative feeding grounds. On such explorative flights it ascends to a great height, flying in "V" formation with each bird endeavouring to gain the maximum advantage by flying in the slipstream of the one ahead of it. Sometimes it flies in thermal air currents, soaring on outstretched wings to catch the updraught which can carry it almost out of sight.

Two other species have, on rare occasions, been known to visit Tasmania briefly. Although similar to the Sacred Ibis in size and shape they differ in plumage and can be readily distinguished. These are the Glossy Ibis *Plegadis falcinellus*, a bird which is dark brown all over, sometimes with an iridescent glossy sheen, and the Straw-necked Ibis *Threskiornis spinicollis*, which is a black-backed and white-bellied bird with prominent straw-like pale yellow feathers on the back of its neck.

Ibis have never been found breeding in Tasmania and the Sacred Ibis, like most waterbirds, is stimulated to do so by flooding, which brings an abundance of food for the young. At such

times it congregates in large numbers on rush-choked swamps and billabongs, often in company with Straw-necked Ibis.

The nest is formed by trampling rushes to make a pad, sometimes adding a few sticks and more rushes. It may be used in successive seasons. On it is laid the clutch of two or three dull white eggs, to be incubated by either parent for a period of about three weeks. The nestlings are white but already have a black head like the adults, although with a much less developed beak. They fly when about five weeks old and from then on their appearance is very similar to that of both parents.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#41). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Yellow-billed Spoonbill *Platalea flavipes*

To Tasmanians and others not familiar with this bird it is a strange and odd-looking creature, for spoonbills are not often seen this far south. The first record of it here was from King Island in June 1965, where one bird lived near Cape Wickham for about two months and since then there have been several other such visits. In October 1972 a single bird at St Helens was the first recorded from the Tasmanian mainland and further vagrants have been seen in subsequent years.

A near relative, the Royal Spoonbill *Platalea regia*, a bird of similar stature but with a black beak and black legs, has also visited Tasmania occasionally. The spoonbills, however, do not usually stay long and eventually return to the Australian mainland.

They are birds of the lagoons and marshlands, where they wade in shallow water in search of food. Probing among weeds, they sweep their partly open beaks from side to side as they walk and locate their prey by touch. Fish, molluscs, crustaceans and aquatic insects are grasped in the broadened, spoon-shaped tip to be crushed and filtered from the water before being tossed to the throat and swallowed.

Spoonbills fly with the head and neck stretched straight out in front and with regular, rapid wing beats interspersed occasionally with short periods of gliding. Sometimes they soar to a considerable height.

They have never been found to breed in Tasmania, but on the mainland they nest in loose colonies sometimes in association with other species. The nest is composed of sticks formed into a rough, concave platform and is usually placed in a tree over shallow water. They have also been known to nest in a swamp among trampled reeds with the addition of sticks.

The Yellow-billed Spoonbill breeds over Summer, each clutch of four white eggs being laid about September. For as long as breeding conditions are satisfactory birds will congregate at the same swamp in successive years. It is strongly defensive of its nest and immediate surroundings, fighting off other individuals which come too close. This it does with an open beak and wings partly spread out for balance, striking with the feet in the manner of a fighting cock.

Both parents participate in the incubation of their clutch and the care and feeding of their nestlings. They carry the food in their stomachs and regurgitate it to the young in a partly digested state. When they are about four weeks old the young birds are sufficiently fledged to leave the nest and fly.

Both the Australian species of spoonbill occur widely over Australia and also found in New Zealand, New Guinea, and islands to the north. They are of a nomadic nature when not breeding and it is because of this tendency that occasional birds reach Tasmania.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#42). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Black-shouldered Kite *Elanus notatus* [now *Elanus axillaris*]

This dainty little bird of prey was first recorded from Tasmania by David Pinner following his observations near Devonport in April 1972. At first sight he thought it to be a Silver Gull as it somewhat resembles that species both in colour and size. In fact many authors refer to this similarity and it could be that previous Tasmanian occurrences had been overlooked because of it. Three weeks later another experienced ornithologist, Betty Angel, watched what was probably the same bird in the same district as it hunted in graceful, hovering flight in search of prey.

Since then it has been found in the Kents Group of islands in north-eastern Bass Strait and on both King and Flinders Islands, and is now included on Tasmania's bird list as a rare and irregular nomadic visitor.

It feeds on a large range of small prey such as lizards, large insects and particularly mice, which are greatly favoured. It locates its food by watching either from a perched position or while slowly gliding over grasslands until it is alerted by movements below. Then it hovers to investigate before dropping directly and silently to take the victim in its talons. This habit and the black shoulder patch, which is present on both the upper and under sides of the wings, readily distinguishes the species.

Black-shouldered Kites, somewhat similar to our bird but of a different species, occur in many parts of the world, occupy a similar ecological niche and often share the same common name because of their distinctive plumage pattern. The Australian representative is endemic to this continent and can be found over all but the most arid regions. Its occurrence and population are greatly influenced by the availability of food and considerable numbers might congregate in some mainland districts when mouse or grasshopper plagues occur, the bird's nomadic nature enabling it to capitalise on such bonanzas.

On the other hand, the occasional appearance of individuals in Tasmania is probably a result of birds been pushed to range to the extremities of their normal distribution when food is difficult to obtain. Presumably these individuals eventually return to rejoin mainland populations and none has been recorded as staying here for long.

Breeding takes place mostly during Winter and might commence as early as April, extending as late as December, according to local conditions and influences. The nest is a dish-shaped structure formed from thin, leafy twigs, lined with green eucalypt leaves and placed high among the smaller, leafy branches of a eucalypt tree. Both partners participate in gathering the nesting material, which they break from the more fragile outer foliage by using beak, claws and body weight to snap off twigs. The site chosen is usually near to water and sometimes the nesting tree actually stands in water on the edge of a swamp or river.

A clutch generally comprises three eggs, sometimes four, and these are heavily and spectacularly marked with reddish-brown and chocolate coloured blotches over a background of dull white. Incubation, by the female, is said to take about thirty days and the creamy-white, down-covered nestlings are brooded by her for a further two weeks while the male gathers and brings food. The nest edge and the ground beneath are usually littered with numerous regurgitated food remnants in the form of small pellets, often consisting of the fur and bones of mice. The young fledge after about five weeks in the nest.

The sexes are similar in their plumage, whilst that of sub-adults is slightly duller.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#43). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Whistling Kite *Milvus sphenurus* [now *Haliastur sphenurus*]

It was not until 1964 that this raptor was positively recorded from Tasmania, but since then sightings have been numerous and regular and two carcasses have been salvaged. The frequency with which it has been seen in the last quarter century is curious, as it seems highly unlikely that its presence before then could have been overlooked by the many competent observers who diligently recorded unusual species. It is, however, possible that its somewhat similar plumage, size and habits to those of the Swamp Harrier were a reason, causing its confusion with that species and consequent oversight.

Like the harrier it soars high in the sky, both flapping and gracefully gliding as it patrols in search of prey, but also alighting to feed on carcasses such as those of mammals killed on roadways. Small mammals, birds, reptiles, fish and large invertebrates all attract its attention as possible sources of food, and it will swoop down to capture the unwary in its powerful talons and sabre-like claws.

The Whistling Kite occurs commonly over much of Australia, favouring open woodland and the verges of pastoral country where it can more easily locate and capture prey. It also works over swamps, rivers and farm dams where waterfowl might congregate and, at least in Tasmania, has been found guilty of attacking domesticated, free range ducks. Most Tasmanian records are from the north of the island, the midlands and along the east coast, with several recorded sightings from King Island, which suggests that it arrives here via that route.

Although most sightings are believed to be of nomadic visitors which do not remain here for any length of time, there have been repeated sightings near Exton since 1974, with Jim Lyne, a competent observer, recorded one of the first accounts of its presence. In that year he found several in the area and in response to his request I visited his property, "Violet Banks", where he showed me a nest which he told me a pair had been constructing high in a tree on the edge of the adjacent forest. On the day of my visit one of the pairs was flushed from the nest but because of the nest's inaccessibility it could not be proved that the birds were actually breeding. However, subsequent sightings of a sub-adult in the area strongly suggested that the pair had successfully reared at least one young.

The Whistling Kite's presence can be picked up from its call, a drawn-out, descending, shrill whistle followed by four or five rapid, ascending notes. This feature of its behaviour, of course, gave rise to its English name as well as to an alternative name, the Whistling Eagle.

On the Australian mainland it may breed at any time of the year in response to local conditions as they favour the rearing of young, but the suspected breeding at Exton was in Spring with birds working the same nest in several successive years and being seen to carry additional sticks and green leaves for lining.

The clutch is of two or three bluish-white eggs, specially marked with red-brown blotches. It is incubated by the female while the male hunts and brings food to her and, later, to the chicks. These are at first clothed in buff-white down and they fledge with dark brown plumage and fly when about six weeks old. The sexes are similar in appearance except that the female is somewhat larger.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#44). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-bellied Sea-eagle *Haliaeetus leucogaster*

Birds of prey, especially the eagles, have for centuries been seen by various cultures as symbols of power, boldness and dominance. Nations, states and sporting clubs have taken different species as emblematic representations and they feature on flags, in heraldry and in many aspects of advertising.

Among these the White-bellied Sea-eagle, or White-breasted Sea-eagle as it is also known, is one of the most handsome. It belongs to a group known as fish eagles which has, over countless generations, evolved with a remarkable ability to catch and feed upon fish. Consequently its domain is the coastal regions of the continent, although it also ventures far inland, following river systems and lakes.

It has a distribution which ranges as far as India, southern China and south-east Asia. Among its near relatives is included the well known and now rare Bald Eagle, the emblem of the United States of America.

By the casual observer the White-bellied Sea-eagle is not often seen in Tasmania, but it might appear almost anywhere. The less populated coastal regions and islands are its preferred territory. Sightings are usually of single birds or pairs soaring and sailing through the air in an apparently carefree way. Periodically it comes ashore to rest on a rocky promontory or the branch of a lofty tree, from where it can watch for potential prey.

This prey includes, in addition to fish, penguins and other birds such as shearwaters, which is snatches up from the surface of the water in its powerful talons and carries off to a feeding station to tear apart with its beak and eat in pieces. It will also avail itself of carrion in the form of beachwashed fish and birds and has been known to fly over pasture land to hunt rabbits and waterfowl. At such times it might feed on the carcass of a dead lamb, incurring the mistaken belief that it was responsible for the beast's death. I have also found it flying over the central highlands, but such forays are by nomadic birds which rarely stay long in any one locality, although they will occasionally take sick and unwary trout from a lake's edge.

This sea-eagle is an early breeder, producing eggs in August and September. A pair then occupies an extensive territory and the same nest is usually re-used for many years if the birds are not unduly disturbed. The nest is a huge bulk of sticks formed into a convex platform with leaves and some finer material added as a lining. The site may be on a rocky promontory or high in the upper branches of a tree near the coast.

Two eggs form the clutch and they are white without markings, although they often become nest stained. When breeding the adults are extremely wary. The female will sit tightly, crouching low in the nest to avoid detection, until forced to fly, but both parents are hesitant to return before their confidence has been restored. Incubation takes about six weeks and the white, fluffy young take a further ten weeks to fledge and fly.

They take three or four weeks to attain full adult plumage and until then the feathering is generally brown. Because of this immature birds and sub-adults can easily be mistaken for Wedge-tailed Eagles if not carefully observed. The White-bellied Sea-eagle has also been confused with the Osprey *Pandion haliaetus* which rarely, if ever, flies as far south as Tasmania.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#45). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Swamp Harrier *Circus approximans*

Well known to most farmers who annually harvest crops of hay or grain, the Swamp Harrier, or Swamp Hawk as it is also called, is a ground nesting bird. In the years when rabbits were in plague numbers an exceptionally strong population was, for a period, supported by this introduced and abundant food resource and in almost every crop of hay a nest containing from three to five eggs or young would be exposed while harvesting.

Such nest sites are, however, like the rabbit, a recent acquisition for this bird. Before the arrival of Europeans and the subsequent spread of farming, the Swamp Harrier's main home was the reed beds and marshland over which it hunts and in which it rears its young. It also hunts over open grassland and occasionally nests among bracken fern or tall thistles.

The Swamp Harrier of Australasia is closely related to the well-known Marsh Harrier of Europe and members of the genus are believed to be the diurnal counterparts of the short-eared owls of the genus *Asio*, which occurs widely in the Northern Hemisphere. It also has partly owl-like facial features which are thought to aid in hearing.

The harriers of Tasmania are regular migrants, flying in during August and September from mainland Australia and departing again during February or as soon as their young are adequately fledged. Odd individuals, however, do occasionally remain here over Winter. Birds which I leg banded in the midlands in the late 1950s were found in the following Winter in Victoria and New South Wales and as far north as the Queensland border.

The Swamp Harrier is an opportunist, hunting over the marshes and grassland for live prey such as waterfowl and their young, small mammals and reptiles. It also eats any fresh carrion and often it is killed by cars, having been attracted to feed on the carcasses of mammals which litter the verges of highways.

It does not start to breed until well into the Spring, the time when the seasonal growth of vegetation is advanced and thus affords better protection for the nest. I have never found eggs before November and in one instance found some as late as mid-January. The clutch is normally four or five plain white eggs, laid at intervals of several days, the female commencing to sit before the clutch is complete. Consequently the young hatch over a period of up to two weeks and vary considerably in age and size. This habit provides for strong and well-grown offspring, as when food is scarce the smaller and weaker members perish progressively until the brood is reduced to an economically viable number.

The nest is composed of sticks, bark and dry grass and the female sits closely, often tolerating the approach of harvesting machinery until it is within a metre or so. The eggs hatch after about five weeks, the young then being clothed in white down. They fledge and fly within about seven weeks. Until then they defend themselves against the approach of a predator by rolling backwards to present their strong and sharp claws, then, if the invader comes to close,

by striking with their feet. The relatively long legs have a surprising reach and even the small young can inflict a nasty wound.

Sub-adults can be distinguished from all the birds by their dark chocolate-brown colour and the lack of the pale rump patch. The sexes are not really distinguishable. The Swamp Harrier could be confused with the Spotted Harrier *Circus assimilis* or the Whistling Kite, which occasionally visit Tasmania, especially the kite, but because of the scarcity of records we have not illustrated the Spotted Harrier.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#46). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Brown Goshawk *Accipiter fasciatus*

All too often this handsome bird falls to the gun or trap of the poultry keeper, pigeon fancier or aviculturist, despite the fact that it has for years been totally protected by law. A highly efficient hunter and killer, it is readily and naturally attracted to such potential prey for that is its way of life. It takes smaller birds, mammals, reptiles and even insects, and any individual which shows signs of weakness or impediment is soon recognised and selected for special attention. To us humans, who protect and care for our sick and impaired, this may seem extremely cruel, but in the world of nature it is not only the means by which predators survive but also tends to remove the weak and least alert members from the populations which make up the goshawk's food source. Eventually this strengthens those species.

Unlike some predators, which have long since learned that humans are to be feared, this goshawk is unusually tolerant, almost to the point of arrogance, as if it has a right to take its share. This has been its weakness, particularly among sub-adults which have not fully developed the skills of catching wild game.

Goshawks, as a genus, occur all over the world and there are many species. The Brown Goshawk is found only in Australia and islands to the north and east. In Tasmania it is common and widely distributed, living in all kinds of forested country. It also visits suburban parks and gardens, to which it is attracted by the introduced sparrows, starlings and blackbirds. These "visitors" are usually young birds exploring for new territory in which to live.

Mature adults are generally found in pairs, living within an established territory or range, and to date there is no evidence of any movement across Bass Strait. Eucalypt forests are favoured and the nesting tree, the centre of the territory, is often in a deep, heavily timbered gully or gorge. In such country it finds an abundance of small birds which, when terrified by its presence, will hide among the dense foliage.

I once watched a pair of goshawks hunting a flock of small birds which had taken shelter in the dense canopy of a eucalypt. One of the pair deliberately crashed itself onto the foliage, frightening some birds into flight, while the other immediately pursued those which had broken from cover.

Rarely does the goshawk ascend to any great height, preferring to spend its time just above or beneath the canopy. Its flight is usually on rapid wing beats with occasional glides, but it also demonstrates great agility aided by the long tail as it moves through the forest.

With the approach of Spring its attention is turned to nest building or the refurbishing of an old nest used in a previous season. The nest is usually high up in the sub-canopy and might have been built originally by currawongs, ravens or other birds of prey. It is formed with sticks and liberally lined with green eucalypt leaves which are added continually during

incubation. The clutch, which comprises three or four white eggs sparsely marked with reddish-brown blotches, is produced about October. Both parents attend closely and will vigorously defend the nest and its contents against would-be predators, swooping and cackling in repeated attack.

The nestlings are covered in creamy-white down until they are fledged and flying, which happens at about the age of about four or five weeks. Females are significantly larger than males, and the breast barring on older birds is much finer than on sub-adults.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#47). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey Goshawk *Accipiter novaehollandiae*

The name of this bird is something of a misnomer, as the Tasmanian members of this extremely handsome species are all pure white in colour. On the Australian mainland, where it occurs widely over much of the eastern and northern parts of the continent, there is also a pale bluish-grey form. The two interbreed indiscriminately and are of one and the same species.

In earlier years, before raptors were afforded legal protection, this fine bird was shot on sight, not only because it occasionally invaded poultry yards and pigeon lofts, but more often simply as a trophy for display, in the mistaken belief that it was simply an “albino hawk”. Almost too late the error of our ways was recognised and the Grey Goshawk, or White Goshawk as it is more commonly called in Tasmania, is accepted as a fixed species, distinct from other members of the genus.

Probably it was never a common bird, but almost certainly it is less so now than at the time of European settlement. It favours mostly the wet eucalypt forests in the north-western, western and southern regions of the island, but occasionally appears in adjoining areas of dry forest, where at times young birds wandering nomadically in search of prey and territory visit farms.

Like its relative, the Brown Goshawk, it is attracted to pigeon lofts where it can cause great havoc among the residents, and in consequence many of the species were once trapped and killed. Fortunately today, thanks to a study and education program conducted by the State’s fauna authority, most people have come to realise its importance and rarity and collaborate in its conservation. As a result there are indications of its number now recovering in some localities.

At a distance it can easily be mistaken for a Sulphur-crested Cockatoo as both species inhabit similar country. Either when perched on a dead bough high above the forest canopy or when soaring in random flight, the initial impression can be confusing to those not familiar with these birds.

It hunts on the wing and once potential prey has been selected it is pursued with great vigour amongst the foliage or onto the ground. The victim is eventually taken in the goshawk’s powerful feet and killed by penetration of the body with the needle-sharp claws. As with most birds of prey, the female is somewhat larger and more powerful than the male and is able to take larger prey. Except for this size difference, which might not be recognisable unless the pair are seen together, both sexes appear similar.

Pair bondage and territory appear to be maintained throughout the bird’s life and the nest may be re-used in successive seasons. It is usually situated high up in the sub-canopy and composed of sticks with a lining of fine twigs and green eucalyptus leaves. The approach of

breeding is indicated by the birds carrying fresh foliage to prepare the nest for eggs. This usually takes place about September.

Very little information is available on the breeding of this bird in Tasmania, but no doubt, like those laid by the species on the mainland, the clutch consists of from three to five white eggs, sometimes sparsely marked with reddish and purplish-brown blotches. Incubation is said to take about five weeks and to be undertaken mainly by the female.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#48). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Collared Sparrowhawk *Accipiter cirrhocephalus*

City and suburban parks and gardens are often visited by this stealthy little raptor. Attracted by the many sparrows, starlings and other small birds which congregate in such places, it will perch quietly as if in ambush and wait, motionless and silent, for selected prey. Having chosen a target it dashes from its perch in swift attack, scattering in terror all birds within the area as it traces with remarkable accuracy a path of pursuit among the trees.

One of the smaller members of this cosmopolitan genus, which is represented by a great many species and forms, the Collared Sparrowhawk occurs widely throughout Australia and Papua New Guinea. In general appearance it looks like a small Brown Goshawk and the two species can be easily confused. Distinguishing between them is even more difficult because the females of each are considerably larger than the males and thus the female sparrowhawk is very much the same size as the male goshawk.

In Tasmania it favours the dry eucalypt forests and woodlands, where it hides in the sub-canopy as it watches, ever alert, for potential prey. Although it will take mice, lizards and insects the major part of its diet consists of small birds.

When not in urgent pursuit of prey it flies with apparent ease and is exceedingly graceful, especially the elegant little male. Bursts of rapid wing beats are broken by short glides as it weaves through the forest, sometimes high above the canopy for a short while and at other times skimming the foliage as if to tease and frighten small birds from their hiding, feeding and resting places.

As yet there is no evidence to suggest that the Collared Sparrowhawk crosses Bass Strait and it is believed to be a rather sedentary species, with an established pair living in the same area for most of their lives. Some nomadic movements have been observed, but these are usually by young birds seeking new territory or exploring for prey. A few pairs live and breed on Flinders Island but none have been recorded from King Island.

Breeding takes place between September and the end of the year, and the same nest may be used in successive seasons. Occasionally an old nest of a raven, currawong or other bird will be selected and renovated by the addition of a fresh lining of green leaves to the egg chamber. On Flinders Island David Rhodes showed me old nests of the sparrowhawk which had been built high up among the foliage of native pines, but the upper foliage of eucalypts is the more usual site.

The clutch is mostly of three or four eggs which are white and slightly nest stained, although in rare instances they are sparsely blotched with brown markings. The young hatch out after three weeks and are then covered in fluffy white down. They fledge and take their first flight at about four weeks old. At all times the parents fiercely defend their nest and brood against any intrusion.

Males and females of the same age have similar plumage but young adults can be easily distinguished by the barring on the breast, which is very much broader than that of the finely marked older birds.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 1 (#49). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

THE UNPUBLISHED
PORTRAITS OF TASMANIAN BIRDS

200 illustrations by Sue Lester

with accompanying text by Bob Green

These plates were reproduced from 35mm slides of the original paintings. The text was computed, edited and printed by Tim Thorne with progressive amendments by the author; end pages give a brief outline of the production and failure to publish.

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Volume 2

Wedge-tailed Eagle *Aquila audax*

The genus *Aquila*, to which this bird belongs, comprises the “true” eagles, representatives of which are found all over the world. The Wedge-tailed Eagle is, however, the only Australian *Aquila* and is confined to this region. It is a close relative of the widely distributed and well known Golden Eagle of the Northern Hemisphere.

One of the largest eagles in the world, the Wedge-tailed Eagle has a wingspan which can exceed two metres and its body weight is around four kilograms. The specific name *audax* is taken from the Latin, meaning “bold”, and to those who are able to view this bird at close quarters, such as when it is in captivity, the great talons and beak and the staring, deep-set, dark eyes can create a momentary and unexpected sense of fear.

Here it is seen usually as individuals or in pairs, although in 1935 I witnessed the rare sight for Tasmania of a party of eight near Saint Peters Pass. Larger congregations occur in inland Australia, especially around accumulations of carrion, and in that part of its range it sometimes attacks young calves. Predation on domestic stock in Tasmania is extremely rare, but the bird’s habit of scavenging on the carcasses of dead sheep and lambs did, in the past, lead to the false belief that it had killed these animals. Consequently it was shot and trapped at every opportunity by shepherds, with pride. In more recent years studies have revealed this error and it now enjoys total protection by law, although its number has been reduced to a dangerously low level. This is of even greater concern when it is realised that the Tasmanian population is endemic at sub-specific level and there is no possibility of natural recruitment from the mainland.

In flight this eagle is magnificent to behold, using as it does the thermal air currents to great advantage. On outstretched wings and with only an occasional wing beat it can soon rise to such a height as to be almost beyond view by the human eye without the aid of binoculars. In a gently descending glide it can attain considerable speed and this approach is used in an initial attack upon its intended prey. Such attacks are usually launched over open country where there is less hope of its victim finding shelter.

I have watched a pair of eagles relentlessly attack a kangaroo as it fled across an open plain each bird ultimately dropping onto the ’roo’s back in an effort to exhaust and ground it. On another occasion a pair were seen to chase a rabbit which took shelter in a shallow burrow. The eagles then took turns in scratching the burrow away until the rabbit was caught.

Spring is its breeding season, when a pair will occupy and patrol an extensive home range within which the huge nest of sticks, lined with grass and leaves, is sited high up in a lofty eucalypt. Two or three white eggs, heavily mottled with chocolate and lilac markings, comprise a clutch. Incubation is by the female and takes about six weeks, after which the eagles, which are at first covered with white, fluffy down, spend another three months in the nest before they are fully fledged and able to fly.

Sub-adults have a more golden brown plumage than the darker parents and the sexes are alike. Rarely do more than one, or at the most two, survive to the stage of fledglings as the younger and weaker members of the brood die if food is insufficient or are killed and eaten by the stronger nestmate. Remains of food, such as bones and skin, often lie scattered on the ground beneath the nest and are a good indicator of the bird's predatory habits and diet.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#50). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Brown Falcon *Falco berigora*

One of the more regularly seen raptorial birds, the Brown Falcon, often called the Brown Hawk, favours the light forests and woodlands and is most numerous in areas of sheep and cattle country. From highways and by-roads it can often be found perched quietly on a pole, fence post or dead tree, watching for prey and paying little attention to the passing traffic. It will also feed on the carcasses of road-killed animals and sometimes meets with the same fate when it is too sluggish to rise from its meal.

Usually it is found in pairs which remain within an established territory, but if the food resource becomes abnormally abundant in one locality many will congregate in the area. I once witnessed this in the Tunbridge district when a plague of field crickets erupted in a paddock of about twenty hectares, attracting some thirty Brown Falcons. It was Summer and the paddock was almost bare of vegetation, exposing some insects to view. Falcons were scattered over the whole area, running to and fro, excitedly searching for the crickets and catching them with their beaks.

The Brown Falcon occurs all over Australia, reaching some islands to the near north and New Guinea. It varies considerably in colour from dark, heavily mottled birds to much paler forms, examples of each being found in Tasmania. Recent studies and observations have demonstrated that some birds cross Bass Strait, possibly as nomads, but a regular seasonal migration is also indicated. It also lives and breeds on King and Flinders Islands.

It is noticeably different from other falcons in several respects. The legs are longer and less stout and the thigh feathers do not cover the shins. Its flight is much slower and it does not chase prey on the wing. To find food it mostly sits and watches for mice, lizards, injured small birds, insects and the like, gliding or dropping down on unsuspecting prey to catch it with feet or beak, as circumstances dictate. Sometimes it will hunt by flying slowly over grassland at a height of about fifty metres while searching the ground below. If unsure of a target it might hover over the spot in the manner of a kestrel, a habit which can easily lead to mistaken identification. It is especially fond of mice and will stay for weeks, watching over mouse infested haystacks for a chance to feed on this vermin.

Breeding takes place from August to the end of the year, a pair occupying territory and defending against others of its kind so as to protect an essential food resource within convenient range of the nest. The nest is composed of sticks, bark and leaves formed into a shallow bowl and situated high up in the branches of a eucalypt. Often the falcon will renovate and use the old nest of a raven or other such bird and I once found a nest with half grown young placed in an exposed cavity high in the barrel of an old eucalypt tree.

The eggs are typical of falcons, being very heavily blotched and spotted with chocolate brown over a cream base. Three or, rarely, four make up a clutch. Incubation takes a little over four weeks and the nestlings are covered with fluffy white down. Both parents, which

are similar in appearance and general proportions, share in incubation and tending of the young, which fledge and fly when about six weeks old.

The call of the Brown Falcon is a loud cackling chatter, uttered in flight as if to communicate with its mate.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#51). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Australian Kestrel *Falco cenchroides*

This handsome and dainty little bird is not often seen on the Tasmanian mainland, individuals which do occur here being mostly nomadic stragglers from across Bass Strait. Elsewhere in Australia it is widely distributed and common. Though it is occasionally recorded in southern localities the majority of Tasmanian recordings are from the north-west, indicating that the birds have arrived by way of King Island, where they occur quite regularly. The kestrel has also been known to breed on Hunter Island and on Flinders Island, where it is also regularly seen.

Although it belongs to the family **Falconidae**, it is unlike typical falcons, is not swift of flight and does not take prey on the wing. Living mostly in areas of open woodlands and grasslands, it takes its prey on the ground, locating it by hovering at a height of about twenty metres on rapidly quivering wings and searching below for items such as mice and other small mammals, injured or juvenile birds, lizards and insects. Once prey is located the kestrel positions itself and drops almost vertically and silently to seize its unsuspecting victim in its talons.

On the Australian mainland it will congregate in districts where food is locally and temporarily abundant, such as where there are plagues of mice or insects, but too few birds reach Tasmania for this to occur here. The kestrel appears not to be shy and is relatively tolerant of humans, and I have seen it in the parks and suburbs of Melbourne where, I am told, it sometimes nests on the ledges of tall buildings.

It can be distinguished from other birds, not only by its flight and mode of hunting, with tail fanned out for balance, but also by its pale, sandy coloured plumage and delicate appearance.

It breeds in Spring and the few Tasmanian records conform with others from south-eastern Australia as to its breeding habits. It does not carry material and build a true nest like most birds, but deposits its eggs in a recess in a cave or cliff face, on a bed of decayed wood in a tree hollow or on an old disused nest of a raven or other bird of prey.

The clutch might number from four to six eggs which are very heavily and handsomely pigmented with chocolate-brown markings, typical of this genus. Incubation is said to take about four weeks and the young begin to fly when they are four weeks old. Both parents attend to the nest and call with a high-pitched and repeated “ke-ke-ke” twittering cry when alarmed, especially during the breeding season. The plumage of both sexes and that of sub-adults is nearly similar and males are only slightly smaller than females.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#52). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Australian Hobby *Falco longipennis*

The fierce tenacity with which this little falcon pursues and kills its prey is almost legendary and there are many eyewitness accounts of its striking and killing birds much larger than itself. Powerfully built with large pectoral muscles it is capable of exceptional speed through the air and can quickly overtake all but the swiftest of birds.

Though widely distributed over most of Australia and on some islands to our north it is rather uncommon in Tasmania. I have found it on Flinders Island, and in the Launceston area it sometimes visits parks and reserves, to which it is drawn by the abundance of sparrows, starlings and blackbirds which it finds easy prey. Cage bird in exposed flights and domestic pigeons likewise attract its attention, and it can strike such a terror and panic as to create mortalities without even gaining access to the birds.

A first impression of the Australian Hobby, or Little Falcon as it is also known, is of a small version of its eminent relative, the Peregrine or Black-cheeked Falcon, as its general colouring and behaviour in many ways resemble that bird. Stealthy and daring, it perches quietly on some advantageous lookout, usually high in a tree, while, with head bobbing, it watches and waits for selected prey. Birds form its favoured diet. Launching itself in pursuit, it quickly overtakes its victim, catching the smaller species in its powerful talons while in full flight or, in the case of a larger bird, striking and knocking it to the ground then following to complete its mission.

Larger prey, sometimes larger than the hobby itself, is partly plucked and eaten on the ground, but smaller and lighter birds are more often carried in its claws to some high branch, torn to pieces with its hooked beak and eaten while the carcass is secured beneath its feet.

The Australian Hobby breeds in Spring, usually between September and December. In most cases it takes over an old, highly placed nest of a raven, currawong or other bird of prey and re-lines the platform with green leaves. There is, however, one Tasmanian record of a clutch being found in a broken bough of a eucalypt tree, the eggs having been deposited on decayed wood and the only attempt at nest building having been the addition of a few small sticks.

Two or three eggs comprise the usual clutch and in colour they are typical of those of falcons, being so heavily marked with reddish-brown blotches and speckles as almost to obliterate the creamy-white base colour. The female sits tightly on her eggs, crouching low to avoid detection, but if they are disturbed both birds will defend the site, circling and sometimes sweeping in attack while calling with chattering cries of alarm.

Incubation is said to take about four weeks and the young fledge and fly at about five weeks of age. Both sexes are of similar plumage and males are only slightly smaller than females.

To date there is no evidence that this bird crosses Bass Strait, but its occurrence on Flinders Island and its remarkable powers of flight suggest that this most probably takes place.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#53). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Peregrine Falcon *Falco peregrinus*

One of the world's most widely distributed and best known birds, the Peregrine Falcon, also known as the Black-cheeked Falcon, occurs on every continent except Antarctica. Sadly it is now relatively rare, having suffered at the hands of humans for many years. It has been lauded as a symbol in heraldry and admired by many for its noble and bold deportment; one might wonder why it is today so seldom seen.

For centuries the Peregrine Falcon was domesticated and trained in the art of falconry in many parts of the world. Adults were trapped and young birds taken from the nest to be reared by hand. After a long period of careful schooling they were taught to chase and kill birds and mammals for the sport and satisfaction of their handlers, in much the same way as dogs were trained for similar activities.

In later years the bird fell from favour because its predation upon homing pigeons, free ranging domestic poultry and game birds. Consequently it was trapped, shot or otherwise destroyed by many with a mistaken belief in the wisdom of such actions. Perhaps its greatest threat from human interference came more recently and indirectly, with the development and use of chemicals such as DDT in sprays for the control of insect plagues. Feeding at the top of the food chain, this falcon – and, no doubt, others – then accumulated high concentrations of poison resulting not only in death but, in many instances, failure to breed successfully because of thinning and weakening of the eggshells causing the eggs to break before hatching.

Fortunately we have now learned from the errors of these activities and studies have provided a good knowledge of the falcon's life and requirements. It is now a totally protected species and it is hoped that it will gradually increase in number.

Many races of the species have evolved in various regions of the world, one of which occurs throughout Australia. In Tasmania it might be found almost anywhere, from coastal islands to the highlands, and I have on several occasions watched a pair displaying in full flight over central Launceston, wheeling and diving in a playful manner in the evening sky for perhaps fifteen minutes before flying off towards the eastern ranges.

The Peregrine Falcon has developed large and powerful pectoral muscles and so, with rapid wing beats interspersed with short glides, it can attain great speed. In dives it has been estimated to reach 300 kilometres an hour. It is in such flight that it takes its food, which consists mostly of birds. From patrolling at great height it dives out of the sky to strike with its mighty talons so forcefully as to kill birds much larger than itself.

Smaller birds are mostly taken in the falcon's claws and carried off, whilst larger ones are felled to the ground, sometimes still in their predator's crutches. It is a fussy and selective

feeder and plucks away the feathers before eating the flesh. Small mammals, reptiles and insects might also be eaten, but birds are its favoured food.

Pair bondage is for life and the same breeding territory is occupied in successive years. The nest is usually a scrape on a sheltered ledge on a cliff face, the clutch of three eggs being produced about September or October. The eggs are beautifully and heavily pigmented all over with a rich chocolate-red which almost totally obliterates the pale background colour.

The female does most of the incubating while the male hunts and brings her food. The eggs hatch after about four weeks and the young fly when they are approximately six weeks old. Both sexes have similar plumage, but females are slightly larger than males.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#54). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Black Swan *Cygnus atratus*

The extreme gracefulness, decorum and regal deportment of this, the largest of our native waterfowl, always claims the attention and admiration of those who are privileged to be able to observe its activities at a close distance. The gentle and apparently confident and effortless manner in which it floats over the water, the vivid contrast of its black and white plumage and its scarlet beak at the end of an almost serpent-like head and neck all add to its fascinating beauty.

With the arrival of the first European explorers descriptions of this black swan filtered back to the old world, where swans had until then been accepted as being birds of white plumage. With the introduction of a postal service and issuing of stamps it featured prominently on a number of early Western Australian postal items.

The Black Swan occurs widely on estuaries, sheltered bays, coastal lagoons, rivers, lakes and inland lagoons over most of western, eastern and southern Australia. In Tasmania it may be found living in all such habitats, and some of its most favoured locations are the Derwent and Tamar Rivers, inlets and bays along the east coast, the sheltered waters of Port Davey and many inland bodies of fresh water.

Nesting as it does in relatively accessible marshes and along reedy shores, it no doubt provided both meat and eggs as food for the Aboriginal people. With the arrival and settlement of Europeans it soon became the object of greatly increased predation for the same purpose and the populations then suffered a decline.

The passing of time brought fauna regulations under which it was partly protected, subject only to a restricted shooting season, and the taking of eggs was outlawed. In more recent years public opinion against the shooting of swans has been so strong as to prevent annual open seasons. Thus, probably for the first time in its existence, the Black Swan is now free from human predation and, as a consequence, its numbers appear to be increasing in some locations.

Appealing as this might seem, it brings with it some possible environmental and ecological problems. Overpopulation can create environmental harm and upset a delicate ecological balance as well as inflicting crop and pasture damage when congregations of birds leave the waterways to graze on adjacent farm land. Unfortunately we may eventually have to see population controls introduced, for the benefit of all, as has been the case with some other of our native animals when similar population problems have occurred.

The Eurasian Mute Swan *Cygnus olor* was liberated on Lake Leake about 1944, but these birds have been prevented from dispersing so as to avoid their becoming established, something generally considered undesirable.

The Black Swan will start to breed in late Winter and cygnets may be found swimming with their parents in early Spring. If, however, a successful hatching fails to eventuate, due to flooding or other causes, the swans will produce a second clutch and in such instances small cygnets may be found as late as February.

The nest is a large, dish-shaped structure formed of accumulated reeds and aquatic vegetation and standing in marshy water or on land near the water's edge. From four to six nest-stained, greenish-white eggs form the usual clutch. Both sexes, which are of similar appearance, share the task of incubation over about a forty day period. The fluffy, mottled-grey cygnets leave the nest to swim, escorted by both parents, soon after hatching.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#55). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Cape Barren Goose *Cereopsis novaehollandiae*

The Cape Barren Goose remains something of a mystery as to its evolutionary origin and its relationship to other waterfowl despite its having been of great interest to ornithologists and a subject of close study by taxonomists ever since the early days of European settlement.

It possesses some skeletal features similar to shelducks, with which it has been tentatively placed by some experts, while others hold that it may well be more closely related to geese of New Zealand and South America. No doubt its superficial resemblance to the true geese of the Northern Hemisphere has been a factor in its being referred to as a “goose” until further studies more clearly define its ancestry.

The “Cape Barren” part of its name, too, is somewhat of a misnomer, leading to the belief by many that its distribution is limited to that region in Bass Strait. This is far from the truth; its range extends also to the islands along the coast of Victoria and southern Australia and to an isolated population around Recherche Archipelago in south-western Australia, which is considered to be a separate race. In fact the total number of birds living beyond the Furneaux Islands, of which Cape Barren Island forms a part, may well exceed that localised population. Internationally it is held in many parks and zoos.

The early explorers, sealers and settlers found the Cape Barren Goose plentiful, relatively tame and good eating and with the introduction of fauna regulations it was afforded legal protection, except for a restricted shooting season, which for some years now has been closed. This protective legislation, together with an enhanced food supply, has allowed the bird to increase its numbers considerably, often to the annoyance of farmers to whose pastures it flocks to graze on the green grasses and clovers.

Unlike most waterfowl it rarely swims, preferring to wander in areas near the coast. Pairs begin to occupy breeding territories near the shore on small islands during Autumn and build their rough grass nests among rushes and other rank vegetation.

The egg-laying period is governed to some degree by seasonal conditions. Usually it occurs about June, but it may be delayed for some pairs until the Spring. The eggs are white and a clutch generally numbers between three and six, with incubation taking five weeks. The female undertakes the task of brooding while the male guards their territory, defending it fiercely against intruders.

As the young develop and learn to feed and fend for themselves they gather progressively into parties and small flocks. Once fledged and able to fly they leave the breeding islands and move to areas where food, in the form of green pastures, is more plentiful. It is then that large and spectacular congregations can be seen on farm lands, especially on southern Flinders Island where farmers experience a seasonal problem with the bird's dung fouling watering places and grasslands.

As a result of past persecution and harassment the Cape Barren Goose has developed an acute awareness of possible danger and is often timid and difficult to approach on foot. When grazing it usually remains silent, but if disturbed and forced to take flight it calls loudly with grunting sounds as if to warn others of potential threat.

The sexes are alike except that the male is slightly larger and more heavily built.

Continued monitoring of the populations in recent decades has indicated that the species is secure and may even number more than in any time of its existence.

Another waterfowl which is taxonomically little understood is the Freckled Duck *Stictonetta naevosa*, a rare and possibly now endangered species. There are very few Tasmanian records of this bird, so we have not included it in the illustrations.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#56). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Australian Shelduck *Tadorna tadornoides*

The spectacular plumage of this large and handsome bird readily attracts attention when, in early Spring, pairs form in preparation for the onset of breeding and take up residence in a carefully selected territory. The brilliantly coloured feathers contrast strikingly with the short green grass on which they graze, the female being distinguishable by a clearly defined white eye ring.

The Australian Shelduck usually lays its eggs deep within a hollow tree trunk and, as trees with such natural cavities are more likely to occur in old or over-mature woodlands, in or near to water and in pastoral areas, it is in such places that this bird might often be found. An established pair will return in successive years to reuse a satisfactory hollow, wandering about on open grasslands until the female has produced her clutch and begins to incubate.

While incubation is taking place the male occupies himself by patrolling and guarding the territory, which must include a section of river frontage, lagoon or farm dam to which the ducklings can be taken immediately after hatching. The presence of a solitary male on cautious patrol is then a firm indication that a mate is sitting on eggs, perhaps as far as several kilometres away.

The female flies some little distance away from her nest to feed in company with the male. He accompanies her on the return flight and the pair carefully reconnoitre the area near the nest, hesitant to approach the nest itself until assured that her return will not disclose the site to potential predators. When satisfied, she will fly directly to the nest cavity and immediately enter, after which he leaves the vicinity and returns to the feeding area.

The floor of the nesting cavity is copiously lined with down which the female plucks from her breast. The eggs are creamy white and a clutch may number from eight to fourteen with incubation taking up to five weeks.

To reach the ground the duckling scramble from the entrance in response to their parents' calls and free fall, in some cases from as high as twenty metres, apparently without injury. The brood is then lead across country to the relative safety of a previously selected stretch of water where, if faced with danger, they can dive to avoid predators. Here the ducklings learn to feed on a variety of aquatic invertebrates and vegetation. After the young have become fully fledged the families congregate in flocks which lead a semi-nomadic existence. Tasmanian birds fly to and fro across Bass Strait to take advantage of a seasonally available and localised food resource.

The call is a loud, variable honk, occasionally uttered when disturbed and as a prelude to flight, but more commonly while on the wing.

The Australian Shelduck is often called “Mountain Duck”, but this name is misleading as, although it visits highland lakes (as do other ducks), far greater numbers live at lower altitude and near the coast.

It is subjected to a limited open season in Autumn when in certain areas it can be shot under license as a game bird.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#57). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Maned Wood Duck [now Australian Wood Duck] *Chenonetta jubata*

Until quite recently the Maned Duck, also known by the alternative names of Wood Duck and Maned Goose, was rarely found in Tasmania, although its distribution extends widely over vast areas of the Australian mainland. John Gould, during his visit to Australia early last century, concluded that “it seldom, if ever, visits Van Diemen’s Land”,¹⁶ while Frank Littler in his *Birds of Tasmania*, published in 1910, stated that the first record of its occurrence here was reported to a meeting of the Royal Society of Tasmania in September 1864.¹⁷ Michael Sharland in his *Tasmanian Birds*, 1958 addition, ranked it as a “rare visitor”.¹⁸

Today it is found regularly, sometimes in congregations of dozens, in many of the pastoral districts where, as primarily a grazing bird, it feeds on the green grassy verges of lagoons and in the vicinity of farm dams. Why such an increase should have occurred is not understood. It is said to be also extending its range and numbers in Western Australia and it has been suggested that it has benefited from European settlement, apparently as a result of improved grazing.

The sexes are distinguishable by the plumage, the male being more handsomely coloured with its dark brown head and neck and the mane-like, elongated black feathers on the back of the head and neck. It is this latter feature which prompted its English name.

Though it is usually found near fresh water, it rarely swims, except sometimes to avoid pursuit or to bathe. Unlike most species it is adapted to perching and may be found in trees or on other such a vantage points from where it can readily survey its surroundings while quietly resting.

As it is primarily a grazing bird, its seasonal distribution and breeding are dictated by the availability of satisfactory green feed and so it is adversely affected by periods of unseasonable drought. Therefore it has developed a nomadic lifestyle, moving from district to district in order to avail itself of the best food resources and breeding conditions when good rains assure a luxuriant growth upon which its baby ducklings can be fed.

In Tasmania it breeds in Spring and, being a “tree-duck”, utilises a hollow in a tree trunk or limb in which to lay and brood. The nesting chamber is beautifully lined with down from the bird’s body and down is also used by the female to cover the eggs when she leaves to feed. From nine to twelve creamy white eggs form the most usual clutch and incubation, which lasts about four weeks, is undertaken by the female.

¹⁶ John Gould, *The Birds of Australia* (John Gould, 1848, vol VII) entry for *Bernicla jubata* Maned Goose <<https://www.biodiversitylibrary.org/item/189241#page/21/mode/1up>>.

¹⁷ Frank Mervyn Littler, *A Handbook of the Birds of Tasmania and its Dependencies* (Frank M Littler, 1910) 217 <<https://www.biodiversitylibrary.org/item/34662#page/323/mode/1up>>.

¹⁸ Michael Sharland, *Tasmanian Birds: A field guide to the birds inhabiting Tasmania and adjacent islands* (Angus and Robertson, 1958) 72.

Upon hatching, the ducklings climb out of the nesting hollow and fall to the ground where they are assembled together by their parents and led to grazing areas near water. There they must remain, under the care and attention of the adult birds, until they are fledged and able to fly. They then join the others of the species in nomadic groups to travel in search of alternative feeding grounds as their own become exhausted.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#58). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey Teal *Anas gibberifrons* [now *Anas gracilis*]

This dainty little teal is one of the most numerous, widely distributed and nomadic ducks of Australia, occurring from coastal, saltwater lagoons to river systems and highland lakes. It is also found in New Zealand and has been recorded on Macquarie Island.

Since the inception of an Australian bird banding scheme in 1953 large numbers have been banded with individually numbered leg bands by CSIRO and state fauna authorities. This has produced many spectacular recoveries and has proved that the Grey Teal disperses widely, in a nomadic manner, in response to the effects of seasonal conditions on its requirements.

Its biggest populations occur in the Murray-Darling basin and associated waterways in South Australia, New South Wales and southern Queensland, which constitute its prime breeding area, where it congregates in great numbers following flooding. As the waters dry up the birds scatter to all points, many flying to Tasmania which, in times of mainland drought, can provide a refuge.

Relatively few Grey Teal breed in Tasmania. The vast flooding over extended periods, which triggers the onset of meeting and nesting in inland Australia, does not occur here as the waters drain away too quickly in the absence of floodplains. Consequently there is not the associated great "bloom" of aquatic invertebrates upon which the teal depends for its young to survive and develop until they reach an age and maturity sufficient for them to be able to fly. Most of the Grey Teal found in Tasmania, then, have been reared on the Australian mainland, the island's erratic population being composed mostly of nomadic visitors.

The greatest concentrations generally occur during the Summer and Autumn, on the larger expanses of water such as the Derwent and Tamar Rivers and freshwater lakes and lagoons, especially those of the midlands. Found in association with Chestnut Teal and [Pacific] Black Duck and confusion in identification is then a possibility as, at a distance, female Chestnut Teal are virtually indistinguishable from male and female Grey Teal.

Those Grey Teal which do breed here do so in Spring. The nest is usually sited in a tree hollow, but if none is available the bird will nest on the ground amongst herbage. Wherever the nest is situated, the egg chamber is lined with down from the teal's body. Down is also used to cover the eggs when the female leaves the nest to feed. This is both as insulation and as a means of hiding the eggs from view of possible predators. A clutch usually consists of from six to nine cream-coloured eggs and incubation takes about three and a half weeks. Young swim within hours of hatching and feed, in the company of their parents, on aquatic insects and vegetation.

The Grey Teal is a favourite game bird and is subjected to an annual open season when limited numbers may be shot under license.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#59). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Chestnut Teal *Anas castanea*

A highly attractive and relatively common bird, the Chestnut Teal is a favourite of many. Unlike the Grey Teal it will visit small farm dams and well vegetated creeks near to houses and it can be found breeding in locations where human presence and disturbance would deter other species. Such tolerance may occasionally lead it into danger, but it is remarkably stealthy in its movements. During daylight, and especially when breeding, it creeps from point to point with great caution so that its presence often goes undetected until it emerges with its brood of half-grown young.

Its general distribution extends over much of western and south-eastern Australia where it inhabits saltwater lagoons, coastal estuaries and tidal rivers as well as inland lakes and lagoons. Outside the breeding season and particularly during the months of Summer and Autumn it forms congregations in association with Grey Teal and [Pacific] Black Duck. Except for the presence of the brightly coloured males, it could well be overlooked, as the females appear very similar to both sexes of the Grey Teal.

Although the Chestnut Teal is generally considered less mobile and more sedentary than the Grey Teal, there is regular movement across Bass Strait, as has been demonstrated by recoveries of banded birds. However, Tasmania seems to be a stronghold of the species and many of the lakes and lagoons of the midlands support significant populations. These populations fluctuate as birds move between locations in response to disturbance or the availability of food.

It feeds mostly in shallow water, dabbling along the bottom and, where the depth is too great for this, it will “duck dive”, leaving its tail above the surface and holding this position for some seconds as it fossicks for tiny molluscs, aquatic insects and fragments of vegetation.

With the approach of Spring males display to attract a female and once a pair bond is formed they seek out a nesting site and establish a breeding territory. The nest is formed on the ground among dense grass, rushes or shrubs, and is well concealed, often having its entry and exit by means of pathways in opposite directions beneath the foliage.

The nests which I have examined have been composed of a considerable quantity of grass and leaves formed into a dish and heavily lined with soft down from the bird's breast. A clutch usually consists of between seven and eleven eggs which are a rich cream colour, although sometimes stained by the bird's feet. Incubation is done entirely by the female and is said to take 27 days. Following hatching both parents attend to the care and protection of their offspring, most of which are fully fledged by January.

One of my most vivid recollections of encounters with Chestnut Teal is of watching a pair silently escorting seven small ducklings along the course of a small creek. Led by the male, the ducklings followed closely in a single file, winding their way between the stones,

sometimes waddling, sometimes paddling or swimming, and with the female in the rear, ever alert to ensure that no straggler was left behind.

The Chestnut Teal is one of the ducks for which an annual open season is declared in the Autumn when limited numbers may be taken by license shooters.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#60). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Pacific Black Duck *Anas superciliosa*

There are a few experiences more impressive and appealing to the bird lover than that of watching a family of wild ducks busily going about their daily activities in a quiet backwater on a pleasant Spring day. With an eye ever scanning the sky for the possible danger of a predator's sudden attack, but at the same time tending its brood as they learn the skills of finding and catching food, the wild duck presents a living illustration of the cruel beauty of the struggle for survival. The fascination afforded by the study of waterfowl behaviour causes students of natural history, of all ages, to spend many hours quietly surveying the wetlands for bird activity.

The several species which might be encountered in our wetlands, one of the most common is the Pacific Black Duck. It occurs over most of Australia as well as New Zealand and the Pacific islands to our north. As with most waterfowl which are dependent on seasonal rains and adequate water for survival, this duck is of necessity a nomad. However, because of its ability to gather food in deeper, more permanent water than can the smaller dabbling ducks with which it associates, it is less likely than they to be affected by seasonal conditions.

This bird is the principal target of the duck hunter and usually makes up the greater portion of the bag when, each Autumn, a limited number may be taken by licensed shooters. In consequence it is timid and wary of humans and has learned well from the centuries of encounters. On the other hand, it has also learned to recognise "safety regions" and some people are convinced that many birds move to the protection of sanctuaries in the week before the season opens. There is, however, little in the way of reliable data to support this belief. As with our other ducks, there is some movement across Bass Strait and the population fluctuates accordingly.

Undoubtedly, though, some individuals have discovered the benefits of parklands and reserves where they are generally free from human interference, for the Pacific Black Duck is a regular visitor to such places, flying in from the wild to avail itself of the opportunities of food there. Unfortunately such parklands sometimes contain the introduced semi-domesticated Mallards *Anas platyrhynchos*, a Northern Hemisphere duck that is closely related to our [Pacific] Black Duck. The two species can interbreed and there is fear that hybridisation could, in the long term, favour the more dominant Mallard.

The best populations of the Pacific Black Duck in Tasmania are generally to be found on the Derwent and Tamar Rivers, estuaries and bays on the east coast, and on lakes and lagoons in the midlands. It feeds on aquatic vegetation and insects, and finds most of its food on the bottom, which it reaches by diving, tail up. Under cover of darkness it will also come ashore to consume seeds, grasses and, no doubt, some nocturnally active invertebrates. One shooter once told me of bagging a black duck in a remote highland area above Deloraine and finding its stomach filled with grey peas which he considered the bird had gathered at night from pea paddocks in the lowland farming districts.

Breeding takes place from August to November, the down-lined nest being situated in a tree hollow or among herbage on the ground. Ten to twelve cream eggs form the usual clutch and take about four weeks to hatch. The ducklings swim in the company of their parents soon after hatching.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#61). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Mallard *Anas platyrhynchos*

The Mallard is a game bird of Europe which was introduced to Australia late last [19th] century, since when it has multiplied and spread to become established in a semi-wild state in many areas.

The highly ornamented and decorative males have, over the years, attracted the attention of curators of waterfowl parks and others, who have introduced it into ponds and lakes in city and suburban gardens, thus further promoting its spread. In such sanctuaries it breeds readily and its growing population resulted in greater distribution as the young non-pinioned birds took wing and dispersed, sometimes to settle on farm dams and eventually hybridise with domestic ducks.

With most introduced species unforeseen problems can arise and in this instance it was realised, too late, that it would also cross with native ducks, in particular with its near relative, the Pacific Black Duck. This has occurred not only because of the dispersal of the Mallard, but also because of the nightly visits of black ducks to the reserves where Mallards are kept. In fact, in some such parks and gardens the black duck, too, becomes semi-domesticated, having learned that there it does not need to fear humans, and so becoming even more prone to hybridisation.

Just how serious this threat might eventually become is unclear, but the worry among conservationists is that the species could, in the long term, displace the native one by its superior vigour and genetic dominance. The same dangerous pattern of hybridisation is being demonstrated in North America and New Zealand, where the Mallard was also introduced and has crossed with local black duck species to such a degree as to have swamped them genetically in many areas.

The male Mallard undergoes a post-breeding moult when it loses the brilliant colouring of its green head, white neck ring, chestnut breast and grey back to assume a plumage similar to that of the female. Then, to the untrained eye, it might easily be mistaken for the Pacific Black Duck. With the approach of Spring a further moult sees it resume its magnificent breeding colours.

Like the black duck it will nest on the ground in a hidden spot among foliage, making its nest of vegetable material and lining it with feathers. Up to a dozen light greenish-buff eggs comprise a clutch and they are incubated by the female for about four weeks. As soon as all the young have hatched the duck, attended by the curly tailed drake, takes them to the water, where they quickly learn to catch aquatic insects and to fend for themselves. As an introduced species, the Mallard is not protected by law.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#62). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Australasian Shoveler *Anas rhynchos*

Although it occurs widely over much of south-western and south-eastern Australia, this species is believed to have declined in number during the present [20th] century, for reasons which remain unknown.

It is occasionally found in congregations of its own kind, sometimes numbering hundreds, but more usually in pairs and often in the company of other ducks. Consequently it has, on occasions, been shot during the hunting season despite the fact that its relatively low numbers have caused it to be excluded from those species which may be legally taken.

Even from a distance the characteristically large and broad beak with its distinctive bluish hue, especially in the more colourful male, is quite eye-catching and serves to distinguish the shoveler from all other local ducks. Appearing almost exaggerated in its development, the beak is in fact beautifully equipped to perform its main task of filtering food from mud and water in among the weed where feeding takes place.

The edges of the beak have comb-like lamellae, which retain seeds and small aquatic invertebrates while providing for the expulsion of water, a kind of lateral filtering system. While feeding, the shoveler swims low in the water with its beak submerged and continually forces water through these filters. Occasionally it will dive to feed from the bottom, giving the appearance of standing on its head.

The Australasian Shoveler, also known as the Blue-winged Shoveler, is found mostly on lagoons and swamps of permanent or semi-permanent water where aquatic life is most abundant. Established pairs often remain in the same locality for some time. As with other ducks, there is in all probability a movement of birds to and from the Australian mainland, but few studies have been made and much remains to be learned the habits and requirements of the species.

Its general disposition appears to be nervous as it is always on the alert for possible danger and when it rises to fly it does so with an air of urgency and with rapid, noisy wing beats. As it is not dependent on grazing on green grass to supplement its diet and as it prefers the relative safety of water when resting, it is rarely found ashore.

The exception, of course, is when the breeding season approaches, usually about August. Mating displays and copulation take place on water and it is believed that the male leaves the chores of nest building and breeding to the female, paying little attention until the ducklings hatch.

The nest is on the ground and well hidden among dense vegetation growing either on the edge of a swamp or in shallow water. It is formed from grass and lined with down from the female's breast. Eight to ten eggs make up an average clutch. They are of a cream colour but

sometimes with a slight greenish tinge and often becoming nest stained as incubation progresses. The eggs are believed to hatch after about three weeks and the ducklings are then taken to the water and tended by both parents.

In mature plumage the males are easily distinguished from females by their more colourful appearance, the females being mostly a mottled brown.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#63). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Pink-eared Duck *Malacorhynchus membranaceus*

This is perhaps the most unusual of all the ducks to be found in Tasmania. It occurs over most of Australia, but is more numerous in the Murray-Darling River basin and is only a rare, nomadic visitor to this island.

Although it is not one of the species which may be legally taken during the duck hunting season, it is, however, shot on odd occasions.

Taxonomically it is an interesting but rather confusing bird as its features, taken together, cloud its evolutionary origins. Its broad, spoonbill-like beak, the width of which is exaggerated by lateral flaps, and its method of feeding suggest an affinity with the dabbling ducks, while certain anatomical features resemble those of perching ducks. The striking zebra-like stripes on the plumage of the flanks and breast are distinguishing characteristics and, together with the beak flaps, should serve as ready identifying features of this bird, even for those previously unfamiliar with it. The name of "zebra duck" which has been applied to the Pink-eared Duck might, on first impressions, seem more appropriate. Not until it is observed at relatively close quarters do the most unusual little pink, ear-like spots in the feathers on the sides of the head become apparent. These then confirm without doubt its identity.

As the very broad beak would indicate, the bird feeds with its head partly submerged to suck in quantities of water, rich in microscopic invertebrates and plant fragments, filtering this through extremely fine lamellae on either side of the beak in order to retain the food particles. Occasionally it will also feed by dredging among silt on a muddy bottom or it will trawl in circles, stirring up the water and any potential food it may contain.

The Pink-eared Duck is highly nomadic and Tasmanian birds are believed to be simply wandering visitors. It is not known to breed here and the steep terrain of most of the island, which promotes rapid drainage after rains, does not provide good conditions for the accumulations of stagnant water in which the bird's plankton-like food is produced.

Breeding is erratic and regulated by floods which stimulate it to nest. The process is so timed as to synchronise the hatching and rearing of young with the bloom of its food supply. Following major floods on inland waterways such as the Murray and Darling River systems, concentrations of this bird might number thousands and contain perhaps the major proportion of the total population.

The nest is always situated over the flood water, in the top of a bush, on a tree stump, log, the nest of another bird or any such site which will hold the accretions of nesting materials and down amongst which the eggs are laid. When leaving the nest to feed, the female covers the eggs with down plucked from her body as a means of protection and to retain warmth. From five to eight cream coloured eggs form the usual clutch. Incubation is the task of the female

and takes about four weeks. Within hours of hatching, the young are swimming with their parents.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#64). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Hardhead *Aythya australis*

Only occasionally is this bird of nomadic habits, sometimes called the White-eyed Duck, seen in Tasmania. These spasmodic sightings are all visitors from the mainland, where it occurs widely, as it does on many of the island groups to Australia's north. It is the only Australian representative of a cosmopolitan group of ducks known as Porchards, a name which is also sometimes applied to it.

The Hardhead's dark brown head and back, contrasting with the white under-tail and under-wing feathers which are highly visible in flight, usually provide sufficient identification to enable an observer to distinguish it from other birds. In the male an additional feature is the white iris, conspicuous even from some distance, a marking not possessed by other ducks. The eye of the female is brown.

Generally it favours the deeper parts of freshwater lakes and lagoons, and is rarely found resting ashore in the manner of other duck species. Most of its food is obtained by diving and swimming under water, after which it will surface again up to a minute later some 30 or 40 metres from where it has gracefully submerged. By this means it is able to secure aquatic invertebrates such as water beetles, molluscs and crustaceans. As well it feeds on plant material which is not otherwise accessible and is beyond the reach of those ducks which dabble for their food. Occasionally it feeds in shallows where deep diving is not necessary, and there it can be seen reaching below the surface, tail up, to take food in the manner of dabbling ducks or to strip seeds from aquatic vegetation.

When taking flight the Hardhead rises steeply with rapid wing beats and flies swiftly with a noticeable whirring sound, and it is then that the white under-wing and pale belly feathers are clearly exposed to view.

Few studies seem to have been made of the species. Historical and more recent records and writings indicate that it is a highly mobile bird and responds to drought by extensive nomadic movements, even as far as to islands in the south-west Pacific. It has been recorded as reaching New Zealand, although it has failed to become permanently established there.

The draining of swamps in many parts of Australia and the consequent depletion of areas available for feeding and breeding are thought to have resulted in a significant population decline this century. Dr H J Frith, in his book, *Waterfowl in Australia*, published in 1967,¹⁹ stated, "The bird is in greater danger than any other game species in southern Australia."²⁰ To date his fears seem to have been somewhat exaggerated!

¹⁹ Harold J Frith, *Waterfowl in Australia* (Angus & Robertson, 1967).

²⁰ Ibid, 249.

Breeding is said to occur as a response to local flooding, but it mostly takes place from September to December. The nest is woven from small sticks, reeds and sedges and is lined with down. It is situated over water among dense vegetation. A clutch may number from nine to twelve creamy coloured eggs which have an incubation period of about 25 days.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#65). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Blue-billed Duck *Oxyura australis*

A nomad, like other ducks, this bird occurs in south-western and south-eastern Australia, living on areas of permanent fresh water. For most of the year it favours the deeper and more extensive waters, but with the approach of Spring and the onset of breeding, pairs form and retreat to quiet and more sheltered swamps and lagoons. Here shoreline vegetation provides suitable seclusion in which their nest and their presence can be concealed.

The Blue-billed Duck belongs to a specialised group known as stifftailed ducks. The reason for the name is apparent when this proud little bird chooses to display its tail, which it does in an almost belligerent manner, holding the feathers erect. This habit, together with the distinctly blue beak of the male, especially during the mating season, helps in identifying it, making it easy to avoid any possible confusion between it and the Hardhead or the much larger, also stifftailed, Musk Duck.

The “blue-bill” is not often seen in Tasmania, although it has been recorded as breeding here, including on both King and Flinders Islands, and it has been shot, illegally, during duck hunting seasons.

It is a true diving duck and invariably chooses that method of escape or retreat if it is in the least alarmed, swimming under water for some distance before cautiously emerging to view its surroundings, often from the semi-cover of aquatic vegetation. Only rarely is it seen to fly, and then usually at night.

Much of the Blue-billed Duck’s food is secured by diving to the bottom for aquatic insects and their larvae, molluscs and crustaceans. It also eats a range of plant food such as seeds and buds. All that food is gathered from the water and the duck appears seldom, if ever, to go ashore.

Its courtship behaviour is said to be vigorous, elaborate and spectacular. The male engages in splashing, bill jerking, diving, tail fanning and pursuing the female both above and beneath the surface of the water. Copulation is finally achieved while the birds are completely submerged.

As the Blue-billed Duck is a bird of the deeper swamps, its breeding is less dependent upon rains and flooding than that of most other duck species, and it has a more regular breeding season. The nest is built among dense vegetation or tea tree, usually over water, and is composed of aquatic plants and reeds with the lining of finer material and down. The eggs are laid about September and five or six constitute the usual clutch.

They are of a pale greenish colour. The male takes a little active interest in either nest building or brooding. Incubation is said to extend over some four weeks and the young then take to the water.

Of the ducks which occur in Tasmania only the Freckled Duck *Stictonetta naevosa* would be more rarely found here, having been recorded perhaps as few as half a dozen times this [20th] century. For this reason we have chosen not to illustrate it.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#66). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Musk Duck *Biziura lobata*

A piercing whistle, the mating call of the male Musk Duck, is clearly audible from a kilometre or more away on a calm day and can alert an interested birdwatcher to the opportunity to observe its bizarre but spectacular courtship display.

From a distance the only other evidence of the bird's presence may be a periodic splash of water erupting at regular intervals to synchronise with the whistle. On closer viewing the male can be seen to kick water into the air behind him while his head is raised and the prominent bladder-like fold beneath his beak is considerably expanded. At the same time the stiff tail is fanned as the bird revolves in the water. Such behaviour eventually attracts the attention of a female who, as she approaches, is met by the male. Copulation quickly follows, with the female being totally submerged during the act. Following mating, the two birds each return to their separate territories and no pair bondage is established.

The Musk Duck occurs widely in south-western and south-eastern Australia, favouring the larger lakes, lagoons and swamps, but it can also be found on rivers. Mostly it is seen singly or in small, scattered parties, but it will sometimes be found in congregations on the larger expanses of water. It floats and swims low in the water as if to reduce exposure, and feeds by diving. It can remain below the surface for periods of a minute or more, usually re-emerging at some distance from the point of entry.

Rarely is it seen to fly and if alarmed or threatened it will always dive and hide under water, surfacing again with great stealth at another spot. Except for the occasional need to move to a different locality, at which time it flies during the hours of darkness, it is almost totally aquatic, its form and mode of behaviour having evolved in ways which have something in common with those of the seal. Effortlessly it regulates its buoyancy and will sometimes submerge by gently and silently sinking into the water to avoid detection.

The Musk Duck's diet consists of aquatic plant material, insects, molluscs and, occasionally, small fish and frogs. The food is secured by repeated diving, head first, and often in deep water, for intervals of about half a minute between which it surfaces only briefly to breathe and look around.

It breeds much later in the year than do other ducks. Nests with eggs can be found from October to the beginning of January. The nest, made of rushes and lined with down from the body of the female, is hidden within a clump of reeds growing in water and covered with a dome created by the bird pulling down and weaving the reeds above it. A ramp-like pathway of broken reeds leads from the water into the nest. The whereabouts of a nest is sometimes indicated by a little white down and scattered vegetation on the surrounding water. Unlike other ducks, which usually produce a large clutch, the Musk Duck lays only two or three eggs at a time. These are pale cream in colour but become nest stained during the period of up to four weeks which it takes for incubation.

The Musk Duck is not subjected to an open hunting season. Males have a musky odour caused by a secretion in the oil gland on the tail. Females are distinguishable from males by the smaller size and lack of the prominent lobe beneath the beak.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#67). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Stubble Quail *Coturnix pectoralis*

This cryptic little quail is common and widely distributed over much of Australia. It was once a prevalent and prized game bird in Tasmania but today, for reasons not understood, is a rare species here. There is at present some doubt as to its continued survival on the mainland of Tasmania, although on King and Flinders Islands it might still be found.

This situation is in marked contrast to the findings of John Gould who in, in his *Birds of Australia Volume five*, published in 1848, states that he found it “abundant” in Van Diemen’s Land.²¹ Frank Littler, in *Birds of Tasmania*, published some 60 years later, stated, “Practically every district that has been cultivated holds this fine game bird in greater or lesser numbers.”²² Why such a once common little bird should have failed to maintain its numbers in Tasmania whilst still doing so on the Australian mainland remains a mystery. It is most unlikely that shooting alone would have caused the decline. It is often suggested that the reason is a combination of numerous factors including, in addition to shooting, the spread of feral cats and a reduction of the areas annually sown for grain crops in which the bird apparently thrived. Whatever the contributing causes, there is little chance now that they will ever be fully understood.

Like most ground dwelling birds the Stubble Quail has plumage the colour and pattern of which blends closely with its surroundings. So confident is it of its camouflage that avoidance of predators is usually achieved by the bird squatting and remaining perfectly motionless until the threat passes. However, if pressed to fly it jumps almost vertically to clear the vegetation and flies straight and low on rapid, whirring wing beats for 50 metres or so before dropping to cover and running some little distance before hiding again.

In South Australia, where it still occurs in considerable numbers, a comprehensive banding study has confirmed the long suspected nomadic nature of the Stubble Quail. Small leg bands, numbered to enable identification of individual birds, were used by specially trained and licensed ornithologists in a live capture and release program which was conducted over a number of years. From subsequent recoveries it was proved that movement between districts more than a thousand kilometres apart does take place, apparently in response to the availability of a satisfactory food resource. As seed forms the major part of its diet, the bird would no doubt have long mastered the inherent survival skills necessary for it to locate seasonally available crops and to move in response to drought and other such natural adversities.

²¹ John Gould, *The Birds of Australia* (John Gould, 1848, vol V) entry for *Coturnix Pectoralis*: Pectoral Quail <<https://www.biodiversitylibrary.org/item/188478#page/361/mode/1up>>.

²² Frank Mervyn Littler, *A Handbook of the Birds of Tasmania and its Dependencies* (Frank M Littler, 1910) 106 <<https://www.biodiversitylibrary.org/item/34662#page/176/mode/1up>>.

Breeding appears to be almost opportunistic and it, too, is probably regulated by food supply, peaking at times which are best for the rearing of broods. Consequently this bird starts to lay late in Spring mostly from about October, with clutches being produced as late as February.

The nest is a depression in the ground lined with grasses and is generally well concealed. A clutch usually contains from six to eight cream or sandy-brown coloured eggs which are heavily and attractively blotched with chocolate-brown markings. Incubation is said to be undertaken by the female with the chicks emerging after three weeks, whereupon they are led from the nest to wander with their parents.

Females lack the prominent chestnut coloured throat which is characteristic of mature male birds.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#68). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Brown Quail *Coturnix ypsilophora*

When Europeans first settled in Australia they found quail to be a culinary delight and so these birds were hunted in the same manner as were partridge and other such game birds in England. The practice has continued to the present day, although it has been for many years now strictly controlled under state laws which regulate the season and the conditions under which birds may be shot.

With the passing of years quail numbers have gradually declined and opinions differ as to the possible causes. Some consider the predatory habits of feral cats a reason, while others argue that it may well be land clearing or changes in land usage. Today in Tasmania, only the Brown Quail may be taken, under special license, and then only in the north of the island and on some islands in Bass Strait.

This species occurs widely on the Australian mainland in areas of higher rainfall, but those populations are considered by some authorities to be a sub-species distinct from the Tasmanian birds. For many years ornithologists believed a second and larger species, known as the Great Brown Quail or Swamp Quail, occurred in Tasmania. More recently the so-called larger and smaller brown quail have been accepted as belonging to one and the same species, as there is a lack of sound evidence to suggest otherwise.

The Brown Quail lives in small groups or bevvies and dwells almost totally on the ground in habitats which range from poa grassland to the edges of swamps, marshland, heathland and light forests, where the vegetation is dense enough to provide it with good cover beneath which to shelter and hide from predators.

From such cover it will cautiously creep to feed on a variety of insects, seeds and green vegetation, but will quickly run and hide should danger threaten. If forced to fly it rises explosively with rapid, noisy wing beats to fly rather clumsily for some 50 metres or so before dropping again to the ground and running some further distance before hiding again.

An observer who is sufficiently patient, quiet and still may, after some minutes, be rewarded by hearing the plaintive “whee-whee” whistling call which this bird utters in order to enable the bevy to form again. If the call is mimicked with enough skill and stealth the quail might be persuaded to approach the caller to within a few metres before realising its mistake.

The Brown Quail does not begin to breed until Spring is well advanced, usually about October or November, and maybe found brooding as late as February. The nest is a grass-lined depression in the ground, very well hidden among dense vegetation. A clutch may consist of up to a dozen relatively large eggs of a greenish-cream colour, heavily peppered with very fine brown spots. They hatch, almost simultaneously, after about three weeks and the chicks are led from the nest by their parents within a few hours and start to learn the skills of finding food for themselves. There are few more fascinating sights for the dedicated bird

watcher then a pair of Brown Quail busily engaged in the task of tending their accompanying brood of ten or a dozen chicks.

The North American Californian Quail *Lephortyx californicus* was introduced on King Island about 1920 and the Eurasian Common Pheasant *Phasianus colchicus* to the same island about 1912. Both have since increased to such numbers as to support an open shooting season.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#69). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Painted Button-quail *Turnix varia*

Seven species of button-quail occur in Australia but only this one reaches Tasmania. All belong to the genus *Turnix*, some members of which are found in Africa, Asia and on south-west Pacific islands. Although superficially resembling true quails, the button-quails are in fact more closely related to rails, coots, cranes and bustards, with which they share an ancestral heritage. The quail-like appearance and habits are simply a result of convergent evolution and these features have gradually evolved so as to enable these birds to utilise and thrive in the specialised habitat in which such features are more useful.

An alternative name which is sometimes used is “bustard-quail”, from the anatomical closeness and similarity of habitat of the two kinds of birds. Unlike true quails they do not have a hind toe, a feature which clearly distinguishes them.

The Painted Button-quail occurs over much of western, eastern and southern Australia. In Tasmania it might be found in dry forests and woodlands where a ground cover of leaf litter and other debris harbours the invertebrate animals and seeds upon which it feeds. To find these it scratches in a fowl-like way, often clearing small patches as it sweeps back the litter. To the careful and alert observer such scratchings can provide a good indication of its presence in the area.

I found it in the Kelso district in the north of the island where it was living in sandy coastal country, and among heath in semi-open forest country. I also have records of it from the east Tamar, from near Hobart and on Bruny Island as well as King and Flinders Islands in Bass Strait. It does not, however, appear to be as common as it was half a century or more ago. Along with true quails it was once shot as a game bird but for many years now has been afforded full protection under the law.

The colour and pattern of its plumage blend extremely well with its surroundings and so it has learned to utilise natural camouflage as a means of avoiding detection by predators. It rarely flies, preferring to run and hide, but if forced to take flight it will burst suddenly upwards and, with rapid wing beats, will move low over the shrubbery for 50 metres or so before landing in the seclusion of alternative cover.

Breeding takes place in late Spring and early Summer. The nest is a mere depression in the ground lined with dry grass and leaves, usually well hidden and sometimes partly domed over, situated among grass, shrubs or forest litter. A clutch consists almost always of four eggs, which are basically white but very heavily peppered with fine spots and blotches of brown and purplish-grey. Incubation takes about two weeks and is carried out by the male who, following hatching, continues to attend to the wellbeing of the brood.

The sexes differ in appearance only in minor detail but, in contrast to most birds, the female is the more vocal with a low, booming, pigeon-like call. She initiates sexual display and may mate with several males, usually leaving her partner after producing her clutch.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#70). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Lewin's Rail *Dryolimnas pectoralis* [now *Lewinia pectoralis*²³]

Brackish and freshwater wetlands are the home of this attractive little rail. Although it occurs widely in south-eastern Australia its strongest populations appear to be in Tasmania. It can be found living in wet heathland, around farm dams or along water courses, in fact in almost any natural drainage system where the vegetation provides sufficient cover in which it can hide.

Its presence, however, is often not apparent until, perhaps by accident, one is suddenly flushed from its hiding place. Then it will rise in alarm and fly urgently in a quail-like manner for a short distance, low over the marsh, before dropping again to cover. My museum experience has demonstrated that domestic cats are significant predators of the Lewin's Rail, for many have been brought to me for identification with the question, "What is this bird the cat brought home?"

It can be readily identified by its characteristically elongated and slightly down-curved beak, a feature by which it can be distinguished from those other tiny waterfowl, the crakes. These latter have much shorter and stockier beaks. Confusion could possibly occur with the Buff-banded Rail *Gallirallus philippensis* [now *Hypotaenidia philippensis*], a bird of rather similar habits and appearance but of a significantly greater size, with a shorter beak and a white eyebrow. There are, however, very few records of the Buff-banded Rail in Tasmania, and an encounter with one is extremely unlikely.

Lewin's Rail is generally timid but I have heard of instances of birds becoming accustomed to leaving their shelter and entering a cowshed and a stable where chaff had been fed to cows and horses. The regular spillage had eventually lured them to feed on the waste grain. In its natural surroundings the rail probably feeds largely on invertebrates it finds among the vegetation and mud of the bogs, as suggested by the elongated beak which would be well suited to securing such food items.

Although this rail appears to be a rather plump little bird, its body can be compressed laterally to a surprising extent. I have known it to pass with relative ease between bars of a cage which were barely two centimetres apart. This, too, is an adaptation eminently suited to its life among dense vegetation, allowing it to pass more easily between the reeds and rushes where it forms well defined little runways. It is also an excellent swimmer, either on or under the water, and will dive to avoid pursuit.

Breeding takes place principally between September and December, though some eggs maybe produced in January. At this time of the year its presence may be revealed by its calls, which include grunting sounds and a rapid repeated series of ticking noise. The nest is usually placed well up in the middle of a clump of grass growing in a swamp and is furnished

²³ There is a Tasmanian subspecies of the Lewin's Rail: *Lewinia pectoralis brachipus*.

with an approach ramp of trailed nesting material. The sitting bird partly conceals the site by pulling grass stems down to form a protective hood.

The eggs are a pale cream colour attractively marked with reddish-brown and purple blotches. Four to six of them form the usual clutch. Incubation is said to take about three weeks and the newly hatched young, which are covered with soft black down, leave the nest within the first few hours. Both sexes, which are alike in appearance, share the tasks of incubation and tending the young.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#71). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Australian Crake [now Australian Spotted Crake] *Porzana fluminea*

Crakes might be thought of as the “bantams” of the rail family of waterfowl. Their tiny, slim bodies are well suited to life among the dense reed beds of the marshland which are their habitat.

The Australian Crake, sometimes referred to as the Spotted Crake, is, unlike the other members of its genus, restricted in its distribution to eastern and south-western Australia. It can be found living in marshlands which other crake species also inhabit, and can be distinguished from these other crakes by its plumage. The white markings or spots over much of its olive brown back and the white under-tail feathers, which are displayed through the bird's habit of flicking its tail, are aids to identification. The sexes are alike in appearance, but immature birds lack the prominent red patch on the base of the upper mandible which is characteristic of mature adults.

There is still only little understanding of its seasonal movements and the requirements for its maintenance. It appears, however, to be more tolerant of brackish wetlands than other crakes and I have found it living among the introduced rice grass or *Spartina* along the intertidal shores of the Tamar River. It is generally shy of intruders into its territory and the best chance of seeing this bird is gained by quiet and patient watching over an area where it is suspected to be living. Even then an encounter with it is often a matter of luck.

A useful indication of the presence of crakes is their tell-tale footprints on the muddy verges around dense vegetation and along drains and pathways through the reed beds. From the protection of such shelter it ventures into adjacent shallows and wades up to its belly in search of food. Always alert for the threat of predation, it darts back to safety at the least provocation. Its diet is believed to be much like that of other crakes, including aquatic insects, tiny molluscs, tadpoles and plant matter. It is rarely seen to fly, as such excursions are taken under the cover of darkness.

The Australian Crake's repertoire of calls is complex, as might be expected of a bird which, by its mode of life, has to depend more upon its vocabulary than on visible signals for communicating with its fellows. However, such calls are usually uttered when the bird is out of sight, so there is no certainty as to their originator. Describing the calls, beyond saying that they include a rapid, high-pitched chatter, characteristic of all crakes, is a near to pointless task.

Breeding takes place from September to January. The nest is a shallow, saucer-shaped structure of semi-dry grass is hidden amongst tall grass and rushes growing near the edge of a lagoon or swamp. A clutch comprises five or six eggs, sandy brown in colour and prominently marked with reddish-brown blotches and spots in such a pattern and shade as to resemble closely the coloration of the eggs of the Tasmanian Native-hen. Upon hatching, the young, covered in black, fluffy down, soon abandon the nest to follow their parents.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#72). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Spotless Crane *Porzana tabuensis* [now *Zapornia tabuensis*]

As with other members of its genus the Spotless Crane, or Tabuan Crane as it is also called, is a secretive bird and hence difficult to observe. Its chosen habitat is among the reed beds and dense vegetation of marshlands and in such sites it occurs throughout Tasmania. It is also to be found in the south-east and south-west of the Australian mainland and numerous island groups of the south-west Pacific.

It appears to be the most common of the three species of crakes in Tasmania, but little is yet known of its seasonal movements. Though some populations appear rather sedentary, others apparently migrate or take nomadic flights across Bass Strait. It is distinguishable from the other crane species by its darker, leaden coloured head and breast and its tan coloured back with a complete absence of spotting. The sexes are alike in plumage and other aspects of appearance.

Some of the best observations of its habits and breeding behaviour were made early this century in the Springfield district near Scottsdale by Miss Jane Fletcher, a teacher in the local school at the time. Marshes and swamps, choked with reeds and rushes, were then a feature of the district. They have long since been drained and converted to agricultural land with the consequent disappearance of the crakes and other marshland birds.

Miss Fletcher found many saucer-shaped nests of crakes, formed with dead reeds and soft grasses, usually placed low down in the centre of a clump of rushes growing in what she described as

deep slush and treacherous cress-covered bog, through which progress is difficult. The dense luxuriant growth of rushes, sword grass and blackberry trailers form a jungle well nigh impossible to force a way through and the searcher has many a fall over submerged tree trunks and rotting stumps. Added to the discomfort is the fear of an encounter with snakes which abound.

This gives an indication of the level of this eminent naturalist's interest in nature and her dedication to the study of birds. She wrote numerous accounts of her observations as well as several nature study books and stories for children

The Spotless Crane's food consists of aquatic invertebrate animals and a select range of pond vegetation, which it gathers by walking cautiously over the ooze and floating weed growth, occasionally flicking its tail and offering a variety of sharp notes and bubbling sounds.

Only rarely is it seen to take flight, preferring to run to the shelter and seclusion of the marshland vegetation. Long distance flights are taken only under the protection of darkness so as to avoid the possibility of attack from birds of prey.

In Tasmania breeding commences in September and might continue until January. Three to five eggs form the usual clutch, the colour being a creamy brown, heavily peppered with very fine buff brown markings. Incubation is believed to be undertaken by both parents and to last about three weeks.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#73). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Baillon's Crake *Porzana pusilla* [now *Zapornia pusilla*]

This is the smallest of the crake family in Australia. Also known as the Marsh Crake or Little Crake, it is widely distributed and can also be found beyond our shores, as far afield as Europe, Africa, Japan, south-east Asia and New Zealand.

It is timid and rather secretive and is often hidden by the reed beds in the marshlands which form its habitat. Consequently it is a most difficult bird to study and much knowledge of its life and habits is yet to be disclosed. Fluctuating local populations indicate that it is migratory or nomadic, moving across country by nocturnal flights to alternative feeding regions. Its nomadic tendencies and powers of flight were demonstrated in 1975 by the discovery of a single bird on Macquarie Island.

Baillon's Crake is an omnivorous and opportunistic feeder, taking both seeds and young shoots of marshland plants as well as a range of aquatic invertebrates. Its small body size and light weight allow it to walk across the surface of floating water weeds and its exceptionally long toes span the vegetation for added support as it searches for food items.

There are few good records of its occurrence in Tasmania, no doubt as a result of its secretive nature. Breeding birds were found in the Dromedary area in the south of the island earlier this century, nesting among reeds growing in shallow water and also among band-grass in the bed of a dry swamp. This was in the months of November and December. The nest was said to be composed of rush stems, bitten half through at intervals of about two centimetres so as to allow them to be bent and more conveniently placed in position.

Four or six eggs form the usual clutch and they are of a brownish olive colour, heavily but indistinctly peppered all over with slightly darker brown markings. Incubation is undertaken by both parents and is said to extend over about three weeks. On hatching the chicks appear as tiny balls of fluffy black down and are almost totally dependent on their ability to hide for protection from predators such as harriers, water rats and snakes. Adults engage in tail flicking and other distractive behaviour in their endeavour to draw away from their nest or young the attention of intruders which may pose a threat to their survival.

Males and females have similar plumage and their call has been described as either a single rasping note or a trill-like call uttered as an alarm.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#74). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Tasmanian Native-hen *Gallinula mortierii* [now *Tribonyx mortierii*]

This totally flightless bird now occurs naturally only on the Tasmanian mainland although fossil remains demonstrate that it once lived also on continental Australia. Unlike many species of flightless birds, especially those of smaller islands, the Tasmanian Native-hen did not suffer extinction following the arrival and settlement of Europeans. Rather, it flourished and expanded its distribution and numbers in response to land clearing and pastoral development along the fertile valleys to which it was confined. Being primarily a grazing bird and feeding on short green grasses and clovers, it had previously been restricted by the availability of small, natural, lawn-like areas kept clear by the grazing of marsupials.

As the early settlers gradually developed more and more grazing land close to rivers, so did the native-hen capitalise on the exposed food supply. At the same time it showed a remarkable ability for a flightless bird to allude the hunter, his dogs, traps and poison, so its population increased to such numbers that it became considered as a pest because of its grazing of pastures. Consequently many concentrated efforts were made to reduce its numbers, but despite the killing it continued to maintain its strength.

No doubt the introduction and spread of the rabbit helped in relieving pressure from natural predators which found the rabbit an easier and tastier meal. And so the native-hen flourished, until the advent of myxomatosis and the decimation of the rabbit population. The sudden disappearance of this previously abundant food supply then forced the natural predators such as harriers, ravens, owls and devils to revert to other prey, and the native-hen population suffered a dramatic decline over most of its range, being reduced to a more acceptable and relatively stable population.

Though shy and extremely cautious in its behaviour, it does become accustomed to human presence and, if not unduly disturbed, it may be found feeding, quite unperturbed, near roadways or in parks and reserves where its wetland habitat is available nearby. If pursued by dogs it will run swiftly, sometimes with its short stubby wings slightly raised, and will generally head for a nearby river or waterhole into which it will dive to avoid further pursuit. Though its toes are simple and lack webbing, it is a competent swimmer on or beneath the surface and will remain submerged for some seconds if chased into the water, eventually re-emerging quietly some little distance away.

The Tasmanian Native-hen has a well established social hierarchy, as was discovered by Dr Michael Ridpath, a biologist with CSIRO who worked on the bird from 1961 to 1963 in response to complaints about its excessive numbers.²⁴ Among his extensive and interesting findings were the fact that it forms family groups and that both parents share in incubating

²⁴ See, for example, Michael G Ridpath, 'The Tasmanian Native Hen' (1964) 14(11) *Australian Natural History* 346.

the eggs and caring for the young. Indeed, two males may share the affections of a female and share between them the associated domestic responsibilities.

Breeding can occur from August to January, the well formed nest chamber of dry grass being usually hidden under rushes or similar vegetation. Five or six eggs make up a normal clutch. They are of a sandy brown colour and are finally marked with reddish-brown spots. It takes nearly three weeks for incubation, after which the fluffy, black, downy chicks leave the nest within a day of hatching and accompany their parents. They may remain under the adults' protection within the family group until the following year.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#75). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Dusky Moorhen *Gallinula tenebrosa*

Not until 1976 was the Dusky Moorhen recorded on the Tasmanian mainland. Its presence here was discovered by David Henderson and others while watching birds on Queechy pond in the Launceston suburb of Norwood. This man-made pond, about three hectares in extent, overflows into the North Esk River. It carries a luxuriant growth of reeds and aquatic vegetation, and supports a small but varied and interesting population of water birds.

Three moorhens lived there during the Spring and Summer of that year but in April 1977 their number was found to have increased to seven and to include two juveniles, thus providing the first evidence of their having bred in the area. Subsequent observations have revealed their regular presence there and on the lower reaches of the North Esk, while some have been found in other districts.

Prior to its discovery in Launceston the Dusky Moorhen was known to live and breed on lagoons on both King and Flinders Islands. In its natural habitat, away from human settlement, it is generally a shy and retiring bird and thus difficult to observe. In a parkland situation, however, it soon adjusts to the presence and noise of humans and readily goes about its normal activities with little reserve.

Its general appearance and behaviour resemble in some ways those of the coot, swamp hen and native-hen, so, initially, some confusion may occur on the part of the observer. It swims much like a coot while picking insects and aquatic plants from the surface of the water. Occasionally it dives, tail up, like a duck to feed under water and it often walks ashore to feed on terrestrial invertebrates and green plant growth, in a similar manner to the native-hen.

Though rare in Tasmania, the Dusky Moorhen is common and widely distributed over much of eastern Australia and on some islands to the north of the continent. Its erratic appearances in some regions of low rainfall indicate a nomadic tendency and strong powers of flight, although it is rarely seen to fly. If disturbed while grazing ashore it runs, like a native-hen, to enter the water and swim quickly away. It often flicks its tail to display the white under-tail feathers.

Here, breeding occurs from September to the end of the year, and several males might form a group to defend a territory, mate with one female and attend to all the necessary nesting activities. The nest is formed from an accumulation of sticks, bark, reeds and grasses, and is well hidden among rushes or other shoreline vegetation. When built over water it is usually approached by way of an entrance ramp made of well trodden plant material. Dummy nests and nesting platforms are also built within the territory and can be mistaken for the start of a true nest. Four to eight eggs generally make up the clutch, and they are of a sandy colour, liberally marked with brown and purple blotches. They are incubated for about four weeks.

The newly hatched chicks have a covering of black down and a bright red head shield. The head shield fades in sub-adulthood and the plumage is then in general duller than that of mature adults. The plumage of males and females is similar.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#76). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Purple Swamphen *Porphyrio porphyrio*

This handsome waterfowl which occurs over much of Australia and beyond, inhabits reed beds and adjacent grassy verges. In bright sunlight the purple breast and black back appear almost iridescent and, together with the prominent blood-red beak and frontal head shield, stand out as characteristic features which clearly distinguish it from other birds. This colouring is common to both sexes, which are also alike in other aspects of the physical appearance.

Along the shores of freshwater lakes, lagoons and rivers are the reed beds which it favours as its habitat and hiding places. There it forms runways, often following drainage gutters, to make a pattern of muddy paths through the swampy vegetation. These paths may lead to sunning platforms which the bird builds on top of reed clumps, from where it can survey sections of its territory.

When all is quiet the swamphen emerges from its shelter to feed over nearby grassed areas. It is omnivorous and the wide range of animal and plant species which make up its diet include aquatic insects, frogs, molluscs and seeds. Often it will stand on one leg while holding up a potential food item in the other foot and delicately extracting the edible portions by picking and pulling from between its partly clenched long toes. I have, on occasions, watched this bird carefully examining pieces of dry cow dung, peering at the clawed sample in a search for insects and seeds as it gently pulled the sections apart.

Always cautious and alert for danger, the Purple Swamphen is nonetheless a bold and rather dominant bird of the swamps. A fearless combatant, it is equipped with a fine, needle-like spur on the end of the wing, the feature which, along with the feet and stout beak, can be used in the flurry of an encounter with an adversary.

Its confidence in its ability to defend itself and its breeding territory is illustrated by the rather exposed nature of its chosen nesting site. Unlike most other swamp birds, which hide their nests, the swamphen builds a deeply concaved platform of reeds and rushes in a partly elevated position. This is often clearly visible from above, but the bird is apparently perfectly happy that it can protect the nest and eggs from marauding Swamp Harriers and other such aerial predators.

The Purple Swamphen has a complex vocabulary which seems to play an important part in its communal social system. Birds often call with raucous squawks which carry over a considerable distance. Individuals acting as lookouts can be seen perched on fence posts or other such elevated points, from where they utter a brief warning call in event of intrusion. Swift of foot, the bird generally prefers to run but will take to the air if alarmed or hard pressed, flying low over the water and reed bed with a heavy and seemingly laborious wing beat before dropping to cover or to the safety of distance.

Breeding takes place from September to December, with four to six eggs forming the usual clutch. These are sandy brown and heavily marked with reddish and purplish-brown spots. The chicks with their covering of dense black down hatch out after about three weeks and desert the nest within a day or so to accompany their parents through the swamp.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#77). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Eurasian Coot *Fulica atra*

As suggested by its name, the distribution of this semi-aquatic bird extends well beyond Australia, across much of Asia to southern Europe and Africa. The species consists of several geographically distinct races, only one of which occurs in Australia. It is a highly mobile bird which moves back and forth across Bass Strait at irregular intervals, apparently in an opportunistic response to the local availability of suitable food. The coot's mobility has been demonstrated by the remarkable occurrence, admittedly on rare occasions, of individuals reaching Macquarie Island.

It is a bird of the freshwater lakes, lagoons and rivers, favouring the more exposed and open areas, where it can be found in small parties or loose flocks, busily swimming about in an erratic manner in search of food on or beneath the surface. Unlike those of many water birds its feet are not webbed but the toes have broad lateral lobes which assist in swimming. Diving below the surface is a regular feature of its feeding behaviour and in this way it secures such items as aquatic insects and plants. It then might remain underwater at a depth of several metres for perhaps a quarter of a minute. Occasionally parties of coots will be attracted to grassy verges, leaving the relative safety of the water to graze on tender green foliage, but if they are disturbed or threatened they hurriedly return.

The Eurasian Coot is rarely seen to fly for any distance, as its long journeys take place at night, presumably because at that time attack from falcons and other such predators is unlikely. Short, flapping flights, with the feet pattering across the surface of the water, can be observed during squabbles between individuals or when some urgency exists.

Its inquisitive nature can lead the bird into danger, for it has been well known to fall prey to water rats when venturing too close in investigation of their presence. I once found a single coot trapped in a small patch of clear water in the middle of an iced over lagoon, being attacked repeatedly by a Swamp Harrier. This was a most unusual occurrence as these harriers have normally all migrated from Tasmania long before Winter sets in. The poor coot was, of course, able to submerge for only a short while to avoid the harrier's talons. On the other hand the harrier could not risk a dunking and it eventually gave up its endeavours and flew on.

Breeding takes place in Spring and early Summer, but only very rarely has this bird been found to breed in Tasmania as the island's population is formed of nomadic visitors from the mainland. The nest is a dish-shaped structure of twigs and aquatic vegetable matter built among reeds and other such cover in or near the water's edge. Five or six finely marked, stone coloured eggs form the most common clutch and incubation takes about three weeks. The chicks swim with their parents soon after hatching.

The sexes are alike in appearance, but sub-adults can be distinguished from fully mature birds by observation of the conspicuous and characteristic white frontal head shield. In the younger birds this is slightly duller and not so developed.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#78). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Pied oystercatcher [now Australian Pied Oystercatcher] *Haematopus longirostris*

Popularly known as “red-bills”, because of their most outstanding feature, a long, stout scarlet beak which contrasts sharply with their plumage and provides an unmistakable key to identification, oystercatchers of two species are to be found around our shores. Exactly how many distinct species there are in the world is not yet known, for the taxonomy of this cosmopolitan group of birds is not fully understood.

Of the Tasmanian species the Pied Oystercatcher is perhaps the better known as it favours sandy beaches rather than rocky shores, especially during the Spring months when it is breeding and raising its young. At that time the pairs are strongly territorial, each occupying a section of beach up to half a kilometre long to the exclusion of all others of their kind.

Once the young have grown to maturity and can fend for themselves, the parent birds become much more tolerant and less defensive. From late September they will congregate in parties or flocks, often in association with Sooty Oystercatchers and sometimes in considerable numbers. Though these congregations usually live along the coast, this is not invariably the case, as occasionally birds will move inland to lagoon edges or the shores of rivers. In the Autumn of 1988 a flock of about fifty was living on mudflats by the Tamar River near Launceston.

Its daily routine is determined by the tides, and it feeds busily in the intertidal zone as the water recedes and returns to the littoral zone to rest during the hours when the tide is full. Sometimes balancing on one leg, sometimes with head tucked under a wing, it appears carefree while awaiting the ebb. However, at least one member of a flock is always watchful for possible danger and any threat produces a penetrating alarm call, resembling “kleep”, which alerts all birds in the vicinity. Flight is unhurried and usually low over the water, for a sufficient distance to take the birds to an alternative resting place or a fresh feeding area.

The name “oystercatcher” derives from these birds’ specialised method of extracting bivalve molluscs from their shells. Although in other parts of the world they do eat oysters, they also take a variety of other species. In Tasmania the Pied Oystercatcher eats smaller bivalves, snails, worms and crustaceans as an opportunity is presented, finding these by searching and probing with its long beak into likely holes and crevices in the wet mud or sand. Molluscs which lie partly open might be taken by the bird inserting its beak and clipping the abductor muscles before the valves close, thus enabling the flesh to be easily removed. Small and more fragile shells are usually broken open by repeated stabbing.

Oystercatchers, like most ground nesting birds, have highly camouflaged eggs and young. This species starts to breed in September or October, making a scrape in the sand just above the high water line for its nest. Unfortunately for it, though, this is sometimes not high enough to avoid an exceptionally high spring tide. Two or three sand-coloured eggs marked with black blotches form the clutch and these blend perfectly with their surroundings. Within

a day of hatching, the young, which are equally well camouflaged by their mottled colouring, leave the nest and will hide by litter if alarmed. Only when they are about half grown will they begin to accompany their parents out on to the exposed tidal flats.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#79). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Sooty Oystercatcher *Haematopus fuliginosus*

There are some authorities who assert that the black oystercatchers are merely a melanistic form of the pied birds, but the most strongly held belief is that they comprise a distinct separate species. Although, on very rare occasions, a black and a pied bird have been found to have paired up and nested, there is no reason to consider this of any more significance than similar instances which might occur between other species, such as rosellas.

Outside the breeding season Sooty Oystercatchers will join the pied variety to form flocks on headlands, tidal beaches, sand bars and offshore islets, resting in a loose association during the hours of high tide and dispersing to feed individually on the ebbing tide. With the onset of breeding in Spring they scatter in pairs to occupy breeding territories on the more isolated rocky shores and on small islands. They choose locations far away from human habitation where they are less likely to be disturbed. This is in marked contrast to the breeding sites favoured by the Pied Oystercatchers which so often suffer from human interference and nest destruction along sandy beaches.

Although both species appear to feed on much the same kinds of invertebrate animals, the Sooty Oystercatcher will often be seen to fossick for its prey on exposed, rocky shores, stony reefs and wave-cut platforms. This feeding habitat is shunned by the Pied Oystercatcher, further evidence of specific distinction.

To those who sail in Tasmanian waters and around our many small islands both the sight and sound of a pair of these birds, sometimes known as “red-bills”, are most familiar. When approached, the first indication they will give of their presence is a penetrating call of alarm, somewhat resembling “hu-eep”, which carries clearly over the water for a considerable distance. As the black plumage, which is identical for males and females, blends so well with the colour of the bird’s rocky surroundings, it is often exceedingly difficult to detect visually while it remains motionless. It is likewise hard to see when it skulks away before taking flight, which is one of its habits, especially while breeding.

The diet of the Sooty Oystercatcher consists of small molluscs, crabs, marine worms and such invertebrates as it might be able to pry from their secluded dwelling places with its long and powerful beak. As with other members of this group of birds, its name originated because of its practice of feeding on oysters by using its bill to snip the abductor muscles before the mollusc can close its shell, thus immobilising it and allowing the bird to extract the flesh. Here these birds tend more generally to feed on smaller molluscs such as mussels, usually breaking the shell by stabbing it with their beak or by thrashing it against the stones.

Breeding commences about September, from which time pairs will defend a territory against intrusion by other Sooty Oystercatchers so as to secure for themselves a resource for the term of their breeding period. The nest is a slight depression in the ground well above high tide level. It might be among shingles, dried seaweed or mesembryanthemum, which often grows

prolifically among rocks along the coast. Two eggs constitute the usual clutch, and these are a dark sandy colour, beautifully marked and mottled with black. This colouring affords excellent camouflage for when the birds have to vacate the site temporarily. The newly hatched young leave the nest within a day or so and, should danger threaten, they hide among the stones and wave-tossed litter, the dark, mottled, downy bodies blending perfectly with their surroundings, thus making them very difficult to find.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#80). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Banded Stilt *Cladorhynchus leucocephalus*

Two species of stilts live in Australia but both are only rare or occasional visitors to Tasmania. Although they have long been included in the list of birds which occur here, it is always a thrill for ornithologists when they are sighted on our shores and, even though neither species is likely to be seen here by the average observer, we have included the Banded Stilt in the series because of the interest it arouses and because of its unmistakable, spectacular form.

Stilts are indeed well named; their long, stilt-like legs enable them to wade in water to a depth beyond the reach of most other birds. Thus, with the aid of the long, slender bill, they can procure food which would not be accessible to other birds.

The Banded Stilt, so named because of the prominent chestnut band across the breast when it is in mature plumage, is mainly on salt lakes, tidal swamps, coastal inlets and estuaries. It feeds mostly on crustaceans and in particular on brine shrimps, which it takes by wading and occasionally by swimming while probing the water with its specialised beak. On the west coast of Tasmania I have seen it feeding over the wet sand which was exposed as the tide receded, searching where the corrugated surface still retained water.

Although it was described as early as 1816 and occurs widely over much of Australia, sometimes in flocks of a thousand or more, its breeding remained a mystery until 1930. In that year, following heavy rains, vast nesting colonies were discovered beside remote salt lakes in Western Australia and in central South Australia, and since then further colonies have been found.

The bird is now known to be an opportunistic breeder, and following rains of enough volume to fill salt lakes in remote arid regions it congregates on the shores and islands at such sites and forms huge breeding flocks which have been estimated to number over 300,000 breeding birds. The freshly filled lakes provide a temporary food source in the form of brine shrimps, which appear at such times in quantities so vast as to support the colony through its period of brooding and rearing the young.

The nests are shallow scrapes in the bare ground and are so concentrated that there is only a metre or less between them. The eggs, which are laid three or four to a clutch, are white and are scribbled all over with fine black markings. Unlike those of most other ground nesting birds they are highly conspicuous. The chicks, too, are pure white, like little balls of snowy down, and are relatively helpless and exposed. This trait, most unusual and contrary to the normal pattern for ground nesters, is believed to be a response to the remoteness of the colonies and the enormous numbers, crowded together with a density which in itself gives sufficient protection to ensure the survival of a significant percentage of young.

Breeding may continue for as long as the food supply remains, but as the lakes dry out the birds disperse to alternative locations such as the more permanent salt lakes nearer the coast or to tidal estuaries, eventually deserting completely what had been an area of abundant sustenance.

The other stilt which, on rare occasions, visits Tasmania is the Black-winged Stilt *Himantopus himantopus*. This bird, as might be deduced from its name, is white with completely black wings. It also has black on the back of its head and neck, which provides a good key to its identification, enabling it to be easily distinguished from the Banded Stilt. Though it occurs on saline lakes and lagoons it also lives on inland swamps, where it feeds on aquatic insects and nests on vegetation in shallow water or wet ground. It produces eggs and young the colour of which, unlike those of the Banded Stilt, assimilates very closely with their surroundings.

In both species the males resemble the females in appearance, but immature Banded Stilts, those which are most likely to visit Tasmania, usually lack the well-defined breast band.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#81). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Banded Lapwing *Vanellus tricolor*

This handsome bird makes it home in the elevated and dryer grasslands and hills, but nowhere does its number approach that of its near relative the Masked Lapwing. It has a tendency to be nomadic and, although a pair or a small party might be regularly seen in one locality for several years, all may, without apparent reason, abandon the site in favour of somewhere else. Such movement is in all likelihood a response to changes in the availability of suitable food such as small insects and spiders and the seeds and sprouts of some green grasses.

Once known as the Black-breasted Plover, this species recently underwent a change of English name and generic placement so as to conform with modern international standards of classification.

Smaller and less obtrusive than the Masked Lapwing, its presence can be easily overlooked. At a distance the dorsal plumage blends with the bird's surroundings, making it difficult to see while its back is turned, and, in fact, it deliberately adopts this posture to avoid detection. This also helps protect it from aerial predators, against which it is constantly on the alert. For as long as a potential threat exists it remains motionless and squats either until the danger passes or it is forced into taking flight.

It is interesting to watch the behaviour of the Banded Lapwing and, indeed, of any ground dwelling species which depend greatly upon plumage colour for concealment. When breeding, the birds are constantly conscious of the danger of exposing their coloured fronts and ventral surfaces, and so stand back on to the observer and watch with a sideways turn of the head. Only when they wish to disclose their presence, such as in distraction behaviour to lead a possible predator away from the nest or young, and during their pre-mating performance, do they stand so as to display fully their bright, contrasting under-plumage.

Breeding for the Banded Lapwing begins as much as two months later than for the Masked Lapwing, and rarely are eggs laid before September. This difference is apparently a response to the food requirements of the young of the two species. The Masked Lapwing frequents wetter localities and must therefore breed earlier, before the grounds dried out causing the semi-aquatic invertebrates there to become less numerous. On the other hand, the Banded Lapwing, having evolved to live and breed on dry grasslands and to feed on the terrestrial invertebrates which it find there, gives its young a greater advantage by starting breeding a little later when there will more likely be a peak supply of the food they need.

The nest is a depression in the dry ground, sparsely lined and decorated with pieces of vegetation, pebbles and particles of animal dung. A complete clutch is invariably four eggs, which are a dark brownish-green, heavily mottled with black so as to blend with their surroundings. This makes them extremely difficult to find, even if the parent has been observed to leave the nest and its site has been noted.

When it does leave it runs directly away from the nest, all the time crouching close to the ground so as to minimise detection, and occasionally glancing back with a slight turn of the head. Only when it is some fifty or a hundred metres removed will it turn, expose its conspicuous front and utter its sharp alarm call in an attempt to distract attention away from the nest site.

Incubation extends over about four weeks with both sexes taking shifts on the nest. The newly hatched young have a dark, mottled down which affords excellent camouflage. Upon an alarm call from their parents they will immediately squat and become almost undetectable. Males and females are alike in appearance and both will attack an intruder in defence of their brood, although usually with less vigour than does the Masked Lapwing.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#82). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Masked Lapwing *Vanellus miles*

Few birds have benefited more from European settlement than the Masked Lapwing. As a lover of the open grasslands, it has extended its distribution and increased its numbers as forests have been progressively cleared over the last two centuries for the establishment of crops and pastures.

This species occurs generally throughout northern and eastern Australia, and comprises two distinctly different subspecies. The northern form,²⁵ known as the Masked Lapwing, lacks the black feathering on the sides of the neck and has a more extensive face mask than does the southern form.²⁶ The northern race was originally called the Masked Plover, whilst the southern race was known here as the Spur-winged Plover. The term “plover”, long used for these birds, has been dropped in favour of “lapwing” to conform with international nomenclature standards, “plover” being now reserved for a group of birds which include some which we previously called “dottrels”.

The call of the Masked Lapwing is well known to many people. This harsh alarm or warning cry, broadly interpreted as “ker-ke-ke-ke-ke”, acts to alert all species of native fauna to the presence of an intruder, be it a bird of prey, a stray cat or dog or, especially, man. For hunters of game, such as deer or duck shooters, the bird can for this reason be considered a nuisance.

Earlier this century the Masked Lapwing was itself subjected to an annual open season, from February through to the end of June, when it could be shot as a game bird. As a result it was then extremely timid and difficult to approach, but now with the benefit of total protection for many years it has learnt to live in much closer association with humans.

This association now extends to city and suburban parks and expanses of lawn where it might find the worms and terrestrial insects which form its diet. Occasionally these visits eventuate in permanent residence and, if the birds are not unduly disturbed, even in successful breeding. There have been in recent times many such instances, one of which is in Launceston’s Royal Park where a pair of Masked Lapwings have, for a number of years now, lived and successfully reared one or two clutches annually. In 1988 they had eggs on 20 June and in 1989 following an abnormally wet Autumn they were found to be incubating eggs in the last week of April.

They aggressively defend their eggs and young against any intrusion into their territory. Both adult birds will dive repeatedly in aerial attacks as if to strike in passing with the prominent sharp spurs extending from the wrist joint of each wing. This can cause injury when, as happens on rare occasions, the bird actually makes contact with its target. Such attack dives are usually initiated from behind and can be quite unexpected as the bird remains silent

²⁵ Northern Masked Lapwing *Vanellus miles miles*.

²⁶ Southern Masked Lapwing *Vanellus miles novaehollandiae*.

during its downward swoop. At the point of near contact and as the lapwing rises again the loud alarm cry is screeched. The effect of this surprise attack is usually to persuade the intruder to leave. Of course this behaviour can cause problems when the birds choose to nest on such places as golf courses.

The nest is a slight depression in the ground lined with a little vegetable matter. Four dark greenish-brown, mottled eggs form the usual clutch and the young leave the nest and accompany their parents within a day of hatching. As with most ground nesting birds both eggs and young are so coloured as to be extremely well camouflaged and difficult to find. Males and females are alike in appearance. In Summer and Autumn, after breeding, congregations often formed in pastoral areas.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#83). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Lesser Golden Plover [now Pacific Golden Plover] *Pluvialis dominica* [now *Pluvialis fulva*]

This stately bird is another of the many species of trans-equatorial migrants which visit Tasmania every Summer. Its home is on the treeless Arctic tundra of Siberia, Alaska and Canada where it breeds during the northern Summer months of June and July.

Two distinct subspecies are presently recognised, although some authorities consider that the differences in size and plumage between the two geographically separate populations are enough to warrant them being accepted as full species. The birds which reach here breed in Siberia and western Alaska, and on migration disperse throughout the south-east Asian and South Pacific region. Those which breed in north-eastern Alaska and Arctic Canada migrate to South America.²⁷

The Lesser Golden Plover nests on the ground in a slight depression lined with fragments of vegetable material and small pebbles. Four creamy-buff eggs, blotched and spotted with blue-black, comprise the usual clutch. Incubation is said to take from three and a half to four weeks and the young birds are fledged a further three weeks later.

Once the young have reached independence the birds begin to move off on their migration to the Southern Hemisphere, dispersing throughout the coastal areas of south-east Asia and the South Pacific. Some reach Tasmania and New Zealand, having made a journey of about 8,000 kilometres. Such a flight, requiring as it does remarkable endurance and navigational instincts, has for long fascinated ornithologists. The way it has, over untold generations, evolved and developed to such a degree of perfection is in itself a wonderful example of adaptive evolution.

The migratory pattern has enabled these birds to synchronise the annual cycle so as to utilise to the full the seasonal conditions and food resources of two vastly different geographical regions. Timing is, of course, of the greatest importance if the birds are to complete their breeding programme successfully during the short Arctic Summer. The offspring need to mature and build up sufficient fat reserves for them to be able to follow the adults along the diverse migration routes to the feeding grounds in the south.

The adults, too, must accumulate reserves of body fat while rearing their young and, at the same time, undergoing a gradual moult. The plumage they wear on their breeding grounds is quite different from that which they have while in Australia. The breeding plumage is much more spectacular, the golden flecking being of a darker shade and more prominent, and the face, throat, breast and belly a contrasting black. This colouring, like the non-breeding plumage which is shown in the illustration, is common to both sexes. Moulting begins on the

²⁷ American Golden Plover *Pluvialis dominica*.

breeding grounds about July and little evidence of the birds' northern splendour is obvious by the time they arrive here in late September or October.

The favoured habitat of the Lesser Golden Plover while it is in Tasmania is on the tidal estuaries. Here it congregates, mostly in the company of other migratory waders, to form flocks which might number hundreds. Occasionally pairs and small parties visit the shores of inland lakes and lagoons. It feeds in the intertidal zone on the ebb tide, and on the full tide rests in concentrated flocks along the shore or on offshore islets. When disturbed, the birds fly swiftly in compact formation, wheeling and turning as one over some distance before returning to settle again.

By March they have once more laid down the heavy reserves of fat which are needed for their return journey, and the pre-breeding body moult also starts to become evident in some birds. It is then that they begin to leave our shores for the Arctic Summer.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#84). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey Plover *Pluvialis squatarola*

Like its near relative the Lesser Golden Plover, this is a trans-equatorial migrant which breeds in the high tundra of the Northern Hemisphere. It avoids the harsh Winters of its homeland by flying to this hemisphere where it spends the Summer living on coastal beaches and mudflats.

It is a cosmopolitan species and its distribution extends to all continents except Antarctica, although one bird was found on the Macquarie Island in February 1964, a truly remarkable example of the endurance which the Grey Plover has developed, enabling it to undertake one of the longest annual migration flights of any species.

Although it begins to arrive in north-western Australia as early as September, it is not until about November that it reaches the shores of Tasmania and New Zealand. It may occur as solitary individuals or in small numbers, mingling with flocks of other migratory waders. While here its plumage, which is the same for both sexes, is a rather dull and inconspicuous grey – its non-breeding dress – as shown in the illustration, and thus its presence among other birds with somewhat similar feathering can be easily overlooked by those unfamiliar with this group of birds.

The birds of the species which visit Australia are believed to have their breeding grounds in Siberia and to fly here by way of the coast of south-east Asia and the island chain to our north. Being primarily a terrestrial species, it nests on the ground, on low, dry ridges which overlook the treeless tundra, at a time when patches of snow and ice may still remain after the freeze of the previous Winter. Breeding is concentrated within the months of June and July.

Four greyish-brown eggs mottled with black are deposited in a slight depression which may be lined with a little vegetable matter. Incubation is believed to take about three and a half weeks and the young, which leave the nest soon after hatching start to fly about five weeks later. This timing is most necessary if the Grey Plover is to brood successfully and raise its young to independence during the short northern Summer before it must again fly south for food and survival.

While in the Northern Hemisphere the adults support a plumage very different from that which we see here. The mottled greyish dorsal feathers moult before and during the northward migration and are replaced by more contrasting shades of black, brown and white. This colouring blends with their surroundings to afford better camouflage and protection from predators. At the same time the whole of the breast and facial region moults to new, brilliant black feathers, thus giving the bird a most spectacular appearance while still allowing it to brood quietly in relative secrecy. This breeding plumage is maintained for only a few months, and once the exhausting breeding season is over the birds undergo another moult and revert to their non-breeding appearance.

On its Arctic breeding grounds among the sparse vegetation of sedges, mosses and lichens it feeds mostly on insects and other terrestrial invertebrates which are abundant on the wet tundra during the brief Summer. Once breeding is over and the birds begin to move to pre-migration staging points on river deltas, lakesides and mudflats, the diet changes to available aquatic animals such as small crustaceans, molluscs and worms. Such food fulfils its requirements during its non-breeding sojourns on southern shores. While here the birds progressively build up considerable reserves of body fat to sustain them during their long return flight.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#85). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Black-fronted Dotterel *Elseyornis melanops*

To my mind this dainty little dotterel provides possibly the finest example of avian camouflage and stealth to be experienced in Tasmania. When it is facing the observer and at close quarters its brilliant red beak and eye rings, together with its contrasting black and white plumage, are conspicuous. However, when it chooses to avoid detection, it presents only its back, hiding its front from view by crouching and moving over the ground with furtive caution, turning its head slightly sideways to allow it to watch behind. This technique is most often practised when breeding in Spring, for, like all other members of the family *Charadriidae*, it is a ground nesting bird and must depend on camouflage and cunning to protect its brood.

The Black-fronted Dotterel occurs widely over much of Australia but is mostly a bird of the inland, shunning the coastal shores and preferring the edges of freshwater lagoons, claypans, shingle beds and, since European settlement, the relatively bare ground of cultivated and pasture land. It is found mostly as solitary pairs.

Breeding takes place from September to January and the nest is formed in a slight depression in the ground. It is sometimes adorned with a few pieces of vegetable matter and dry animal dung. Two or three eggs comprise the clutch. These are a dull sandy-cream in colour, heavily peppered with fine spots of bluish-grey and brown, so as to blend perfectly with their surroundings.

I have found this bird nesting among the shingles in the dry bed at the Blackman River near Tunbridge, on fallowed, sandy ground several hundred metres from the shore of Lake Dulverton near Oatlands, on a claypan beside a dam near Cressy, and between the wheel marks on a sandy by-road on King Island. In all instances camouflage was exceptionally effective, the nest only being located by patient observation of the birds' behaviour.

Male and female are alike in their plumage and both take turns at brooding the eggs. When hatched the young leave the nest and accompany their parents, soon learning to search for food for themselves. Their soft, downy plumage is heavily mottled to provide remarkable camouflage, which makes them extremely difficult to find when they "plant", motionless, at the least alarm.

For those people with keen hearing, trained to detect the presence of birds by their voice, the abrupt alarm call of the Black-fronted Dotterel is usually the first indication that it is nearby. As if to alert its mate without unduly revealing its whereabouts, it utters a sharp single note, resembling "tip", which it may repeat more urgently if it becomes agitated. Although the voice can be detected as coming from a particular direction, and is audible from perhaps fifty metres away over clear ground, it is exceedingly difficult to find the caller as it crouches back on, sometimes moving away in a mouse-like manner if gradually approached. If hard pressed it rises to fly, but only for a short distance with an undulating pattern on erratic wing beats.

Its diet consists of tiny invertebrates and their larvae, which it catches on the ground, often near to the water's edge, but rarely does it enter the water to wade in search of food. While engaged in feeding it runs erratically, stopping only briefly to pick up an acceptable item.

A bird with which it may be confused is the Red-kneed Dotterel *Erythrogonys cinctus* which is a rare nomadic visitor to Tasmania. This species, however, can be distinguished by its entirely black head-cap as well as its black breast.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#86). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Double-banded Plover *Charadrius bicinctus*

To some Tasmanians this name may seem a misnomer for the accompanying illustration shows little evidence of the two breast bars, black above and chestnut below, which gave rise to both the scientific and vernacular names of this little plover. The explanation is that, as with those other species of birds in the genus *Charadrius* which are migratory visitors to Australia, the Double-banded Plover has a breeding plumage which is distinctly different from that which we generally see when it comes here during the non-breeding season.

Its home is in New Zealand, from where part of the population flies across the Tasman Sea to south-eastern Australia each year to spend the Winter on coastal plains, lake shores and tidal flats. Some begin to arrive as early as mid-January while others may straggle in as late as April. They may disperse as far as south-western Australia and southern Queensland.

This east–west migration is unique among this group of birds, which we commonly refer to as migratory waders. All the other species have developed a north–south migration which takes them across the equator twice annually as they move to and from their breeding grounds in Central Asia or Siberia. Just why this species, and then only a part of the population, should migrate here is not fully understood, but it may be simply an aspect of post-breeding dispersal in search of Winter feeding grounds which, at that time of year, have been vacated by the north–south migrants who have returned to the Northern Hemisphere.

The Double-banded Plover feeds mostly on small insects and other arthropods and worms which it finds by industriously running about the ground, searching keenly for any acceptable items. Here, it is generally seen in loose congregations, especially in late Summer when the migrating flocks start to arrive.

In March 1961 I enjoyed the pleasure of watching a congregation of these birds feeding in open pasture land near Longford. They were scattered over an area of perhaps ten hectares and numbered between one and two hundred. It appeared that they had only just arrived, for their activity suggested that they were hungry and desperate to replenish themselves after the long trans-Tasman flight. As I walked slowly among them they took little heed and only when I approached within about fifty metres would individuals rise, fly quickly to another part of the paddock, then land and continue feeding. The next day all had vanished, having dispersed further afield.

During late Autumn and early Winter the Double-banded Plover may be seen on tidal estuaries and beaches, often in association with the sedentary Red-capped Plover, feeding in the intertidal zone during the ebb tide and forming mixed congregations to rest along the shore at high tide. By July the instinct to return to New Zealand for breeding again becomes dominant, and then some may be found with the new double-barred breast plumage well advanced.

Breeding commences in August and may not finish until December. The nest is a shallow depression among shingles in a dry riverbed or on agricultural land. It is lined with a few fragments of vegetable matter and animal dung. Three or four grey-brown eggs, blotched with a darker brown and black, form the clutch. Brooding and care of the young are shared by both parents.

The sexes are alike in their colouring, except that the breeding plumage of the female may be somewhat duller. They are indistinguishable from each other in their non-breeding plumage when the breast bands are reduced to mere grey-brown remnants of their former splendour.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#87). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Large Sand Plover [now Greater Sand Plover] *Charadrius leschenaultii*

Not until 1966 was this migratory plover found to visit Tasmania, though it had long been known to reach continental Australia every Summer. In 1967 several birds were found in the Derwent estuary and one was collected for the Tasmanian Museum, to confirm determination of the species, which was previously called the Large-billed Dotterel.

It breeds only in the Northern Hemisphere, from Turkey through central Russia to Mongolia, in the warm to hot arid and semi-arid regions and at altitudes of from 1,000 to 3,000 metres. Nesting sites are generally in uncultivated, treeless areas on dry clay, mud or salt pans and are usually in the vicinity of water. The nest is a shallow scrape in the surface lined with pieces of vegetation shaped into a dish to receive the clutch of from two to four eggs. Laying takes place in April or May, and the eggs are brownish-yellow and marked with small black spots.

Three geographically separate subspecies are recognised, those of the central and eastern regions, some of which migrate to Australia, being distinguished from the western population by having a significantly heavier bill.

It begins to arrive in north-western Australia about October and large congregations have been observed there at that time. From there they disperse around the coast to spend the Summer months on beaches and estuarine tidal flats. Tasmania is the extremity of this bird's range; a mere fragment of the population ventures as far as our shores. Those we see here have temporarily lost their bright breeding plumage and have assumed the grey and white feathers which are characteristic of the non-breeding plumage of most trans-equatorial migrants.

In this guise the various species are difficult to determine for all but those who study and familiarise themselves with these birds. In some instances it is necessary to understand behavioural variations and to have a knowledge of flight patterns and specific calls before some can be positively identified without recourse to capture and measurement.

It is probable that the Large Sand Plover was overlooked here for so long because of the similarity of its plumage with that of the Mongolian Plover, a bird with which it shares the tidal feeding zone and which has long been recognised as a common summer visitor. However, with care and patient observation the Large Sand Plover can be distinguished by its relatively longer beak and its upright, slender form, as opposed to the more plump shape of the Mongolian Plover.

In common with other migratory waders which feed in the intertidal zone it has a diet which includes a range of marine organisms which are exposed as the water recedes. Its flight is swift and low, and it may utter a trilling alarm call while on the wing. One should not expect to find it here after about March, but on rare occasions and for as yet unknown reasons some apparently healthy and normal migratory waders remain to over-winter in non-breeding

plumage. One such incident involved a Large Sand Plover which was found to spend the Winter of 1967 at Lauderdale. This is just one example of the unexpected and exciting discoveries which can result from a study of estuarine birds.

The sexes are indistinguishable in appearance, and the bird in the accompanying illustration is in non-breeding plumage.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#88). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Red-capped Plover *Charadrius ruficapillus*

The little Red-capped Plover, or “dottrel” as it was previously known, is a resident species which occurs over much of Australia. Although it is generally associated with coastal sandy beaches, it also inhabits inland regions where it lives around the shores of lakes, lagoons and man-made dams and waterholes. Like other ground dwelling birds its dorsal plumage is so coloured as to afford good camouflage, which makes it difficult to locate while it remains still. It is, however, less timid than some members of the genus and is relatively tolerant of human presence. If approached it will move away by running over the bare ground in short bursts, pausing momentarily to observe and bobbing its head as if agitated.

Sometimes referred to under the “catch-all” name of “sandpiper”, the Red-capped Plover is well known and common on Tasmanian beaches. It feeds mostly in the intertidal zone while the water is low and the tiny marine organisms become exposed. It runs busily from point to point, dabbing with its beak to take selected items such as worms and molluscs. During the high tide it rests along the shore, sometimes searching beneath the decaying seaweed and beachwashed remains of fish for tiny crustaceans and insects. Outside the breeding season it may congregate in small parties or flocks, often in association with Sharp-tailed Sandpipers and other trans-equatorial migrants, particularly in late Summer when the young plovers are independent.

Breeding may begin as early as September and continue well into the new year. The nest is simply a scrape in the dry sand or a depression in the bare ground, some little distance above the waterline. Unfortunately exceptional Spring tides and floods often wash away some nests before the eggs have hatched, but the birds seem adjusted to such eventualities and soon produce a replacement clutch.

Two or sometimes three eggs are produced for each sitting. They are a sandy-cream colour, heavily marked with black, closely resembling the colour of the desiccated seaweed which litters the shoreline and beside which the bird so often chooses to site its nest. Incubation is shared and takes about a month. Two broods may be reared annually. Upon hatching, the tiny young desert the nest to follow their parents, although not until they are partly grown do they leave the protective camouflage of the shoreline litter to follow the receding tide over the exposed, wet sand.

Like many other ground nesting birds which depend on camouflage to prevent detection of their eggs and young, this plover also engages in the art of feigning injury to distract the attention of predators. In an attempt to lure away from its brood any potential threat to their safety, it will flap its wings on the ground and drag its body as if unable to fly. If it is followed it will lead its pursuer a considerable distance before eventually taking flight and returning to its breeding territory. The young, from only a few days old, if pursued can run with surprising speed, their tiny legs moving so quickly as to be almost invisible and the little bird looking like a ball of downy fluff blowing erratically in the wind.

The Red-capped Plover also lives and breeds around the shores of lagoons and salt pans in the Tasmanian midlands. In November 1955, a year of low Winter rainfall, I found up to two hundred living around the shore of Grimes Lagoon on Mona Vale. Many were nesting on the exposed mud and sparsely vegetated edges and numerous other pairs were found breeding alongside other lagoons and waterholes in the district. In these inland areas the birds apparently feed on aquatic insects and their larvae, and on insects they find in the adjacent short pasture.

The species is believed to be a close relative of the cosmopolitan Kentish Plover *Charadrius alexandrinus*.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#89). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Mongolian Plover [now Lesser Sand Plover] *Charadrius mongolus*

As its name implies, this tiny migratory plover has its home in Mongolia and other parts of the Asian continent, where it breeds during the northern Summer. In August and September, by which time its young have grown to independence, it begins to move south and many birds cross the equator, migrating as far as southern Africa and Australia. Those which reach here are believed to come from eastern Siberian populations. They arrive in September and October and disperse over the tidal beaches and mudflats where they will spend the following five or six months.

By the time they reach here they have usually lost the bright brick-red breast feathering and the contrasting black and white face mask which are part of the breeding dress for both sexes. Males and females alike have assumed instead the grey and white non-breeding plumage as shown in the accompanying illustration.

To the untrained eye this bird can be easily confused with the Double-banded Plover, but both species are rarely on our shores at the same time, the latter having departed for New Zealand to breed a month or so before the arrival of the Mongolian Plover. Caution must, however, be taken when trying to identify these birds positively, as an overlap of their presence occurs when the New Zealand birds start to return in late Summer, before all the Mongolian Plovers have left. Confusion can also arise between this bird and the Large Sand Plover, as discussed under that species.

While here the Mongolian Plover is gregarious and mostly associates with other waders both migratory and sedentary. It feeds over the intertidal flats while the tide is out and takes a range of invertebrates, including marine worms and tiny molluscs and crustaceans. When the tide is high the birds are pushed from their feeding grounds and rest in flocks, sometimes massed in congregations of hundreds, on the shore line or on offshore islets. If disturbed while at rest, flocks will rise almost as one, wheeling and turning together on rapid wing beats before eventually settling.

The eastern Siberian birds, those which migrate to Australia, are believed to be a subspecies distinct from the geographically separate populations of Central Asia. The latter breed on the barren steppes and high mountains and have been found nesting in the Himalayas at altitudes in excess of 5,000 metres. The Siberian birds breed in lowland coastal areas and on offshore islands from April to August, the nest consisting of a scrape in the ground sparsely lined with vegetable material.

Three buff-coloured eggs with darker blotches are laid and are brooded by both sexes. Incubation is said to take a little over three weeks, and the young birds fly when about five weeks old. As with all such migratory species which have to fit the annual life cycle to a strict timetable, there is only time for a single brood to be reared each season.

For those people with interest and with sufficient time to permit the study of migratory waders there is always the challenge of learning to identify the numerous species which visit our shores and the constant expectation of the excitement of finding birds which are rare or unusual in the area.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#90). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Hooded Dotterel [now Hooded Plover] *Charadrius rubicollis* [*Thinornis cucullatus*]

This delightful little bird of the sandy coastal beaches is unfortunately now one of the rarer and more threatened of Australian species. Though its distribution extends around the shores of south-eastern and south-western Australia its numbers are relatively low and in a conservation statement produced by the Royal Australasian Ornithologists Union in 1987 were estimated to be about 1800 birds.

Believed to have always been a fairly restricted species, even at the time of the first European settlement, it appears to have suffered since as a result of the ever increasing presence of humans on beaches during its summer breeding period. At that time it is strictly territorial, occurring as separate pairs occupying their own stretch of shore, but in other seasons it forms parties which assemble on tidal sands and it is then relatively tolerant of human presence.

It is interesting to watch a gathering of perhaps half a dozen individual birds, busily engaged in catching their invertebrate food on the ebbing tide, following the receding waves in search of any edible items which may be exposed for a few brief seconds, only to be driven shorewards again as the next wave breaks. Rarely does the Hooded Plover fly, except by sheer necessity, as it prefers always to run. This it can do with surprising speed, its legs appearing blurred as if in clockwork locomotion. On the high tide it rests on the dry sand, well camouflaged by its plumage, often near to blackened, desiccated seaweed. There also it may spend time excavating with its beak for tiny invertebrates which it finds beneath the sand and decaying kelp.

Breeding commences about September and juveniles, still too young to fly, may be found as late as February. This, of course, is the time of year when the sandy beaches on which it nests are in peak demand by holiday makers. With the advent of off-road vehicles and trail bikes very few breeding sites remain free from some disturbance, and uncontrolled dogs can cause casualties among partly fledged young birds.

The Hooded Plover's nest is simply a scrape in the dry sand, usually beside stones, dry weed or driftwood and not much more than a few metres above the high tide line. Inevitably the occasional extreme Spring tides result in some eggs being washed away, but when this happens the birds produce a replacement set. A clutch consists of two or three eggs, sand-coloured and blotched with bluish, brown and black markings.

On hatching, the young leave the nest but remain above the high water mark until they are partly feathered. When danger threatens they hide by "planting" themselves beside debris where their beautiful, soft, mottled juvenile down blends, as do the eggs, in perfect harmony with the surroundings so that, while they remain motionless, they are extremely difficult to find. Studies have shown that incubation takes about thirty days, which is exceptionally long for such a small plover, and the young do not fly for at least three weeks. This is the time of

greatest vulnerability and mortality is particularly high in some localities, to the extent that it is a cause for concern as to the long term viability of the species.

Unlike many members of the sub-family *Charadriidae*, to which it belongs, the Hooded Plover is not a migrant and established pairs do not move any great distance from their breeding territories for the rest of the year. Males and females are alike and both sexes share the brooding and care of the young. Sub-adults lack the black head colouring until they are some months old.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#91). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Ruddy Turnstone *Arenaria interpres*

This short-legged, active little bird is another of the trans-equatorial migrants which visit us during the warmer months. It breeds during June and July on the edge of the Arctic Circle and the northern coasts of the Baltic sea. It has a cosmopolitan distribution, occurring on the shores of every continent except Antarctica.

As its vernacular name implies, it has developed the technique of turning stones over in search of the invertebrate animals which hide there and which form part of its varied diet. It is one of the more industrious birds within the wader group, and though it does not feed over mudflats it favours shingle reefs and tidal rock platforms where it hunts tirelessly for its food, often within reach of the splash from breaking waves. In such sites it finds a range of marine animals in a habitat worked by few other birds.

The Ruddy Turnstone's short legs are well adapted for moving among the rocks so as to pry in crevices and beneath overhangs for any acceptable items. Its relatively short and sharp, stout beak is used like a chisel to break open barnacles and molluscs, particularly mussels, with quick, short blows, whereupon it extracts the animal from inside. When it is engaged in these activities, little escapes its keen eyes, and a cautious observer with binoculars will be treated to a most enlightening example of avian evolution and adaptation which has enabled this bird to utilise a particular feeding zone to its considerable advantage.

When the tide is full the turnstone may be found in small groups resting on the rocky shore or occupying itself busily searching for food among the litter cast up by the waves. Any object such as seaweed, shells, pebbles or driftwood which could be a hiding place of insects or marine organisms may, if it is not too heavy, be turned over or tossed aside by use of the beak. The bird also associates with other migratory waders when they congregate and rest on reefs, sand bars or protected beaches when their feeding grounds are covered at high tide.

Throughout the warmer months it may be found all around the coast of Australia, but it rarely ventures inland. Birds arrive here from September on, their number increasing until about November. They are believed to be from the populations which breed in eastern Siberia, having migrated to Australia by way of the shores of eastern Asia and the islands to our north.

Rarely do we see here birds which show to any great extent the brilliant breeding plumage which the Ruddy Turnstone has while it is in its northern home. The beautiful chestnut red of the back and wings, which contrast with the black breast and white belly, has usually moulted and been replaced by mottled brown feathers, as in the illustration, leaving only the merest hint of its former glory. Out of context such spectacular plumage might be thought unsuitable for a ground nesting bird such as the turnstone is, but in the environs of its breeding grounds, amongst the stones and vegetation of the Arctic region, it so closely resembles its surroundings as to become almost invisible from any sort of distance.

This camouflage is a specially effective while it is brooding its clutch of four darkly-blotched, greenish-brown eggs. The nest is formed in a depression on the ground and lined with a little vegetable matter from its surroundings. Incubation is said to take about three weeks, the young leaving the nest and accompanying their parents soon after hatching. When the birds are about three weeks old their feathers have developed sufficiently for them to start flying.

Like other trans-equatorial migrants which have to fly such vast distances, the Ruddy Turnstone must accumulate heavy fat reserves to sustain it on its journey. This is achieved during the months of feeding on our shores, and by March or April it is once more ready to depart to its Arctic breeding grounds.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#92). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Bar-tailed Godwit *Limosa lapponica*

Two species of godwits visit Tasmania as trans-equatorial migrants from their breeding grounds in the Northern Hemisphere, and of these the Bar-tailed is by far the most commonly seen. It nests on the ground on the Arctic tundra, from Lapland to eastern Siberia and western Alaska, during the northern Summer, mostly in June and July. Two subspecies are recognised, that of the eastern Siberian and Alaskan population being the one which migrates to Australia, apparently by way of the east coast of Asia and the islands of the south-west Pacific region.

How these birds came to be given the name of “godwit” is lost in time; apparently it is an old English word the original meaning of which is now unknown. They have been known to ornithologists for a great many years, having been first described and given the scientific name “*lapponica*” (meaning “of Lapland”) in 1758 by Linnaeus, the eminent Swedish taxonomist when he established the binomial system of scientific nomenclature at that time.

Here it is a bird of the tidal estuaries, feeding over the mudflats and sandy beaches as the water recedes and provides access to marine organisms such as worms and molluscs which the godwit takes by probing deeply with its beak. It also wades, up to the full length of its legs, and with its exceptionally long beak it can secure items which are active beneath the water rather than withdrawn into the mud as they are once the tide has ebbed. This diet contrasts with what it eats while nesting on the rolling tundra and grassy terrain of its breeding grounds, where it takes insects and their larvae.

The nest of the Bar-tailed Godwit is a depression, lined with grass, leaves and other such vegetable matter gathered from the vicinity, and it may be partly hidden and sheltered by low bushes. The eggs, usually four to a clutch, are an olive-green, blotched with dark brown markings, principally about the larger end. Incubation is said to take about three weeks and be carried out by both sexes. The young leave the nest soon after hatching and learn from their parents to search for their insect food.

Once the young have developed to independence the birds move to the coast and from there begin their southward migration during August and September. The first birds start to arrive here in about late September and numbers increase in the subsequent few weeks. They remain here until February or March before flying back to their northern homeland.

Like all the trans-equatorial migrants the Bar-tailed Godwit undergoes two moults each year and the birds we see here, as shown in the accompanying illustration, rarely possess any of the splendid breeding plumage which they have during their time in the Northern Hemisphere. There, the plumage is flushed with russet reddish-brown, most intensely on the face and belly. This colouring is lost before or during migration and most of the birds arrive here in their grey non-breeding dress. Sometimes in March some of those individuals which are later in departing will have commenced to moult again in preparation for breeding and it

is then that we may have the opportunity to gain an idea of the splendour of their alternative plumage.

The other species which arrives on Tasmanian shores on rare occasions is the Black-tailed Godwit *Limosa limosa*. It has a migratory pattern similar to that of the Bar-tailed Godwit, but it does not breed as far north as that species. It is likely to be found well inland on lagoons and swamps not favoured by its relative but it also, at times, visits tidal flats where the two species might be seen together. The Black-tailed Godwit can be distinguished by the broad white wing bar which it shows when in flight and by its broadly black-tipped tail which contrasts with the white feathers of its rump. For both species when in their non-breeding plumage the sexes are indistinguishable.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#93). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Whimbrel *Numenius phaeopus*

From September to March the Whimbrel is an occasional visitor to the tidal estuaries and reefs along the coast of Tasmania. Of the several subspecies which are recognised, all of which breed near the Arctic Circle, those which migrate here are from a population based in eastern Siberia. Tasmania is one of the southern extremities of this bird's range and is only reached by a few individuals. Most disperse around more northerly coastal areas, especially favouring the extensive tidal zones of north-western Australia, where the first wave of migration arrives about August.

In many ways the Whimbrel resembles its close relative the Eastern Curlew and this similarity sometimes causes confusion and misidentification by observers who are not fully familiar with the characteristics of these two birds. The Whimbrel, however is rather smaller, its beak is not as long, and it has two dark stripes along the top of its head which help in identification.

Here it is usually seen only as solitary individuals feeding over tidal mudflats, beaches and reefs which become exposed at low tide. Such sites are favoured by many species of wading birds and the Whimbrel mingles with them as it searches and probes for marine worms and crabs near the water's edge. Crabs are believed to form the major part of its diet while it is on our shores; it crushes the smaller ones with its beak before swallowing them, while larger specimens are broken up by repeated blows from the beak and then eaten in pieces.

When it takes flight it rises without a preparatory run and when alighting it lands with a wing flutter to break its descent. Occasionally it calls in flight with a rippling trill resembling "pu-pu-pu" rapidly repeated ten to twenty times, as if in alarm or to alert other birds. It has been known to perch on posts.

Like other migratory waders the Whimbrel moults twice annually, but there are not the striking differences between breeding and non-breeding plumage that are typical of most of the smaller species. The sexes are similar in appearance.

It breeds between May and August, forming its nest from bits of vegetable material gathered from the vicinity, which are used to line a slight depression in the ground. The nesting site is generally exposed and near to tundra pools on elevated land near the coast. The three or four eggs which comprise the normal clutch are a dull olive-brown colour, blotched and spotted with darker markings.

Like most ground nesting birds the Whimbrel depends greatly upon the complementary colouring of its eggs and young, as well as of the adult's own plumage, to avoid detection. Among the grasses and lichens of the tundra landscape it blends so well as to be almost invisible from a distance. Incubation is said to take up to four weeks, and the young leave the

nest within hours of hatching to range freely with their parents. They can fly when about five weeks old, after which congregations start to form for their annual southward exodus.

The Whimbrel reaches here by following the coastline of eastern Asia and then island-hopping through the Philippines, Borneo and Indonesia. While on this long journey it is an opportunistic feeder, resting for brief periods at inland locations as well as on the coast, and taking berries and other plant material together with a wide range of arthropods, snails, worms, lizards and crustaceans. During its stay in the Southern Hemisphere it accumulates substantial deposit of body fat to sustain it for migration and in preparation for the next breeding season.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#94). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Eastern Curlew [now Far Eastern Curlew] *Numenius madagascariensis*

Of all the birds of the group known as migratory waders this is the largest to visit Tasmania. Curlews are well known in Europe, Asia and Africa, but that population is considered to be specifically distinct from the eastern birds which come here.

The Eastern Curlew breeds in eastern Manchuria during the northern Summer, mostly in May and June, after which it migrates to spend the following half-year in Australia and islands of the south-west Pacific. Birds arrive in north-western Australia during August and September, and from there they disperse all around our coast, many reaching the south-east of the continent and Tasmania. Here it may be found during Summer, wandering over the tidal beaches, mudflats and reefs in search of marine invertebrates such as worms, crustaceans and molluscs.

The most striking feature of its appearance is its remarkably long, downwards curved bill, which extends from a relatively small head and seems even more out of proportion than that of its smaller relative, the Whimbrel. Just why these birds have so evolved is something of a mystery, but it no doubt provides great practical advantage in helping the bird more readily to gather its food from the hiding places into which the various small species retreat.

Another characteristic of the curlew is its call, which gives rise to its English name. The plaintive, almost mournful, lonely “ker-lee ker-lee” or “cur-lue cur-lue” carries far over the tidal bays and on a still, moonlight night has an almost eerie, mystical quality.

Its flight is relatively slow, heavy and deliberate, as might be expected of such a large bird, and when a flock moves any distance, as from one feeding ground to another, the birds sometimes string out in a long line or in “V” formation. This assists their flight by enabling them to utilise the slipstream air currents created by the leaders. Over the Derwent River flocks of two hundred or more have been observed flying in these formations. When they alight the formations break up as each bird pursues its individual activities.

In its Manchurian homeland it breeds on the ground, forming a nest from grasses among the low shrubs and ground cover vegetation. Little, however, is known of its breeding biology. There are four eggs to the clutch, and these are olive-green, spotted with darker green and brown markings. Incubation is believed to take about four weeks and the young leave the nest soon after hatching. They follow their parents and learn to search for their insect food, which is abundant at that time of year among the moss and grasses of the marshlands. Ripe berries, too, are eaten and these become an important addition to the diet in the weeks preceding and during migration.

The plumage of both sexes is similar, and during the breeding season the colouring is slightly more russet than that of the non-breeding plumage which we see here. Before and during

migration, the birds moult, taking on a slightly duller and paler feathering for the stay in the Southern Hemisphere, as shown in the accompanying illustration.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#95). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Greenshank [now Common Greenshank] *Tringa nebularia*

Another trans-equatorial migrant which visits Australia every Summer, the Greenshank has its true home in the Northern Hemisphere, across a range extending from northern Scotland and Scandinavia through Eurasia to eastern Siberia. The whole population comprises a single species without any subspecific differences throughout the entirety of its vast range

Migrating birds begin to arrive in Australia in late August but do not usually reach Tasmania until well into September. Here it is mostly a solitary species and rarely are more than two birds found together. Dispersal is general, to the shores of inland lagoons, lakes and rivers as well as the coastal wetlands and tidal flats.

A medium to large sized wader, its slim body, long, stilt-like legs and long, ever so slightly upturned bill give it a rather frail and delicate appearance. As it has a rather timid nature it is somewhat difficult to approach and will rise to fly with rapid wing beat at the least disturbance, a common trait of birds which live in exposed areas without the company and social security of others.

In flight the uniformly dark wings contrast with the white of the rump which extends up onto the back and which, together with the characteristic bill and greenish legs, serves to help in identification. The sexes are similar, and the Greenshank's call has been described as a high-pitched "twee-twee-twee", uttered mostly while the bird is in flight.

The Greenshank wades in search of food, up to the depth of its legs, and it will swim if necessary. Always alert, it strides through the water or along muddy shores keeping cautious surveillance, pecking the surface as if to take tiny invertebrates or to test and sample items which may prove edible. It catches and eats tadpoles, small frogs and fish in addition to insects, crustaceans, molluscs and worms. The larger items are often carried ashore so as to be more easily managed and broken up for eating.

The breeding grounds which this species favours are the wild, undisturbed, open expanses of country to the south of the tundra. On these moorlands, foothills and bogs and in the broad valleys the herbage provides some protection when it is nesting, and the lakes, ponds and waterlogged ground support an abundant supply of food in the form of aquatic and semi-aquatic insects and larvae during the northern Summer months. Scattered trees, stumps and elevated rocks are favoured perching places and lookouts when a pair is brooding or rearing young, and are used to avoid the possibility of surprise intrusion.

The nest is a shallow depression lined with grasses, often placed near stones, wood or bushes. Four eggs form the most usual clutch and they are pale cream, blotched heavily with reddish-brown markings to blend with the colour of the general surroundings. Incubation has been found to take about three and a half weeks. The young leave the nest soon after hatching and hide beneath the vegetation if danger threatens. They can fly when about one month old.

The restricted Summer period in the high northern latitudes where the Greenshank breeds permits time for only a single brood before the birds must begin to move south on the long journey of migration to this hemisphere. Recent studies have revealed that some birds from the Asian population may move south-west across eastern and central Europe to southern Africa, as well as south to southern Asia.

As is the case with most trans-equatorial migrant species, a great deal remains to be learnt of the seasonal movements and requirements, and such knowledge is a necessity for good conservation management.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#96). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey-tailed Tattler *Heteroscelus brevipes* [now *Tringa brevipes*]

Although this is one of the most common of the trans-equatorial migrant waders to visit Australia, its breeding place for long remained a mystery. Not until 1959 was the first nest with eggs found and described, and still to date very little is known of its breeding biology. The breeding grounds are in the remote mountains of eastern Siberia, and it starts to leave there about mid-August so as to escape the severe Siberian Winter.

It migrates by way of China to south-east Asia and the islands of the south-west Pacific, and, whilst many birds reach northern Australia, only relatively few come as far as the south coast. In Tasmania it is one of the less numerous migrants, living around our shores on tidal reefs, rock platforms, mudflats and beaches during the warmer half of the year. Here its diet consists mostly of marine invertebrates including crabs, which it has been found to dismember before eating. It has also been seen to catch small fish in shallow tidal pools.

Alert and active, as indeed are most waders, it gives the impression of being somewhat nervous, especially when feeding, as it bobs its head and wags its tail while walking about and probing in search of prey. When aroused to fly, it mostly passes low over the water and tidal flats on rapid wing beats and upon landing it has the peculiar habit of raising and stretching its wings vertically before folding them against its body.

When the tide is high and its feeding grounds are submerged it rests along the shore, sometimes in association with other waders and sometimes in small parties of its own kind, perching on high boulders and occasionally tree branches, and often standing on one leg. Its alarm call, uttered as a warning to others when it is approached, has been described as “klooeep” and “klee-klee klee-klee tooee tooee”.

It leaves Australia and returns to its Siberian breeding grounds during April, but some individuals, presumably immature birds of less than one year old, remain behind to over-winter.

There is no apparent difference between the sexes, and the breeding plumage is quite similar to that of the birds seen here, except that it then has extensive and well-defined transverse barring on the breast and belly. This is replaced by white feathers in the non-breeding season.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#97). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Common Sandpiper *Actitis hypoleucos*

A number of species of sandpipers may be found in Tasmania during the summer months, and all are visiting migrants from the Northern Hemisphere. Some are here in large numbers, whilst other species are represented by only the few individuals who manage to fly as far south as Tasmania. The Common Sandpiper is one of the latter for, though its distribution extends over a vast range across northern Europe and Asia, and it can justly be described there as “common”, here it is a rather “uncommon” bird.

It is extremely adaptable and less specialised than many of the waders, being able to utilise both salt and fresh water habitats. It might, therefore, occasionally be found on estuarine tidal flats but it is more likely to be encountered along the shores of rivers, lakes, lagoons, dams and steep sided canals. Accordingly, the invertebrate animal food it eats is equally varied and its diet is largely determined by what is available to it. Here it takes mostly aquatic insects and their larvae, which it finds visually, by actively searching among stones, litter and crevices near the water’s edge. At times it will stealthily “stalk” an insect, as would an accomplished predator.

A strange habit of sandpipers and especially of this species is a particular bobbing action of the head and body, displayed when the bird pauses to look around. This makes it appear to be in a state of excited anticipation or nervousness and, although it has long intrigued ornithologists, its purpose still remains unexplained. Its flight is low and straight to the point of landing and it often perches on waterside objects such as rocks, driftwood, branches or posts.

As might be expected of a bird which is so adaptable, its Northern Hemisphere breeding grounds extend through a broad range of climatic and vegetation zones, from sea level to mountain country at an altitude of over 4,000 metres. They include areas with a wide variety of temperatures and rainfall but, perhaps sensibly, the Common Sandpiper avoids frozen, snow-clad regions and very hot places.

Breeding takes place from May to August, and the nest is formed of grass and leaves in a depression on the ground. It is usually well concealed among dense vegetation near to fresh water lakes and fast-flowing, rocky streams and rivers. Four cream-coloured eggs, blotched and spotted with reddish-brown markings, make up the usual clutch, with incubation taking about three weeks. Upon hatching, the young leave the nest and by accompanying their parents soon learn to capture their own food. When they are about four weeks old they are able to fly.

In the Northern Hemisphere when not restricted by the brooding and tending of the young this bird has been found to visit almost any kind of fresh water, from clear running stream to tanks, ditches and puddles as well as tidal creeks, rocky shores, harbours, docks and rice

fields. Birds which migrate to Africa has been found there to associate with – and forage from the backs of – hippopotamus and crocodiles.

Subspecies are recognised throughout the Common Sandpiper's vast range, but it is most probable that the birds which migrate to Australia come from eastern Siberia, while those in Africa originate in Europe. It arrives here in about September or October and departs again around March.

There is no difference between the plumage of males and females, and very little difference between that of the breeding and non-breeding seasons, with the latter being just a little duller.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#98). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Red Knot *Calidris canutus*

The origin of this bird's strange English name is, like that of the Great Knot *Calidris tenuirostris*, lost in the mists of time. The latter, which is but a rare visitor to Tasmania, derives its scientific name from the Latin for "slender bill", its beak being significantly longer than that of its near relative. The Red Knot was given its scientific name by Linnaeus in 1758 after the Danish King Knut, or Canute, who is reputed to have tried to stop the tide from flowing in to shore. The reference is to the bird's habit of feeding at the very edge of the water.

The breeding grounds of the Red Knot are in the high Arctic, often on large islands to the north of the continents. Several subspecies have been described from geographically separate breeding populations; that which flies to Australia comes from north-eastern Siberia and north-western Alaska.

It arrives about August in north-western Australia, where flocks totalling huge numbers have been recorded. Large flocks have also been found on other stretches of the north coast, but further south it becomes scarcer. In Tasmania it is a regular but not a common visitor, small parties of from three to a dozen being occasionally found along the shore in tidal bays feeding on marine invertebrates, mainly small molluscs.

In its more northerly range, where it congregates in dense flocks, the Red Knot performs spectacular aerial manoeuvres. The birds rise high in the air to wheel and turn as a single unit with great agility and grace until, as if by command, the whole flock resettles to resume its earthbound activities. Here, where its numbers are so few, such flights are not so noticeable and when they are taken it is in association with other species to which its behaviour is usually tied.

These tight flock-flight formations appear to be a response to the need for self preservation. They provide a kind of "social security", enabling each individual to feel safe as long as it remains among the masses and does not let itself be removed and isolated from the flock. As a solitary bird it would be more likely to become the target of a predator. Aerial attacks by falcons are generally directed at separated individuals, for when a tight flock is attacked the raptor appears to become disoriented among the mass of possible objectives.

Breeding time for the Red Knot is confined to the period from June to August and in the high Arctic tundra where it nests much of the ground may still be snow-covered upon its arrival. Then, for a brief interval until the thaw brings a proliferation of invertebrate food, it will supplement its diet with seeds.

The nest is a scrape in the ground, lined with a little grass, and is usually situated in open, barren terrain. A clutch normally consists of four olive-green eggs which are marked with various shades of brown. Incubation is said to take about three weeks and, like those of other

waders, the young leave the nest after hatching to follow their parents and learn the art of finding their own food. They can fly when they are about three weeks old, but are usually abandoned by the female to fend for themselves a few days before this. Because of the short Arctic Summer there is little time to spare and with the independence of the young birds preparations are made for the migration southwards.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#99). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Pectoral Sandpiper *Calidris melanotos*

This bird has only recently been discovered to occur regularly in Australia. The close similarity of its plumage, form and general behaviour to those of its much more numerous near relative, the Sharp-tailed Sandpiper, apparently resulted in it being overlooked for some time. A few visit Tasmania and these can be recognised by the sharply defined break between the grey breast markings and the pale belly. In the Sharp-tailed Sandpiper these markings are more inclined to blend gradually. The legs and feet also differ in being more yellowish, and the base of the beak has a greenish-yellow tint.

Sightings in Tasmania have been in the Derwent River estuary on tidal flats in sheltered bays, but it is known to favour also the margins of fresh water swamps and lagoons, similar locations to those which are often used by the Sharp-tailed Sandpiper, with which it associates. The Pectoral Sandpiper's diet mostly comprises aquatic insects and larvae which are picked from the water's edge. These are occasionally supplemented with seeds.

It breeds in the low Arctic sub-cold zone in eastern Siberia, Alaska and northern Canada, and no subspecific difference has been recognised between birds originating from the two continents. The nest is formed on the ground, often well hidden among the short vegetation, and composed of grasses and similar vegetable material. The sites it favours are well drained but otherwise it accepts a range of tundra vegetation as long as a good cover of grass or sedge is provided.

A clutch for pale-buff eggs, blotched with brown, is produced in about June and incubated for some three weeks. The young leave the nest soon after hatching. They are, like those of all tundra nesting waders, covered with downy feathers in mottled colours complementary to their surroundings so as to afford camouflage and concealment from predators.

By August, when the young have begun to fly, the sandpipers start to congregate around lakes and beaches near their breeding grounds in preparation for migration before the onset of the northern Winter. Observations, supported by the recovery of two banded birds, suggest that part of the Siberian population moves east to Alaska and Canada before joining up with birds from that region to fly the vast distances to South America. Other birds which originate from Siberia move regularly to eastern Asia and Japan, and it is believed that those reaching Australia are extra-limital members of this migration.

There is very little difference between the breeding and non-breeding plumage, and none at all between that of the sexes.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 2 (#100). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

THE UNPUBLISHED
PORTRAITS OF TASMANIAN BIRDS

200 illustrations by Sue Lester

with accompanying text by Bob Green

These plates were reproduced from 35mm slides of the original paintings. The text was computed, edited and printed by Tim Thorne with progressive amendments by the author; end pages give a brief outline of the production and failure to publish.

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Volume 3

Sharp-tailed Sandpiper *Calidris acuminata*

Throughout the summer months this little sandpiper can be found on many of the estuarine tidal flats around Tasmania, as it is one of the most numerous of the waders to visit our shores. The edges of inland lakes and lagoons are others of its haunts, for there it finds food in the form of aquatic insects and larvae on the drying mud pans and at the water's edge. The freshwater lagoons and salt pans of the midlands invariably support small parties every Summer, and the birds move from one to another in response to disturbance and to the availability of food.

The Sharp-tailed Sandpiper breeds in the low Arctic and sub-Arctic regions of Siberia, from where it departs in August and September, migrating south across Mongolia, eastern China and the western Pacific islands to spend the Winter south of the equator in Melanesia, Australia and New Zealand. It starts to arrive here in August and remains until about March.

For the small birds to fly such a vast distance is indeed a remarkable achievement. The migratory pattern has evolved and been perfected over countless generations so that the birds can benefit from seasonal resources almost half a world apart. Many have been marked with numbered leg bands by registered ornithologists in an endeavour to trace their movements and it is interesting to note that one bird ringed in Western Australia in January was found the following May on the Yana River in north-eastern Siberia.

Very little is known about its breeding biology or of its life while on the Siberian tundra. Like all migratory waders it makes its nest on the ground, probably on the peaty dwarf-shrub tundra where the uneven landscape provides a mosaic of elevated drier ground among lower, wet peat bogs. The nest is said to be a shallow depression lined with grass and leaves, and well hidden in the low vegetation. Four olive-brown eggs, densely marked with brown, form the clutch. Times for incubation and the fledging of the young are as yet unrecorded.

The plumage of this bird while it is breeding it is said to acquire "the streaky grass-buff and warm russets that blend so well with the tundra where it nests." By the time it has migrated to Australia it has lost much of this warm colouring and assumed the duller shades of brown and grey which is common to both males and females and which are depicted in the illustration.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#101). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Red-necked Stint *Calidris ruficollis*

Thirty or more species of migratory waders which breed in the Northern Hemisphere have been recorded as visiting Tasmania during the Summer months. Of these the Red-necked Stint is by far the most common and familiar to us. It arrives about September and spend the following half year feeding over the tidal mudflats and beaches. While here it grows fat, almost as if it is having a holiday and recuperating from the rigours of the previous breeding season and extraordinarily long flight from its Arctic breeding grounds.

The scientific name, which means “kind of bird with a red neck” was given to it in 1776 by the eminent German naturalist Peter Simon Pallas, who spent some years in Russia collecting specimens of natural history and studying birds in Siberia. Rarely, however do Tasmanians see the stint with any evidence of ever having a red neck, for when here it is in its non-breeding plumage, as shown in the accompanying illustration.

While on its breeding grounds it has a quite different colouring; the head, neck and upper chest and back are a chestnut-red, flecked with black and white margins to the feathers. This not only gives the bird a most attractive appearance, but also enables it to blend imperceptibly with its surroundings. The camouflage thus provided is, of course, most desirable, so that it can avoid detection while breeding and tending its young. This bright plumage, common to both sexes, is moulted after breeding and before the birds reach Tasmania to be replaced by the soft grey feathers of the non-breeding plumage.

Here its diet consists of marine organisms picked up from recently exposed tidal flats and from shallow water, into which it will wade up to its belly. It is always entertaining to watch a flock of stints busily competing for food, probing the wet ground with the tips of their beaks as if testing for the possible presence of a worm or mollusc and running a few steps to pick up an item of food before a competitor can find it. All this is done in a frenzied manner as if the aim is to cram in as much food as possible before the tide floods again and closes off the feeding zone.

When the tide is full the birds take a well earned rest and gather in tight flocks, often in association with other waders and sometimes numbering many hundreds, to digest the catch. Many appear to sleep, head under wing, or squatting on the ground; others stand on one leg. During this period there is very little movement or noise among the birds, and their pale plumage blends with their surroundings, especially if they are resting on sand. It is possible to walk unsuspectingly upon a flock at rest without being aware of their presence until they stir or take flight.

On the wing these birds, like most waders, are spectacular to watch as they fly on rapidly beating wings in tight-flock formation, wheeling, turning, rising and falling in unison, their feathers glinting and fading in response to the reflecting light. When all is quiet they return to their resting place and land a little distance away to resume their wait for the turn of the tide.

The Red-necked Stint breeds in June and July on the lower coastal tundra of eastern Siberia. Its nest is on the ground on a dry ridge, sometimes among low vegetation and sometimes on dry, stony ground, but invariably near to pools of water. Three or four rufous-brown eggs are laid on a lining of grass and, after hatching, the mottled young accompany their parents in search of the insects on which they feed.

By August the young can fly and the whole population commences its migration across eastern Asia and along the coast to Winter in Australasia and the islands to our north. By March, when the stints are again ready to depart, some birds may have partially acquired their reddish breeding plumage. Occasionally a few will remain here over Winter.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#102). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Curlew Sandpiper *Calidris ferruginea*

So called because of the downward curve of its peak, which in silhouette rather resembles that of a curlew, this little sandpiper is one of the more numerous and better known waders to visit our shores. It is a bird of the tidal flats, feeding busily when the water is low, in loose flocks and often in association with Sharp-tailed Sandpipers and Red-necked Stints. During high tide it generally rests in denser flocks which gather, in company of other species, along the shore. The same resting sites are used repeatedly and thus can provide an opportunity for those who are interested to study and identify the various species.

With its long beak the Curlew Sandpiper is able to take worms and other marine organisms from a greater depth beneath the mud than can its equally small competitors. Studies conducted by Tasmanian ornithologists David Thomas and Alan Dartnall²⁸ in 1968 found that most food was taken by jabbing and probing with its peak in the top 20 – 40 mm substrata of mud and sand. Whereas many waders choose to feed over the wet tidal flats or at the very edge of the water, it will wade up to its belly and at times even deeper as it searches for items which, being still covered with water, would not have withdrawn into their hiding places. Worms are usually washed free of sand and soil before being eaten.

Thomas and Dartnall are also found that a major proportion of the food taken consisted of larvae and pupae of flies, presumably picked up from desiccated seaweed or over samphire flats and salt marshes, an alternative feeding zone which these waders often visit. They found that most birds took small molluscs, up to 5 mm in length, as well as a few crustaceans and some seeds.

The Curlew Sandpiper breeds in high Arctic Siberia, along the lowland coastal belt and on offshore islands. In this tundra environment the melting of the ice and snow which has accumulated over Winter provides a rich, moist habitat in the brief Summer period. While there the birds wear their dark chestnut-red breeding plumage, which blends perfectly with the short grasses, moss and lichens of the hummocky tundra. Like other Arctic waders which migrate to Australia they lose this plumage by the time they arrive here and those which we mostly see are in their non-breeding plumage of grey and white, as shown in the illustration. The plumage is identical for both sexes.

Towards the end of our Summer, when the birds have laid down heavy fat reserves ready for the return journey and they feel again the subconscious urge to go back to their breeding grounds, we might see individuals in partial moult, showing some of the chestnut feathering

²⁸ See, for example, David G Thomas and Alan J Dartnall, 'Ecological aspects of the feeding of two calidritine sandpipers wintering in south-eastern Tasmania' (1971) 71 *Emu* 20. See, also, David G Thomas and Alan J Dartnall, 'Moult of the Curlew Sandpiper in relation to its annual cycle' (1971) 71 *Emu* 153; David G Thomas and Alan J Dartnall, 'Differences in size between the sexes of the Curlew Sandpiper' (1970) 70 *Emu* 89;

which is typical of breeding birds. This is most likely to happen in the Autumn, and in late March I have found individuals in the Tamar River estuary on which the new plumage was well advanced.

The nest of the Curlew Sandpiper consists of a depression in the ground lined with a little local vegetable matter. It is sited near the edge of a bog or pool where there will be an abundance of aquatic insects emerging and breeding as the weather warms. A clutch usually is made up of four eggs which are olive in colour and blotched and spotted with brown.

Little is known of this bird's breeding routine, but no doubt, as is the case with others of its kind, incubation is synchronised so that the eggs hatch within a few hours of each other and the young then all leave the nest together and accompany their parents. By August with the approach of the northern Winter they must leave the tundra and start their annual migration. Some fly south-west to the African region and others head in the direction of south-east Asia and Australasia. There is no recognised subspecific difference between birds of the two regions.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#103). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Sanderling *Calidris alba*

The Sanderling is a regular, though uncommon, Summer visitor to this island. It arrives here in about September from its breeding areas in Arctic Siberia and leaves again in about March.

Once one is familiar with the unusually pale non-breeding plumage which it has while in the Southern Hemisphere, it is relatively easy to distinguish. An active and industrious bird of the sandy beaches, it can be found in small parties feeding near the water's edge on the ebb tide. Its habit is to follow the receding waves and pick up any exposed organisms which it might find acceptable, then to retreat before the next incoming wave. It also feeds by probing in the sand, locating items beneath the surface and determining their edibility by the sensitivity of its bill. As well, it has been seen to snap at flying insects.

On returning to its breeding grounds in May, when the snow and ice have only partially thawed and insects are few, it has to supplement its diet with plant material such as buds, shoots, roots, seeds, algae and moss, but as the weather warms and animal food becomes progressively more abundant it takes a wide range of invertebrates, both from the edges of ponds and from among the sparse vegetation.

These high Arctic breeding grounds are on the tundra of Canada, Siberia and Greenland. From there it migrates to equally diverse geographical regions in the Southern Hemisphere, as far as southern South America, southern Africa and Australasia. Remarkably for a species whose breeding range and associated migratory patterns have so much variation, no distinct subspecies have evolved or been recognised.

Breeding takes place principally in the months of June and July. The nest is on the ground among the short grasses, moss and lichen where its clutch of three or four dull olive and brown eggs blend with the surroundings and are most difficult to find should the bird be pressed into leaving them exposed.

Incubation is said to take about three and a half weeks and eggs hatch synchronously so that the precocious young can leave the nest together immediately upon hatching. They then accompany their parents to feed on insects which they catch along the edges of ponds or among the short vegetation on the wet tundra bogs. Fledging is believed to take as little as 17 days, a considerable advantage for birds which must complete their breeding cycle within the limits of the short Arctic Summer.

Timing is of the upmost importance, for if the birds return too early, before the thaw has advanced sufficiently, they risk starvation. This is because there is not enough plant material exposed and invertebrates will not have begun to emerge. On the other hand, if breeding is delayed or prolonged, they must face the onset of Winter and the attendant risk of the young perishing before they are able to fly south.

Like most birds of the wader group the Sanderling has a special plumage for the breeding season. The feathers are infused on the upper surface with russet-brown and chestnut shading, giving the birds a distinctly different appearance from that which they have in the Southern Hemisphere, when they are a pale silvery grey. Males and females are indistinguishable.

After breeding the birds flock to tidal sandy beaches, preferring the exposed, firm, clean sand to that of the mudflats. Those which reach here probably originate in Siberia, flying by way of southern Asia and Micronesia.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#104). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Latham's Snipe *Gallinago hardwickii*

This bird's home is in the islands of northern Japan, where it breeds from May to July. Tasmania is used by considerable numbers of snipe as a base for rest and recuperation after the exertions of the long flight south.

Once the young birds have developed to independence, large flocks congregate on the shores of lakes in preparation for the migration. They depart progressively during the month of August and September, flying via Taiwan and the island chain to its south, on to Cape York and finally to south-eastern Australia, where the first birds arrive from about the middle of September.

In Tasmania the snipe inhabits wet, tussocky grassland, lagoon edges, swamps and the banks of water courses where damp, grassy vegetation provides a degree of shelter and protection from predators. Here, too, it can find an abundance of worms, arthropods and seeds. Its sojourn here lasts about six months, then it heads northwards, following the same route by which it arrived, and by the end of April all have usually left.

By resting and feeding here it builds up its fat and energy reserves for the return flight, so as to arrive back on its home island in peak condition for the next breeding season. Unfortunately for some, this practice has led to their death, as the snipe has been prized as a gamebird among the shooting fraternity ever since Europeans first settled in Australia. Its fattened little body makes it a culinary delicacy, and the rapid, weaving flight pattern it has developed over centuries of being shot at presents a challenge to the marksman.

It is a shy and timid bird, hiding beneath the vegetation should any form of danger threaten. Only when pressed to do so will it break cover and fly, swiftly and low, on a rapid wing beat for a hundred metres or so before diving to the ground and the shelter of tall vegetation. This reluctance to take to the air is also, no doubt, a response to the fact that it presents a target to game shooters when it does so. To assist in flushing snipe from cover dogs were trained specifically for that purpose, to hunt only for birds and to work within gun range of their owner.

Though the population of Latham's Snipe has no doubt declined over the years, this may not be all due to shooting. The extensive draining and ploughing of marshes and other wetlands for agricultural purposes and the flooding of valley floors by damming has destroyed many areas which previously supported populations during their visits here.

However, despite these adversities, the bird is still common in many localities and studies into its life, habits and requirements have recently been undertaken by Australian and Japanese biologists in collaboration, in an attempt to ensure its conservation and long-term security. As a precautionary measure no open season for shooting has been declared since this international study began.

As a ground dwelling species the snipe, of course, nests on the ground, in a depression lined with grass beneath the shelter of grass tussocks or bushes. Three or four yellowish-brown eggs with darker spots form the most usual clutch. Incubation is said to be undertaken by the female and to extend over about three weeks. Young birds are similar to adults in their plumage, nor is there a difference between the sexes in this regard.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#105). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Southern Skua *Catharacta antarctica*

Skuas are large, heavily built, predatory birds of the southern oceans, and the genus is represented here by only two species. The South Polar Skua *Catharacta maccormicki* breeds in Antarctica from October to January, after which it migrates to more northern latitudes for the winter months. At this time it may be seen in Tasmanian seas, but such records are rare and we have therefore chosen not to illustrate it here.

The Southern Skua, on the other hand, is a relatively common bird around Tasmania during Autumn and Winter. It breeds in Spring on sub-Antarctic islands, the nearest such location being Macquarie Island.

Skuas are opportunistic feeders, scavenging on all kinds of carrion as well as hunting and killing their own food. Their prey includes small mammals, other seabirds (whose eggs and young they eat), fish and a range of invertebrates such as molluscs and crustaceans. They will also chase birds and harass them until they drop or disgorge food, which the skua will then consume. Ships at sea are another potential source of food, and skuas, along with other seabirds, will follow in wait for edible refuse to be thrown overboard.

They can be distinguished from their northern relatives, the jaegers, by their squarish, blunt tail which lacks the elongated central feathers of the latter. Plumage is similar for both sexes, but females are slightly larger than males.

The Southern Skua returns to its traditional breeding islands about September and establishes nesting territories which are fiercely defended. Birds younger than about six years do not breed but spend the breeding season gathered in loose congregations along the shore and in places where carrion and other food might be obtained, squabbling among themselves for possession of tasty morsels.

The nest is merely a slight depression in the ground, usually in an exposed position where the birds can obtain a good general view of their surroundings. A pair will vigorously defend their nest and young, and are such respected adversaries that they need have little concern for concealment.

Indeed, this bird has few natural enemies other than man. Any intruder into an occupied breeding territory will be confronted by a skua with raised wings in an aggressive posture, and if the threat implied in this stance is ignored an attack is pressed home in a most ferocious manner. The birds continuously fly at their enemy, screaming threats and striking with wings, beak and both feet at every opportunity. This habit once resulted in the death of many breeding pairs when some of the early explorers, finding themselves under attack, shot in self-defence. Fortunately, today such slaughter is considered a criminal act and the skuas are respected and tolerated, though admittedly sometimes with difficulty.

Two brown eggs, spotted and blotched with darker markings, form the usual clutch. Both sexes share in the incubation, which is said to take a little over four weeks, and also in the task of tending to the young birds, who may be two months old before they are able to fly. As with all migratory birds, whose breeding season must be contained within strict seasonal limits, the Southern Skua produces but a single clutch annually.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#106). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Arctic Jaeger *Stercorarius parasiticus*

Jaegers are truly cosmopolitan birds of the oceans. There are three species and all breed in the Arctic tundra during the northern Summer, after which they migrate south to spend the rest of the year in warmer latitudes. It is then that they visit the seas around Tasmania. They are sometimes called skuas, but this name should apply exclusively to a closely related genus which breeds only in the Antarctic and visits Australia in our Winter.

The Arctic Jaeger is the most likely of the three species to be seen here, mostly from the month of October to April. After then it returns to its northern breeding grounds. Although it does fly close to shore and even enters the Derwent River as far as Hobart, it is mostly oceanic and will follow ships to scavenge upon discarded scraps of food.

Its scientific name "*parasiticus*", given to it by Linnaeus in 1758, refers to its habit of robbing other birds of their food, and although other species occasionally do this none have perfected the technique to the extent of the Arctic Jaeger. Its tapered, almost falcon-like wings enable it to attain considerable speed when in pursuit of another bird and to twist and turn with great agility as it counters every effort of its intended victim to avoid physical contact. Only when the quarry reluctantly drops the food it is carrying will the jaeger break off the chase. Then it dives to secure the food as it falls before another bird can reach it. And other times its flight may be almost lazy and gull-like, occasionally gliding, but all the time alert for its next meal.

It also hunts for its own prey, such as small fish which may swim to the surface, and, during the breeding season, when it is land based, it will take small animals and birds, in the manner of other predatory birds, as well as the range of invertebrate animals. The jaeger's powerful beak with its strongly hooked tip is indeed perfectly proportioned for its various feeding methods.

The plumage of jaegers is confusing, as all are polymorphic and might occur in a variety of colour phases and patterns, thus making them extremely difficult to identify at sea. These phases may range from almost uniformly dusky brown birds to others with quite extensive pale and white patterning about the head and breast. Studies into this unusual phenomena have failed to explain why it occurs. Males cannot be readily distinguished from females. Jaegers are different from skuas in having the central pair of tail feathers pointed and, unless worn down or broken, extending well beyond the rest of the tail, almost like streamers.

The other two jaegers which occasionally reach as far south as Tasmania during migration are the Pomarine Jaeger *Stercorarius pomarinus* and the Long-tailed Jaeger *Stercorarius longicauda*. Their home is the Arctic tundra and during breeding they feed mostly on small birds and rodents, especially lemmings. Both are rare visitors to our seas and are therefore not included among the series of illustrations.

The Arctic Jaeger breeds in June and July, its nest being a slight depression on the wet, exposed tundra, lined with a little grass and other vegetable matter. It so fiercely defends its territory against invaders or would-be predators that it scarcely needs to hide its nest, for few are those who would voluntarily expose themselves to the vigour of its attacks.

Two to four eggs form a clutch, and they are brown in colour, spotted and blotched with a darker shade. Incubation is said to take up to four weeks, and the young may take their first flight about four weeks later. After this, and before the onset of the northern Winter, the southward migration begins.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#107). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Pacific Gull *Larus pacificus*

Northern Tasmania and the Bass Strait region appear to be the strongholds of this large and spectacular gull, though its distributions extend all around the coast of southern Australia. Beaches, rocky shores, bays, estuaries and the larger tidal rivers are its natural habitat, but since the settlement of the area by Europeans it has been provided with an additional resource base – urban garbage disposal areas.

These sites attract large numbers of birds to scavenge on almost anything which might be edible, and here they squabble and vie for possession, not only amongst their own kind but also with Silver Gulls and Forest Ravens, which similarly utilise this artificial food source. At such locations along the north coast and at Launceston's refuge disposal area, which is some 50 kilometres inland, large congregations of birds gather, their numbers often including well over a hundred Pacific Gulls of all ages and plumage phases.

Away from the attraction of garbage dumps, the bird derives its food from opportunistic scavenging on dead fish and other such flotsam and jetsam, and by preying upon invertebrate animals in the intertidal zone. In Spring and Summer it will also take the unguarded eggs or the young of sea birds. It patrols over the nesting grounds of shearwaters and storm-petrels and around the perimeters of Silver Gull or tern colonies with an ever watchful eye for the chance to make a killing. It often swallows its food unselectively and in large lumps with much indigestible matter which passes through its faeces, thus giving evidence of its diet.

The jetty at Darlington on Maria Island is formed in part by an extensive concrete slab, and there I have observed the ingenious method by which the Pacific Gull can extract a live mollusc from the hard and seemingly impenetrable shell of the Common Warrener. A fine adult bird had apparently found a colony of this mollusc in the rocky intertidal zone about half a kilometre away across the bay. It was using the concrete slab as a "tool" on which to break the shell by dropping it while hovering above at a height of about twenty-five metres. After releasing the shell from its beak the bird followed it to the slab, inspected the effort and, if unsatisfied, immediately carried the shell aloft again. The operation was repeated for as many drops as it took for the shell to be sufficiently shattered, whereupon the animal was extracted and swallowed. The gull then flew across the bay and within minutes was back with another warrener and the process was repeated. The area was littered with fragments of warrener shells, indicating that the jetty had long been a feeding site.

In flight the Pacific Gull generally appears sluggish and unhurried, often gliding on outstretched, motionless wings and rising to considerable heights as if simply enjoying the experience. It may rest or sleep standing or sitting near the water's edge on a rocky promontory or pylon, or just floating on the surface in the manner of a duck. Its cry, uttered in flight, is like a mournful "oww, oww, oww."

It breeds from October to the end of the year. The nest is on the ground, sometimes sheltered by low vegetation and sometimes quite exposed. The site selected is usually on a low headland or a small island where it might be free of disturbance. Two or three greenish-brown, mottled eggs form a clutch.

Male and female Pacific Gulls have similar plumage, but immature birds are dull brownish-grey with dark beaks and take up to four years before they eventually develop, with successive moults, the plumage of fully mature adults.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#108). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Kelp Gull *Larus dominicanus*

It was at Botany Bay in 1943 that this large gull was first recorded from Australia. Since then it has greatly increased in number and has extended its range around the south-east coast to Tasmania and as far as south-western Australia. It was first found in this state in December 1955 when Leonard Wall discovered two living at Ralphs Bay at the mouth of the Derwent. Within twenty years it could be found in small flocks and many were breeding on small islands in the D'Entrecasteaux Channel.

Why it has suddenly established a population here and from where it came are unclear. Considerable numbers live and breed in New Zealand and on Macquarie Island and birds may have reached Tasmania from either of these places. The Kelp Gull also occurs in South America, South Africa and on many sub-Antarctic islands. With such an extensive circumpolar distribution it is perhaps even more remarkable that it had not established itself long ago in Australia.

It is interesting to note that its near relative, the Pacific Gull, is to be found only in Australia, the only major ice-free landmass in these southern latitudes where the Kelp Gull did not, until recently, occur. Now that the Kelp Gull is so firmly established here and is in apparent competition with the Pacific Gull, there may well be cause for concern that any further expansion of the invader's range and numbers will endanger the long-term security of the indigenous species.

The close similarity in appearance of these two majestic birds could easily result in them being mistaken for each other and no doubt this has happened on many an occasion. With adults in good plumage, however, a distinction can be made by reference to the tail feathers. Those of the Kelp Gull lack the dark sub-terminal band of the Pacific Gull, although this means the identification is not infallible as the tail band may be eroded and inconspicuous in some individuals as seasonal plumage wear progresses.

Also known as the Southern Black-backed Gull and the Dominican Gull, the Kelp Gull has a range of feeding habits which include scavenging on beach-washed carcasses as well as taking live animals such as small fish, molluscs and crustaceans. In addition it will devour the eggs and young of other birds if they are not adequately guarded by their parents.

It shares with the Pacific Gull a most intriguing way of securing food. When the tide is low and organisms such as shellfish become temporarily exposed, it may take and carry a live mollusc in its beak to drop from a height on to rocks, repeating the action until the shell is broken by the impact enough for the animal to be easily extracted and eaten.

The Kelp Gull breeds in Spring, usually on small, isolated islands where it may be relatively free from disturbance and when populations are strong it may gather in loose colonies. The nest is composed of an accumulation of dead seaweed and other sundry vegetable matter

formed into a dish-shaped depression on the ground. Two or three eggs form a clutch and they are dark greenish-grey, heavily blotched with darker markings. Incubation is said to take about four weeks.

Sub-adults in their first year are mottled slate-brown, but with successive moults the proportion of white plumage progressively increases until about the fourth year, when the full adult plumage, which is similar for both sexes, is acquired.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#109). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Silver Gull *Larus novaehollandiae*

Few if any indigenous birds have benefited more from learning to live in association with human colonisation than has the little Silver Gull. It is probably our best known bird, occurring in large numbers around the coast, especially near to human settlement, and visiting towns and cities to scavenge on dumps and to solicit scraps of food from kindly people who are attracted by its attention.

So tame does it become that on occasions an individual can be persuaded to take a bread crust from the hand. An item of food cast to a single bird will usually result in the invasion as others fly in, as if from nowhere, to participate in the handout.

With the approach of evening it usually leaves the areas where it obtains its food and parties and small straddling flocks may be seen stringing their way seawards to spend their night roosting on an exposed shore or isolated isle where they will congregate to sleep in relative safety from predation.

The flight of the Silver Gull appears light and unhurried, except perhaps when it is racing to outpace a competitor for an item of food. In late Summer, when flying insects sometimes emerge in vast numbers, to be carried aloft in the rising evening air currents, it is attracted to feed on these while "hawking". Up to hundreds of birds may then gather, high in the still air, gliding and occasionally fluttering awkwardly as they attempt to make a catch.

On the ground it runs confidently, and where birds gather an obvious and strict pecking order of dominance is maintained. The top bird will proclaim its authority with loud "kwarks" and threats to its subordinates.

On sandy beaches or tidal flats where the shore is heavily waterlogged it may be seen rapidly paddling its feet up and down on the same spot. This is to dislodge tiny invertebrates from beneath the sand so as to snap them up when they rise to the surface. Sometimes flocks will move inland to avail themselves of the opportunity of food in the form of field crickets, grasshoppers, grubs or earthworms turned up by a farmer's plough.

Breeding starts in early Spring when birds congregate in colonies which, in some locations, number several thousands. Pairs of birds progressively join the colony through September and October. Colonies are usually situated on small islands where they are out of reach of mammalian predators. However, at Wynyard this bird has, rather exceptionally, colonised a long rock breakwater which is connected to the mainland.

The nest is usually a bulky dish of loosely gathered vegetation and is partly sheltered beside a rock or small bush. Nests are as close as a metre to each other, so that there is barely room for an intruder to pass between them without suffering an attack from one or both of the occupants. Defence of the colony is vigorous and extremely noisy; any threat to its safety is

met by a gathering of gulls flying close overhead and all the time maintaining their harsh “kwark” of alarm in a mass chorus of protest.

Two or three eggs form a clutch, and they may vary greatly in colour and pattern of pigmentation. Broadly, however, they may be described as greyish-green with dark spots and mottling. Incubation is said to take about three weeks. When first hatched the young are like mottled round balls of down, but they develop quickly and by the end of the year many will have flown to congregate in adjacent areas before eventually gaining independence and moving further afield. Many even travel as far as the Australian mainland, as has been shown by the banding of nestlings.

Sub-adults in their first year can be distinguished by their mottled backs and grey-brown beaks, eyes and legs. This colouring is common to both sexes, as is the familiar brilliant red of the eye-ring, beak and legs of adults, which is not fully attained until the following Spring.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#110). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Caspian Tern *Sterna caspia*

A giant among terns the species is readily identifiable because of its massive size, brilliant red bill and the impression it gives of arrogant dominance of its environment. It is usually seen as a solitary individual or in pairs, but occasionally during the breeding season it forms loose congregations.

The Caspian Tern is a cosmopolitan bird, ranging widely over North America and Eurasia as well as Australia. Its name dates back to 1770 when it was first described from a specimen collected in the Caspian Sea. In the Northern Hemisphere and on the Australian mainland it ranges far inland along rivers and around lakes, but in Tasmania this is rarely the case. Here it is principally a bird of the estuaries, the coastline and the islands of Bass Strait, although I have seen it near Launceston, having apparently followed the Tamar River upstream.

Its flight is slow and deliberate as it patrols at a height of up to ten metres in search of fish, maintaining a constant vigilance with its beak directed downwards. It takes its food by diving vertically on to the water with closed wings to capture its prey from just beneath the surface. Within a few seconds it rises again, ascends to its previous altitude and resumes its patrol.

Periods of rest are spent on a sandspit, an offshore rock or some similar site where it is least likely to be disturbed. There it may preen and gently attend to the maintenance and waterproofing of its immaculate plumage, a task which is, of course, essential for birds which feed as the terns do.

Outside the breeding season the Caspian Tern appears to live with few concerns or enemies but in Spring with the establishment of a nesting site it takes on a new image. Gone is its apparent carefree existence as it becomes extremely and noisily aggressive in defence of its territory.

The site chosen for a nest is usually near the shore of a small island or on some isolated promontory or beach. The nest itself is but a scrape in the sand or a slight depression in the ground surface, sometimes among short vegetation or desiccating seaweed. There its two or three egg clutch is beautifully camouflaged against detection by robbers, as the eggs have markings of black, brown and grey spots on a sand-coloured base.

However, it would be a bold or foolish invader which dared to approach the nest for the Caspian Tern is a fierce adversary, attacking with great determination anything that might upset or threaten its eggs or young. Taking flight, both adult birds protest loudly and greet the intruder with threatening swoops from above. Should this not be enough to dissuade the offender then attack may become even more vigorous, noisy and urgent, and can lead to strikes with its powerful, sharp beak as its swoops past. Such strikes can inflict a wound to the head. For a poor unsuspecting chick of another species which happens to wander into the

territory from a nearby colony the result could be fatal. All the while the tern keeps up an incessant warning screech of “krah kah” in alarm and threat.

Egg laying may occur from October to December and both sexes brood and tend their young. Incubation is said to take about three weeks. The downy young are a pale buff-grey with a few darker markings, a colouring which helps thwart detection by predators. Males and females have similar plumage and both have the habit of slightly raising the feathers at the back of the head when excited.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#111). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-fronted Tern *Sterna striata*

The home of this tern is New Zealand, where it breeds on southern islands during Summer. With the approach of Winter a considerable number migrate westward across the Tasman Sea to spend the colder months around the coast and offshore islands of south-eastern Australia.

Until recently it had not been confirmed as breeding here, although a few birds had occasionally been seen in Bass Strait during Summer. However in January 1979 John Whinray discovered five pairs breeding on Battery Island, a small granite islet of less than half a hectare in the Furneaux Group. This finding prompted officers of the Lands, Parks and Wildlife Service to undertake a more detailed survey which revealed that up to 53 pairs had bred or had attempted to breed during 1986. Breeding sites were found on 13 different islands in the group. These discoveries do not necessarily indicate a recent expansion of its breeding range, but rather that the species may well have been breeding undetected on relatively isolated islands for many years previously.

In Bass Strait the White-fronted Tern might start breeding as early as mid-September and continue well into the new year. The nest is, as with most terns, a mere shallow scrape in the sand or a depression among succulent vegetation. It may include a sparse lining of fragments gathered from the vicinity. One, two or, rarely, three eggs constitute the clutch. They are a sandy-grey or stone-grey colour heavily blotched with fine markings of black and blue-grey. This colouration blends with the surroundings in which they are laid and thus affords good camouflage against discovery and predation when the nest is unattended.

Males resemble females in plumage, but immature birds are extremely mottled, in contrast to the immaculate silver-grey wings and backs of the adults in their breeding plumage. Outside the breeding season the spectacular and well-defined black cap of mature adults becomes mottled with white markings which can extend as far back as the top of the crown.

When tending eggs or feeding young, the White-fronted Tern can become quite aggressive and will harass and attack intruders to its breeding territory. Outside the breeding season it congregates in flocks, often in association with gulls and other shore dwelling birds. Because of its graceful flight and aerial manoeuvres it has also been called the "Sea Swallow". In flight above the waves it will occasionally dip to the surface to secure the tiny fish which form its principal diet.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#112). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Arctic Tern *Sterna paradisaea*

The extraordinary migratory flight of the Arctic Tern is undoubtedly one of the most remarkable achievements among the endeavours of birds to utilise available resources. As its name implies, its home is in the Arctic and sub-Arctic regions of North America, Eurasia and Greenland, where it breeds during the northern Summer. Once the season's offspring are reared to independence it sets out on a journey to the southernmost latitudes where it avails itself of an abundance of tiny fish, crustaceans and plankton while escaping the northern Winter. After several months living in the vicinity of the Antarctic pack ice it flies northwards once more, before the onset of our Winter, and returns to its original breeding territories.

The routes by which it travels on this immense annual journey are not yet clearly defined, but indications are that birds fly via both the eastern Pacific and the eastern Atlantic Oceans, covering a distance of about 32,000 kilometres. In addition, of course, it must also expend much time and energy in securing food during the flights. It must also tolerate the great changes in temperature which it encounters while passing through tropical seas after months spent living and feeding in waters which are below 0° degrees centigrade.

Neither of the suggested flight paths passes near Australia, so consequently the Arctic Tern is but a rare visitor here. One theory for the appearance of occasional individuals on our shores is that some weaker birds are carried by prevailing winds in the latitude of the "Roaring Forties", eventually reaching here in a state of exhaustion or, as is more often the case, being found dead on our beaches.

In January 1957 I found just such an individual, near to death on a small salt lagoon east of Tunbridge. It was starved and emaciated and died soon after I found it. I was unfamiliar with the species at the time and sent the preserved skin to an authority at the CSIRO in Canberra for identification. It constituted the first record of the Arctic Tern from Tasmania and at the time only the eighth from Australia. Since then there have been numerous records, including one found beachwashed at Eaglehawk Neck in December 1972 which was wearing a leg band. Upon investigation this bird was found to have been banded in Finland, just eight months previously.

There are two other species of small terns which may, on rare occasions, be discovered in Tasmania. These are the closely related and very similar Antarctic Tern *Sterna vittata*, a bird of the cold Southern Ocean which also breeds on Macquarie Island, and the Common Tern *Sterna hirundo* which breeds in the northern regions of North America and Eurasia and which occasionally wanders as far south as Australia during our Summer. Because of the close resemblance of these two to the Arctic Tern, identification is extremely difficult for the average observer and we have therefore chosen to exclude them from the series of plates.

Like most other terns the Arctic Tern nests on the ground, mostly in loose colonies, and broods its clutch of two or three eggs in a scrape among the shingles. The eggs are pale bluish-grey in colour and blotched with black and grey markings which make them very well camouflaged in their surroundings. The sexes are alike in appearance and are said to share the brooding of eggs and the tending of the offspring between them.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#113). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Crested Tern *Sterna bergii*

This is by far the most numerous of the half dozen or so species of tern which might be encountered around the Tasmanian coast. It occurs all around Australia and its distribution extend as far as the shores around the Indian Ocean and even to South Africa.

Outside the breeding season it is rather nomadic and maybe found in small parties resting near the water's edge or passing the day in a leisurely manner by flying over the sea almost aimlessly. Occasionally it will swoop or dive to the water as if tempted by the appearance of small fish near the surface and the prospect of an easy meal.

With the approach of Spring, however, its attitude to life changes and it becomes a busy and somewhat aggressive bird as the urge to breed becomes acute. Then it congregates in colonies on small, isolated islands, especially in Bass Strait. This feature of its habits, in fact, gave rise to one of its earlier names, the Bass Strait Tern. These breeding colonies might be formed by up to hundreds of pairs, their sheer numbers and the density of their concentration giving them considerable protection from harassment and predation.

Anyone who visits a large breeding colony of the Crested Tern cannot help but be impressed by the social organisation and the territorial defence of the colony. One is immediately greeted by the raucous chorus of their mass cries of alarm. Threat postures, either on the ground with the black head feathers erected in a haughty crest, or in swooping overhead flights, is designed to instil fear into an intruder. Rarely, however, are these threats of aggression ever extended to actual physical contact against humans.

In November 1977 I was fortunate to be able to spend four days, in company with my eldest son, camped on George Island off the north-east coast of Tasmania. The purpose was to study the fauna, especially a breeding colony of this species. When we landed on 12 November several dozen Crested Terns had gathered at one end of the island and we counted about thirty nests. By 15 November, when we left, their number had increased to about 250 with many more birds arriving each day. Trevor Singline, a local fisherman with a long knowledge of the island, had estimated that about 2,000 pairs had bred there the previous Summer.

The spectacle of many hundreds of these attractive seabirds coming and going while engaged in their busy daily routine made a marked contrast to the leisurely behaviour in other seasons. All around the island birds circled, as high as hundreds of metres above the sea, while watching below for tiny fish. Suddenly, having sighted a potential victim, a bird would plunge into the water in a steep dive, to rise from the surface seconds later, almost invariably with its wriggling, silver catch. The little fish were usually carried about for some time as part of the male bird's display to attract the attention of a female, as if to boast of its prowess.

By the end of November the last birds to have arrived would have laid eggs and be brooding. A single egg forms the clutch, being a sandy-cream colour and heavily blotched with black

markings. Nests are usually about one metre apart, or just beyond the pecking distance of a neighbour.

The young remain in the nest and are tended by a parent for a few days until they are old enough to run. From then on they progressively gather in mobs or crèches, the adults maintaining a constant shuttle to catch and carry food until the young are sufficiently fledged and learn to fish for themselves. They then disperse and might lead a nomadic life travelling hundreds of kilometres until the following Spring when the cycle starts again.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#114). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Fairy Tern *Sterna nereis*

This is one of the smallest and most attractive of all the tern species which breed on Tasmanian shores. It is not a common bird and it is believed to be decreasing in numbers throughout its range. One reason for this decline is its habit of nesting on sandspits and beaches where the ever increasing human interference often results in disturbance and eventual destruction of nests and young birds.

On the other hand its near relative the Little Tern *Sterna albifrons*, with which it can easily be confused, appears to be expanding its number and range and was found breeding on the east coast of Tasmania in 1968 by James Napier who photographed birds on their nests. The range of the Little Tern extends to Asia, Africa and Europe, and its greater numerical strength and increasing competition with the Fairy Tern appears to be another possible reason for the latter's decline.

From a distance the two species are difficult to tell apart, but mature adults may be distinguished by differences in the head markings. The Little Tern has a black-tipped beak and black between the eyes and the base of the beak. As can be seen in the illustration, the Fairy Tern lacks these features. As the Little Tern is a rare bird in Tasmania and is unlikely to be encountered here, we have chosen not to illustrate it.

The Fairy Tern occurs also on the coast of western and southern Australia, but breeds only in the more southerly parts of its range. In Autumn it is believed to move to the northern limits and it may be absent from Tasmania over Winter.

Its English name of "Fairy" is apt because of its relatively small size, its elegant appearance and meticulous nature. The scientific name "*nereis*" means "sea-nymph". To some bird lovers it was also known by the names of Sea Swallow or White-faced Ternlet.

When not engaged in tending eggs or young it pays little attention to humans, and pairs of small parties can at such times be seen resting near the water's edge or lazily flying over coastal shallows. Occasionally it will dive from a height to plunge into the sea and secure a tiny fish in its beak. However, with the onset of breeding, about the end of October, and the establishment of small colonies, its mood changes and it becomes agitated and aggressive towards any intruder who may pose a threat to its brood.

Sites chosen for breeding may be recolonised in successive years, but are sometimes relocated elsewhere as a result of disturbance or changes to the geography of beaches. The nest itself is nothing more than a shallow scrape in the sand, sometimes decorated with an odd fragment of broken seashell. The site is invariably exposed and on windy days the drifting sand may soon partly cover the eggs if a brooding bird leave the nest for any length of time. This may actually provide some protection against disclosure and predation, and the returning parent has little difficulty in locating the eggs and settling back into its task.

Any intruders venturing into the vicinity of a breeding colony will soon provoke the indignation of the terns, which is expressed mostly with a constant chatter resembling “kat-kat-kat”. This sound is repeated rapidly while the birds fly overhead in a pseudo attack. Such attention is kept up until the offender is eventually escorted from the territory.

One or two eggs form the clutch. They are sand coloured and blotched with black markings, so that they blend perfectly with their surroundings and are very difficult to find. Likewise the mottled colouring of the young birds affords excellent camouflage when they are squatting motionless on the sand. Males and females have similar plumage.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#115). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-winged [now White-winged Black] Tern *Chlidonias leucopterus*

Twelve species of terns have been recorded from Tasmania, but only five of these have been found to breed here. Some are but rare visitors which breed outside Australia and the White-winged Tern is one of these.

The first account of its occurrence in Tasmania was published by the well-known Hobart ornithologist Leonard Wall in 1982 following the discovery of a single bird at Rushy Lagoon, some fifteen kilometres south of Hobart, in December 1961. His find created considerable interest among bird observers and prompted others to watch more closely for rare and unusual birds which might visit here. In subsequent years this tern has been sighted around the Derwent estuary on several occasions and in different seasons. We have included it here as no doubt further such sightings will be recorded in the future.

Unlike most of our terns, which are coastal birds, the White-winged Tern lives mostly over fresh or brackish water swamps and marshlands where, in addition to small fish, it feeds upon insects and their larvae. Only during migration does it fly far out to sea.

It breeds in colonies in central Europe, Russia and China, building a rough platform nest of plant material on top of aquatic vegetation in a marsh. There it broods its clutch of from two to four eggs, and rears its young during the northern Summer. Once the young are independent it migrates southwards to warmer latitudes, some birds reaching Australia in November, occasionally in considerable numbers, and remaining here until about April. It is then that odd individuals may fly as far south as Tasmania.

The birds that reach here are in eclipse or non-breeding plumage, as shown in the illustration, having moulted and lost the brilliant black body plumage with contrasting white tail and wings. This colour coloration has given rise to the alternative English name of White-winged Black Tern. It may occur in company with other tern species and its identity overlooked because of confusion with one or other of them.

A near relative which breeds in south-eastern Australia but rarely reaches Tasmania is the Whiskered Tern *Chlidonias hybrida*. Also known as the Marsh Tern, it, too, lives and breeds in swamps and favours inland as opposed to coastal waters.

Some others which, on rare occasions, visit our shores are the Antarctic Tern *Sterna vittata* *which*, as its name implies, has its home in far southern latitudes and the Common Tern *Sterna hirundo*, a bird of the Northern Hemisphere which breeds in North America and Eurasia. As well, the Gull-billed Tern *Sterna nilotica* [now *Gelochelidon nilotica*], a widely distributed species which lives mostly in regions of fresh and brackish water, was found at Georgetown in 1979 and 1980, and the Bridled Tern *Sterna anaethetus* [now *Onychoprion anaethetus*], which belongs to tropical and sub-tropical regions and which breeds in Western Australia, was found near Devonport in 1982.

All the Australian terns are part of a sub-family known as the Sterninae and together they form a most interesting and highly specialised group of species. Once one becomes familiar with their habits, flight and characteristic plumage, they can be readily distinguished from other sea and marsh birds and their aerial manoeuvring and feeding techniques can become a source of interest and a pleasure to witness.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#116). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Spotted Turtle-dove *Streptopelia chinensis*

Several subspecies of the Spotted Turtledove were introduced into Australia in the latter part of the last [19th] century. They have since interbred and become established in many urban and country areas of eastern and southern Australia. In Tasmania it was apparently introduced at a later date but exactly when and which subspecies was involved is shrouded in doubt. However I recall it living and breeding in parks and gardens in Launceston in 1938.

Here it has not yet extended its distribution to country areas, as has been the case on the Australian mainland, and it is mostly restricted to gardens and parks in and around Hobart and Launceston. Nowhere is it found in flocks or in substantial numbers and as long as it stays within its present distributional limits it is unlikely to become a threat to native species or a pest in the community.

To most of us it is an admirable bird and a welcome addition to the fauna inhabiting our garden landscape. Its peaceful nature and the gentle cooing it utters during its breeding time in Spring are most appealing. A pair of these handsome and colourful birds strutting about their business as they quietly search for food beneath trees or on an open expanse of lawn makes a pleasing sight.

When flushed to fly it rises on rapid wing beats with a loud flapping noise and with its tail slightly fanned. The flight is direct but generally unhurried and the bird is content to fly but a short distance to safety in a nearby tree. Pairs usually remain within a restricted area throughout their life, often returning to the same garden or even the same tree to nest in successive years. Sub-adults are apparently rather nomadic, probably as a result of being forced from their original home territory by their parents. They then wander until they find a vacant and acceptable home range for themselves.

The Spotted Turtledove will readily adapt to accepting seeds, bread crumbs and other such handouts offered to it on a regular basis. Poultry food is also favourite and sometimes it will avail itself of the easy pickings from fowl pens. Like most ground feeding birds it takes some insects in addition to a variety of seeds from weeds and exotic garden plants.

In common with other members of the family it engages in an elaborate pre-copulatory display which includes much bowing with the feathers fluffed up and the head and tail posed in unusual positions. With each bow a "coo" call is uttered. The whole repertoire is, of course, designed to lure the female into acceptance of the suitor and to eventual mating.

Nest building may commence in September and two or even three broods might be reared during Spring and early Summer. The nest is usually a simple platform of dead twigs and a few bits of coarse vegetation and is in most cases well hidden among the branches and foliage of an exotic shrub or tree. Its height above ground might be from one to four metres. For each clutch two oval white eggs are laid, and generally the young are reared after an

incubation lasting about two weeks. Males and females have similar plumage but juveniles lack the white-spotted collar on the neck.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#117). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Common Bronzewing *Phaps chalcoptera*

From the days of the earliest European settlement this bird has attracted the attention not only of bird lovers but also of those who sought to shoot it for food. To those early settlers whose diet must have been wanting in variety its abundance and its plump body meant that it presented a readily accessible culinary delight. Indeed, it was said to have constituted “a most excellent viand and is constantly eaten by every class of person, being equally acceptable at the table of the Governor and at that of the inmate of a log hut in the interior of the country.”²⁹ Shooting of this pigeon as a game bird continued until almost the middle of the present century, But the bird has since been afforded total protection.

It occurs extensively throughout Australia, including a wide distribution in Tasmania. Here it favours eucalypt forests, woodlands, coastal scrubs, and areas of crop and pasture land, but it shuns the denser wet forests. Nowhere is it now to be found in the numbers it enjoyed in former years and, although this numerical decline must, at least in part, be attributable to the intense pressure to which shooting subjected it, the years of total protection do not appear to have resulted in its population recovering.

The Common Bronzewing is principally a ground-dwelling bird and it feeds mostly on seeds, including those of a wide range of both native and introduced species which the bird obtains by diligently searching among ground litter. Seeds of the wattle are favoured and some fifty or so years ago I enjoyed the rare experience of finding a congregation of over a hundred birds feeding beneath wattles near Tunbridge. They were distributed over an area of more than twenty hectares and, as I walked beneath the trees the birds, disturbed, were forced to take flight. They rose in small parties to fly hurriedly across the valley, a distance of about a kilometre, to the shelter of an extensive wattle scrub on the opposite hillside.

On other occasions I have found pairs or small parties feeding on open pasture land where they were, no doubt, taking the seeds of clovers and introduced plants. When disturbed they invariably flew to seek protection in the sub-canopy of distant trees, rising with a rapid and noisy wing beat and flying with apparent urgency and at considerable speed in order to avoid the possibility of a falcon attack.

And a distance the bird appears dull brown, blending perfectly with its background, and when it is standing quite still it can be almost undetectable. If, however, the observer is lucky enough to view it at close quarters the full brilliancy of its plumage is revealed. Especially on a sunny day the metallic greenish-bronze feathers in the wings reflect light with an iridescent quality, vividly demonstrating the salient feature which prompted the choice of its English name. Indeed, the scientific name is derived from Greek words meaning “bronze wing”.

²⁹ John Gould, *The Birds of Australia* (John Gould, 1848, vol V) entry for *Peristera chalcoptera* Bronzewinged Pigeon <<https://www.biodiversitylibrary.org/item/188478#page/265/mode/1up>>.

The call of the Common Bronzewing is a deep, booming “oom” regularly repeated which carries for a considerable distance. It is uttered generally in Spring when the birds are breeding and has a rather mournful tone to the human ear. The pre-mating display, which consists of bowing, is accompanied by soft “cooing” notes.

Breeding takes place from September to January and the nest is made of fine twigs in the form of a slightly concave platform. It is usually situated in a horizontal fork among the branches of a tree, not more than eight metres above ground. Two oval, white eggs formed the clutch. Females and sub-adults are slightly less brilliant in plumage than adult males, but are otherwise similar.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#118). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Brush Bronzewing *Phaps elegans*

This bird appears now to be more numerous and widely distributed than its larger relative, the Common Bronzewing, though I believe this to be a fairly recent trend. The Brush Bronzewing occurs throughout Tasmania and on King and Flinders Islands, but it favours forested and scrubby areas where it might find seclusion and partial protection beneath the leafy foliage. It occurs also on the Australian mainland, principally in the South-east and South-west, but, generally speaking, its numbers have declined everywhere since European settlement.

Earlier accounts, such as those of John Gould, record it as being very numerous, but this state of affairs had changed by 1910 when F M Littler wrote, “The advance of civilisation is responsible for the appreciable decline in the numbers of the Brush Bronzewing Pigeon during the last decade.”³⁰ Though today it appears to be the more numerous of our two bronzewing species, it is nonetheless a bird which is not commonly encountered.

As it is principally a ground dweller and has little vocal ability, its presence is often easily overlooked until, perhaps quite by accident, it is suddenly startled, whereupon it will rise on rapid wing beats and hastily take flight. It is therefore mostly observed only when alerted and on guard against the possibility of danger.

Like most members of the pigeon family it feeds on ripe seeds which have fallen to the ground from trees and shrubs. Wattle and many other native species are included in its diet but no doubt it is not averse to taking seeds of some introduced plants, berries and the occasional insect. While feeding it rarely perches in trees, except after having been alarmed, and then only to take advantage of an elevated view of its surroundings. Then it usually perches, quite motionless, its plumage colours blending with the background to provide the same high degree of camouflage in the sub-canopy as it has when gleaning among the litter on the forest floor.

It was once ranked, along with the Common Bronzewing, as a game bird and last [19th] century and in the early years of the [20th] century large numbers were shot, either for food – as their plump bodies were considered a delicacy by many of the early settlers – or simply for sport.

The call of the Brush Bronzewing is a peculiar, booming “oom”, uttered as if the voice was forced with some effort from deep within the bird’s body. It is to be heard mostly in Spring when the birds are occupying breeding territories and on a clear, still morning it is audible

³⁰ Frank M Littler, *A handbook of the Birds of Tasmania and its dependencies* (Frank M Littler, Launceston, 1910) 104 <<https://www.biodiversitylibrary.org/item/34662#page/1/mode/1up>>

from a considerable distance. When the bird is in full cry this single, rather mournful note is repeated with monotonous regularity.

Breeding commences about October and can continue until January. The nest is little more than a few fine sticks interlaced to form a frail platform two or three metres above ground. It is usually placed in twigs, within or just beneath the foliage of tea tree or other such scrubby bushes. Two oval-shaped, pure white eggs form the clutch and these are delicately balanced on what appears to be a most precarious albeit inconspicuous nest. Incubation has been found to take sixteen days and the young leave the nest by the time they are three weeks old. Two broods may be reared in a season.

Males and females are much alike in appearance, except that the females, as also the sub-adults, have slightly duller plumage, legs and feet.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#119). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Yellow-tailed Black Cockatoo *Calyptorhynchus funereus*

The most remarkable aspect of this bird's behaviour is its feeding method. Omnivorous, it takes both seeds and wood-boring larvae as the opportunity arises, but it singles out for attack eucalypts which have become infested with large wood-boring grubs. These may be standing green trees or dead and decaying logs on the forest floor.

Just how the birds are able to locate such a potential food source is quite surprising, but once they have done so the attention of the whole flock is so concentrated on the task of extraction that the timber is soon chopped up to the full depth to which the larvae had penetrated. This appears to be no haphazard "hit-or-miss" affair, but rather the result of the cockatoos' ability to locate the whereabouts of a grub by sound.

On standing trees the bird may even break out a chip immediately below the position of the grub, but leave it semi-attached to act as a shoe and thus assist its stance while working towards its meal. It is indeed an impressive sight to see a tree or log being so worked over and torn to pieces by these birds' powerful beaks. On closer examination one can find the individual sites where a bird has worked towards its objective and see the exposed cavity from which the grub has been extracted.

While a flock is working on this task of chipping, often deep within the forest or on the forest floor, it may well be vulnerable to a sneak attack by predators. This possibility is taken care of by the posting of one or two birds on lookout or sentry duty. The birds keep in constant contact by uttering subdued grumblings, but if danger threatens the guard bird increases the volume of its call to a raucous, drawn-out "keark-keark" and the whole flock will then abandon their efforts, rise into the treetops and join in the chorus. If the threat is real the birds will gradually move away in apparently heavy, laboured flight, but if it proves to be a false alarm they may return cautiously to their pursuits.

In coastal areas where the "blackboy" or Yakka Gum grows the tall flower stems likewise become infested with larvae and these, too, are an attraction to the cockatoos. At times they supplement their insectivorous diet with a variety of seeds.

Up to four species of black cockatoos are recognised in Australia but only the yellow-tailed species inhabits Tasmania. On the mainland it ranges throughout the south-east, from South Australia to southern Queensland. Here it is mostly a forest dweller but its nomadic wanderings occasionally take it into woodland areas.

It is a social bird and the flocks it forms outside the breeding season may number from three or four up to dozens or, at times, even hundreds. Though it wanders the State from the mountains to the coast and on to the islands, including King Island and Flinders Island, there are no records of it crossing Bass Strait. That it does so, however, seems most probable, as up

to four subspecies are currently recognised and that to which the Tasmanian population belongs extends also to south-eastern South Australia and southern Victoria.

Breeding takes place in Spring and is restricted to those areas where there are stands of large, old trees to provide suitable cavities for nesting. The site chosen is usually at a considerable height in the hollow trunk of a eucalypt, either living or dead.

The birds are exceedingly timid when nesting and take great pains not to disclose the nest site. If additional excavation of the decayed wood is necessary to enlarge or deepen the chamber, the bird carries the waste out concealed among its feathers and, when clear of the entrance, shakes itself vigorously to dislodge the dust before returning for another load.

Two pure white eggs make up the usual clutch, and they are deposited in a cavity formed in wood dust at the bottom of the chamber, as far as several metres below the entrance. Rarely is more than a single young reared to maturity from each brood.

Males and females are of similar plumage.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#120). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Sulphur-crested Cockatoo *Cacatua galerita*

What a spectacular sight is presented by a flock of these birds, numbering dozens, feeding on seed and green vegetation in the rolling pasture land, or passing through, or just above, the forest canopy which provides a contrasting background to the immaculate white plumage. Even the raucous call, which serves to keep the birds in contact and the flock together, contrasts in a startling way with the otherwise tranquil peace of the bush.

For many years the Sulphur-crested Cockatoo, or White Cockatoo as it is also called, was rarely seen by the general public, as it is mostly a bird of the western and southern forests except for a resident population in Epping Forest in the midlands. With the passing of time the originally expansive range of Epping Forest has been reduced by clearing for pasture paddocks. A few cockatoos still remain there, feeding on seeds and scavenging grain from feed lots set up for cattle. These birds have become quite tame and tolerant of the presence of people and the passing vehicular traffic. In the vicinity of Powranna they can generally be found in loose flocks, perching in the scattered trees or wandering about the paddocks in search of food.

In some areas and at particular times of the year the bird can become somewhat of a pest by feeding on introduced crops, but in Tasmania this is not the problem that it is in some parts of the mainland where its distribution extend throughout eastern and northern Australia and into Papua New Guinea.

As well as eating a range of native and introduced plants and their seeds, the Sulphur-crested Cockatoo also takes some insects and their larvae. Little study has been undertaken on the Tasmanian birds and their diet and habits are not yet well understood.

While a flock is feeding on the ground, where it is at its most vulnerable to surprise attack, a few birds will remain aloft as lookouts and, if danger threatens, they will utter their harsh alarm call as a warning, upon which the whole flock will respond by taking flight. This habit of posting lookouts gave rise to the term “cockatoo” for the person posted to warn of a police raid in the days when the “great Australian game” of two-up was played illegally.

There is no indication that the Tasmanian birds cross Bass Strait and birds are rarely if ever seen on the north coast of Tasmania. A few were once on King Island, but such is not the case today as little of that island’s original heavy forest cover remains.

Flock movements within Tasmania are local and probably nomadic as a response to the seasonal availability of food. Nocturnal roosting sites may be used on successive nights, the birds returning at dusk as if coming home to bed down after a day of gleaning food in distant areas. While settling to sleep among the forest canopy they maintain a subdued conversation.

As is the case with most of our bush birds, breeding takes place in the Spring and, as with the Black Cockatoo,³¹ the site selected is deep within a tree hollow. There are actually very few accounts of cockatoo nests being found in Tasmania

A nest of a pair found near Cleveland in the northern midlands on 19 October 1910 was situated in a hollow limb of a White Gum tree standing at the head of a small valley. It was about 13 metres above ground and the clutch of three white eggs was placed on dry wood dust about a metre from the entrance. This is the only nest description I know of for the species in Tasmania, but it is probably a fairly typical example. The sparsity of nesting records is no doubt a reflection of the bird's stealth and secretive behaviour when breeding.

Male, female and immature birds all have a similar plumage.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#121). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

³¹ Presumably a reference to the Yellow-tailed Black Cockatoo (Bird 120).

Galah *Cacatua roseicapilla*

Once known as the Rose-breasted Cockatoo, the Galah is common and widely distributed over most of Australia, especially the inland. Strangely it has, until recently, been a rare bird in Tasmania.

This rarity, together with its attractive appearance, has resulted in the species endearing itself to many people here as an aviary bird or household pet. It is easy to keep and, if aviary bred, can become very tame and even taught to “talk”. It is certainly one of our more beautiful birds, whether in a flock feeding on the ground, in full flight, or simply performing its comical acrobatics in trees or on overhead wires. The attractive plumage is common to adults of both sexes, but immature birds are slightly duller.

John Gould did not include Van Diemen’s Land in the range of the Galah’s distribution in 1848.³² F M Littler in 1910 recorded a pair shot at Jerusalem Plains (now Lower Piper’s River) on 5 May 1908, one of which is today in the collections of the Queen Victoria Museum.³³ M S R Sharland in 1945 mentioned odd occurrences in several Southern areas and that, in 1922, a number had escaped from a ship moored in the Huon River.³⁴

Whether all the Tasmanian population originated from these escapees or whether nomadic birds flying in from Victoria have added to the local stock will probably never be determined. It is, however, most likely that the Galah will continue to increase its number and distribution here and, whilst it is at present a spectacular novelty, it may in the future prove to become a pest in some agricultural districts. Its diet, which includes a wide variety of seeds and green plants, wheat, oats, fruit and nuts, and its habit of digging for sprouting shoots, have led it to be deemed an agricultural pest in some parts of mainland Australia.

In November 1959 I saw two feeding in a clover paddock near Ross, which were said to have been living in the vicinity for two years prior to that date, and on 15 February 1960 two transitory birds flew over Antill Ponds. A small flock was said to be living near Exton and apparently breeding there in 1959, and during the 1960s a few were living and breeding on the “Landfall” estate north of Launceston.

In 1980 M S R Sharland wrote, “There is a large colony in the Kingston area south of Hobart where as many as 80 have been counted... Other birds have been reported from New Norfolk, Port Sorell, Lindisfarne, King Island and Waddamana.” A flock of two dozen lived

³² John Gould, *The Birds of Australia in seven volumes* Volume V (John Gould, Golden Square, 1848) <<https://www.biodiversitylibrary.org/item/188478#page/25/mode/1up>>.

³³ Frank M Littler, *A handbook of the Birds of Tasmania and its dependencies* (Frank M Littler, Launceston, 1910) 93–94 <<https://www.biodiversitylibrary.org/item/34662#page/1/mode/1up>>

³⁴ Michael Sharland, *Tasmanian birds: A field guide to the birds inhabiting Tasmania and adjacent islands, including the sea birds* (Angus and Robertson, 1958) 96.

around Launceston in 1984 and pairs and small flocks are now seen there regularly. These observations, together with numerous others from various parts of the State, indicate that the Galah is now establishing itself in a number of districts and must be considered as part of Tasmania's avifauna.

Its arrival and apparent establishment here during this century parallels a significant increase in the Galah's population and distribution on the mainland, which appears to be the result of agricultural development enhancing its food supply. Thus it may well be that the establishment in Tasmania is simply part of a general dispersal of an expanding population. If this is so its numbers will doubtless continue to increase here.

Like others of the cockatoo family, to which it belongs, it is a hole-nesting species, selecting a nest site in the cavity of a hollow tree or in a hollow limb. Some green leaves are usually placed in the bottom of the chamber as a nest lining. From two to five white eggs may form a clutch, and incubation is said to take about thirty days. Both parents brood and care for the young, which are about two months old when they leave the nest and fly.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#122). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Musk Lorikeet *Glossopsitta concinna*

Few birds can give such pleasure or annoyance as does the little Musk Lorikeet. The sight of a flock congregating to feed among eucalypt blossom is most spectacular, as their contrasting green and red plumage reflects the sunlight. Indeed, the scientific name, “*concinna*”, means “pretty”. However, when their attention is turned to ripening fruit in an orchard or suburban garden, admiration can quickly turn to indignation.

The Musk Lorikeet occurs generally throughout the eucalypt forests and woodlands of south-eastern Australia. In Tasmania it is considered a trans-Bass Strait migrant, arriving in Spring, breeding here and departing again in the Autumn. These movements may, however, be more in the nature of a nomadic response to the availability of a nectar flow and of ripe fruit such as pears and plums.

Its numbers do not now approach those recorded in former times. A J North, who was ornithologist to the Australian Museum, Sydney, found it in vast numbers in that locality at the end of last century.³⁵ F M Littler, when commenting on the abundance of the species in Tasmania during the Summer of 1898, stated, “One day a flock of Musk-Lorikeets ‘came down like a wolf on the fold,’ settled on the [fruit] laden trees, and commenced a fierce onslaught. Guns were brought into requisition, and great slaughter ensued, but, nothing daunted, the Lorikeets returned to the charge again and again.”³⁶

North also quotes from a Sydney newspaper: “Immense flocks of these Lorikeets have devastated entire orchards, and many thousands have been killed... but still there is no apparent diminution in their numbers as long as there is any fruit left to feed upon.”³⁷ Such is scarcely the case today. Flocks numbering a few dozen fed on nectar and ripe fruit in gardens around Launceston up until about 1970, but the bird has been seen only rarely in the locality since then. Mostly it seems to congregate in the south-eastern quarter of the island, where flocks may form in Summer following the fledging of their young.

When engaged in feeding it has an extremely tame disposition, tolerating to the point of danger the approach of humans. No doubt its near total dedication to the task of feeding, and its noisy social chatter, which invariably discloses its whereabouts, must at times make it an easy prey for cats and other predators.

³⁵ Alfred J North, *Nests and Eggs of Birds Found Breeding in Australia and Tasmania*, Volume III (Australian Museum, Sydney, 1912) 49–50

<<https://ia802900.us.archive.org/32/items/nestsegsofbirds03nort/nestsegsofbirds03nort.pdf>>

³⁶ Frank M Littler, *A handbook of the Birds of Tasmanian and its dependencies* (Frank M Littler, Launceston, 1910) 89 <<https://www.biodiversitylibrary.org/item/34662#page/1/mode/1up>>

³⁷ ‘Orchard and Vineyard Pests’ in *Australian Town and Country Journal* (Sydney, NSW, 22 February 1986) 19

<<https://trove.nla.gov.au/newspaper/article/71242101?browse=ndp%3Abrowse%2Ftitle%2FA%2Ftitle%2F52%2F1896%2F02%2F22%2Fpage%2F5329303%2Farticle%2F71242101>>.

Its short legs and stocky little body are well suited to its acrobatic mode of feeding. While climbing amongst the foliage, seeking nectar from pendant blossom or pulp from the juicy parts of fruit, it twists its body around in the manner of a contortionist, sometimes hanging head down or from the underside of its objective so as to take its nourishment more conveniently with its short beak.

At times it will feed, in a mixed flock, with Swift Parrots when both species are attracted to the same food source, and the identity of the two species may initially be confused. With a little care the Musk Lorikeet can be distinguished by its much shorter tail and great expanse of red on the head as shown in the accompanying illustration. Males and females have similar plumage, but immature birds are noticeably less brilliant.

Breeding takes place from October to December, and the nest is a scrape among wood dust at the bottom of a hollow in a branch or in a cavity within the trunk of a living or dead tree. It is from five to ten metres above ground level. Two rounded, white eggs form the usual clutch. Incubation takes about three weeks and the young may reach the age of up to seven weeks before flying.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#123). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Ground Parrot *Pezoporus wallicus*

The population and distribution of this remarkable parrot have diminished greatly with progressive land clearing and the spread of European settlement. It is now mostly restricted to coastal areas in south-western and south-eastern Australia. In Tasmania its stronghold is the wet sedge-land and heathlands in the west, although it once enjoyed a much greater range which extended to the North and East coasts and many inland areas.

John Gould collected both adults and young on Flinders Island where he found the species breeding early last century, but it has long since vanished from there. He also commented, "Its flesh is excellent, being much more delicate in flavour than the snipe, and equal, if not surpassing, that of the quail."³⁸

The Ground Parrot, or Swamp Parrot as it has also been known, is truly a terrestrial species and, except for brief flights, spends the whole of its life on the ground. It is an exceedingly difficult bird to find, being shy, secretive and invariably well secluded among the buttongrass and heaths where it finds its food of seeds and other vegetable matter.

In Spring it will often call at dawn and dusk with a few clear, high-pitched, bell-like notes, as if communicating with a mate, and thus will disclose its whereabouts. If approached carefully, the bird may sometimes be prompted to fly, but such a sighting is more likely to come about as an unexpected surprise when one is walking casually across country in its habitat.

The parrot rises hurriedly on noisy wing-beats and flies away with great urgency, just clearing the foliage for a hundred metres or so before again plunging earthwards to seek seclusion and protection beneath the vegetation. Never does it perch or settle on trees or projections as do other parrots, depending entirely on its swift, twisting, evasive flight and beautifully camouflaged plumage to avoid predators.

Breeding commences about late September, and eggs are laid in October or November. The nest is extremely well hidden and generally can only be found when a sitting bird has been suddenly flushed to take flight and diligent search has been made.

Only once have I enjoyed the rare privilege of seeing the nest of a Ground Parrot. That was in Tasmania's south-west, high on a steep, buttongrass-covered hill overlooking Bond Bay. The brooding bird did not flush until I was within two metres, when she took flight with great haste. I located the nest by carefully lifting a dense swathe of overhanging buttongrass foliage to disclose a beautifully formed chamber, literally carved out of the base of the tuft. Entrance was by way of a rat-like runway and the bird had formed the nesting chamber by chewing the

³⁸ John Gould, *The Birds of Australia in seven volumes* Volume V (John Gould, Golden Square, 1848) <<https://www.biodiversitylibrary.org/item/188478#page/193/mode/1up>>.

stalks of grass to form a spherical cavity in which her clutch of four round, white eggs had been laid.

Though I waited and watched quietly and well hidden for over an hour, she never once appeared or otherwise disclosed her whereabouts until, out of concern for the safety of the clutch, I decided to retreat. Immediately she rose to fly again, not ten metres from where I had been hiding. Apparently fully aware of my presence, she had been reluctant to resume incubating.

The extensive areas now within the Southwest National Park should provide for the future maintenance of a good Ground Parrot population, but a habitat management program will probably have to be formulated if its breeding and feeding requirements are to remain at as near to optimum standards as practical.

Males and females have similar plumage, but immature birds lack the red forehead band of adults.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#124). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Green Rosella *Platycercus caledonicus*

Once considered a pest by farmers and orchardists because of its liking for grain and ripe fruits, the Green Rosella has in recent years declined numerically to such an extent that it now rarely causes significant damage. It is an endemic Tasmanian bird, being confined to this State, including the islands of Bass Strait. Though the eucalypt forests are its principal habitat, it also occurs in woodlands and pastoral areas, coastal heathlands and the edges of rainforest, where it feeds mostly on native grasses, seed and foliage insects.

With the spread of European settlement during the Nineteenth Century it readily adapted to eating the products of introduced plants, in particular oats, orchard fruits and the berries of hawthorns and briar roses. Such an enhanced food supply undoubtedly promoted an increase in its population and early [in the 20th] century a great many Green Rosellas were shot in an attempt to cull the species in several districts.

In the era when oat crops were grown for cutting into chaff to feed the many farm horses, it would feed on the grain from stooked sheaves standing in paddocks ready for carting and stacking. Later in the year it attacked the oaten hay stacks, pulling away the thatch to reach the grain-laden straws. In so doing it allowed rain to penetrate and damage the hay. Likewise, flocks numbering dozens fed in hawthorn hedgerows when they were bearing ripe red berries in Autumn and early Winter.

John Gould “found this species very abundant on the banks of the Tamar and in one instance saw hundreds congregated at a barn door amongst the straw of some recently threshed corn, precisely after the manner of the Sparrow and Pigeon in England.”³⁹ The same authority states that it was “frequently eaten by man” and in pies “were commonly eaten at every table.” Gould also found its flesh “so excellent that I partook of it whenever an opportunity for my doing so presented itself.”

Today its numbers, though still high, are a mere fraction of its former strength and it is an unusual sight to see even a small congregation feeding in the roadside hawthorns. The Green Rosella now enjoys total protection by law, but as to whether its decline was due to human predation, changes in farming practices or the spread of the introduced Common Starling, with which it must compete for nesting sites, is debatable. Its best populations are now to be found in the heavy forests into which the starling does not penetrate.

Pairs communicate by a series of piping, melodious notes, especially during the breeding season, but when alarmed or on taking flight it will utter a harsh “cossick, cossick” call to warn others of its kind or to indicate its movement further afield.

³⁹ John Gould, *The Birds of Australia in seven volumes* Volume V (John Gould, Golden Square, 1848) *Platycercus flaviventris*, Yellow-bellied Parakeet
<<https://www.biodiversitylibrary.org/item/188478#page/105/mode/1up>>.

Like most members of the parrot family it is an accomplished climber, using its feet and powerful beak to manoeuvre itself among the foliage as it searches for lerp and other such insects or for the fruit of native or introduced trees. The beak is also an effective weapon of attack and defence, as has often been attested to by those who have been bitten while attempting to handle the bird.

Breeding begins with the onset of Spring, and brooding birds set from October to December. Five to seven rounded white eggs form a clutch. The nest is a mere scrape among wood dust within a hollow branch or a cavity inside a tree trunk, often at a considerable height.

The plumage of birds in their first year is a much deeper shade of green than that of older birds. With successive moults the colours brighten, and aged individuals may be quite golden on the ventral areas. However, males are always brighter than females of the same age, and have a noticeable stouter head and beak.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#125). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-cheeked Rosella [now Eastern Rosella] *Platycercus eximius*

This most striking bird, also known as the Eastern Rosella, has its home in the woodlands and lightly timbered eucalypt forests, where it occurs in pairs or in small flocks. The brilliance of its scarlet red breast and head contrasts with the green of its surroundings so that a party busily searching for seeds among the short grass, scurrying over the ground and chattering as they compete for food, make a very pleasant sight. This sight, however, has not always been considered so, especially by many farmers and fruit growers when the birds raided their precious crops.

Today the White-cheeked Rosella's population is a mere fraction of what it was when, in the middle of last century, it was one of our more common birds and, according to ornithologist John Gould, small companies could be seen along country roads like Sparrows in England.⁴⁰ This decline in numbers and shrinking of distribution appear to have come about gradually over the last hundred years.

It never did occur in the highlands or in the western sector of the island, where the habitat is quite unacceptable to it. The grassy plains and developing crop and pasture lands of the midlands, south and east were its original stronghold. Just why it has suffered such a decline is not clear, but it may well be due to a combination of factors.

No doubt great numbers were once destroyed by shooting and poisoning because of their destructive habits among the settlers' crops and some were probably taken to eat. Clearing of trees from much of their range would also have reduced the availability of necessary habitat and suitable breeding sites. Unfortunately, during this century, the establishment and spread of the introduced European Starling has considerably increased competition for the ever decreasing number of potential nesting holes in old, decaying trees. The habitat and distribution of this rosella has for many years now been completely encompassed by the spread of the vastly more numerous and aggressive starling.

The White-cheeked Rosella occurs also in the south-east of the Australian mainland and there two separate subspecies are presently recognised. The Tasmanian population represents a third distinct subspecies, being larger and of a more brilliant plumage than mainland birds. Immature birds have rather less brilliance in their feather pigmentation than do adults, but the only distinction between the sexes is that the males have a slightly heavier head and beak.

In the days before protective legislation was introduced this species was a greatly favoured aviary bird and many were kept as caged pets. Taken from the nest and hand-reared, a White-cheeked Rosella could readily attune its shrill whistle to mimic sounds it heard around it. I

⁴⁰ John Gould, *The Birds of Australia in seven volumes* Volume V (John Gould, Golden Square, 1848)
<<https://www.biodiversitylibrary.org/item/188478#page/117/mode/1up>>

knew of one bird which occasionally embarrassed ladies with its perfect rendition of a cheeky “wolf whistle”.

In addition to a wide range of seeds and fruits, both native and introduced, this rosella has also been observed to take tiny psyllids from the galls on eucalypt foliage, cracking a tough, wooden case and extracting the insect with great efficiency in a matter of seconds.

Breeding commences in Spring when a cavity inside a hollow limb or tree trunk is selected and prepared. A clutch may number from six to nine roundish oval, white eggs, deposited on dry wood dust on the floor of the chamber. Incubation is undertaken by the female and is said to take nineteen days. The young are flying at the age of about five weeks. A second clutch may be produced in the same season. A pair of birds probably mate for life.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#126). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Blue-winged Parrot *Neophema chrysostoma*

This dainty little parrot is a bird of the grasslands, feeding on the seeds of native and introduced plants. Outside the breeding season it congregates in flocks which may number from half a dozen to several hundred. Then it is nomadic, living in a district for as long as it is not unduly disturbed and while there is enough food available for the needs of its numbers.

On the ground its dull olive-green dorsal plumage provides excellent camouflage. This colouring is common to both sexes, although immature birds are slightly less brilliant than adults. When alerted to the possibility of danger it will remain motionless until pressed to take flight. Once assured of safety it quickly returns to its search for food, moving over the ground in an alert, mouse-like fashion as it weaves its way among the grasses or thistle stems.

In the Autumn of 1967 I was informed of the presence of numbers of small parrots feeding on the ground beneath an apple orchard at Legana on the West Tamar. On investigation in July of that year I found these to be Blue-winged Parrots in a flock of about four hundred. The cultivated area under the trees supported a heavy growth of the introduced weed known as "fat hen", which was at the time shedding an abundant crop of ripe seeds. This attractive food supply was no doubt the reason for the parrots having congregated in such exceptionally large numbers and remaining in and around the orchard throughout the Winter.

The species is generally regarded as being migratory, leaving Tasmania in Autumn to spend the colder months in the inland regions of South Australia and western New South Wales. However, whilst suitable conditions and an adequate food supply exist, it appears that many are encouraged to remain on the island over Winter.

Like several other smaller parrot species, its numbers have declined over the past half-century. Formerly it was a common bird in many woodland and grasslands areas, especially in the eastern half of the State. In the midlands it found ideal breeding and feeding conditions, nesting in cavities in the many scattered old eucalypt and feeding over the pastures grazed by domestic stock.

Following the establishment, spread and population explosion of the introduced European Starling, Blue-winged Parrot numbers gradually declined and by the 1960s it was rare in districts where it had once been common. Many instances were recorded of starlings competing successfully with the parrots for nesting sites, and this inoffensive little bird seems to have suffered greatly as a result. Breeding is somewhat later in the Spring than is the case for most of our birds, eggs being incubated mostly in November, and thus coinciding with the peak of the starling's breeding season.

The site chosen for nesting is inside a hollow limb of a eucalypt, either living or dead, sometimes horizontal and sometimes nearly vertical. The eggs are placed on wood dust or fine chips between thirty and sixty centimetres from the small entrance. A breeding pair are

strongly territorial and do not move far from the nest site, flying from tree to tree in an agitated way when disturbed, but hesitant to return to the nest until confidence has been regained. Five or six round, white eggs comprise the usual clutch, and the female sits for about three weeks, leaving the nest only occasionally and being fed by the male.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#127). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Orange-bellied Parrot *Neophema chrysogaster*

This is the rarest of all Tasmanian birds and one of the rarest in the world, a truly endangered species. It now numbers possibly less than one hundred breeding adults. In recent years it has been the subject of an intensive study in an endeavour to determine the cause of its decline and in the hope of being able to reverse the trend.

The Orange-bellied Parrot is a migratory species, arriving here in September to breed and departing again in March or April to spend the Winter in the coastal regions of Victoria and South Australia, in particular the Coorong. Much has been learned of its migratory movements and food requirements, and this has enabled forward planning for the conservation of its nesting and feeding areas. To date, however, there is little evidence of any recovery in its numbers.

The British ornithologist John Gould found it abundant on the Actæon Islands at the entrance to D'Entrecasteaux Channel early last century and was mistakenly led to believe that there it nested on the ground. At that time it was also recorded as occurring in other localities, such as near Hobart and at New Norfolk.⁴¹ In 1898 it was found breeding at Bothwell and the following year it was plentiful in the Bothwell and Melton districts, but in 1909 only one individual was found there despite a week-long search by two competent ornithologists.

Today its occurrence in Tasmania is limited to a restricted area in the far south-west, the only location where it breeds, and to the west and north-west coast and King Island, along the route of its migration to and from its breeding area. It feeds exclusively on the ground, eating a variety of seeds, fruits, buds and the growing tips of plants. King Island is a most important stop-over for feeding and resting during migration, and Max McGarvie, a long-time resident and competent ornithologist, has recorded highly valuable data on this bird's habits over the years.

While engaged on field work at Ordnance Point on the west coast in March 1981 I made my first acquaintance with this bird. I noticed a pair flying overhead in a northerly direction and calling in their characteristic "buzzing" tone. Later I saw several individuals doing likewise, and on 27 March I was fortunate enough to spend some time watching two birds quietly feeding on short vegetation which was growing among shingles just above the high water mark.

This was at the time of the annual migratory exodus, and all were progressively moving northwards up the coast, in an apparently leisurely manner. At the same time small parties of Blue-winged Parrots were also migrating northwards, but these could easily be distinguished by their calls, which were clear rather than "buzzing". The dorsal plumage of the Orange-

⁴¹ John Gould, *The Birds of Australia in seven volumes* Volume V (John Gould, Golden Square, 1848) <<https://www.biodiversitylibrary.org/item/188478#page/165/mode/1up>>.

bellied Parrot is a distinctive bright grass-green, as opposed to the more olive-green of its relative. The plumage of males and females is similar, but immature birds lack the brilliance of adults.

Because of its present rarity and the great importance of protecting it against undue disturbance during breeding, the known nesting sites are monitored and closely guarded. Nest sites are, like those of the Blue-winged Parrot, usually inside a hollow limb or trunk of a partly decayed tree. The four white eggs which form the standard clutch are deposited on dry wood dust on the floor of the cavity. A positively determined set of eggs of the species is in the Harrison collection in the Tasmanian Museum. It was taken in November 1898 by A W Swindells at Bothwell, who often related to me how he also took a breeding bird at the same time as confirmation.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#128). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Swift Parrot *Lathamus discolor*

The present population of this bird is so small as to give cause for concern as to its long-term stability. Its own greed, especially for sweet food, could be said to have indirectly contributed to the situation, as when visiting orchards it may become so engrossed in the pleasures of eating as to be heedless of an approaching threat. Often this threat has been in the form of an irate orchardist with a gun, whom the bird will allow to approach to within a few metres before taking flight. In the years before the species was protected, the consequences of this gluttony was usually fatal.

What is more, some observers have recorded instances of Swift Parrots so engorging themselves as to become partially incapable of flight and to give the appearance of being intoxicated. This possibly gave rise to the common Australian alliterative vernacular simile for drunkenness.

That the present situation represents a very significant decline in number for this small and handsome parrot is evident from early accounts, such as that of John Gould who in 1848 recorded, "During September and the four following months it is not only abundant in all the gum forest of Van Diemen's Land, but is very common in the shrubberies and gardens at Hobart Town, small flights being constantly seen passing up and down the streets and flying in various directions over houses."⁴²

Until 1964, when the eminent ornithologists Keith Hindwood and Michael Sharland published the results of their research,⁴³ it had been believed that the Swift Parrot bred both on the Australian mainland and in Tasmania. Their investigations amply demonstrated that this was not the case and that, though it may occur from south-eastern South Australia to south-eastern Queensland during the winter months, the total breeding population migrated to Tasmania in Spring. Tasmania, they showed, was in fact the only place where the birds bred. Subsequent studies have further confirmed Hindwood and Sharland's conclusions, and the eventual survival of the species is therefore dependent, in part, on its ability to maintain a satisfactory breeding regime in this State.

The Swift Parrot is principally a bird of the sclerophyll forests and woodlands where it finds the bulk of its food among the foliage and blossom of eucalypts. Its diet appears to be somewhat opportunistic and consists of scale insects, nectar and blossom as well as ripe fruits such as plums and pears.

When the eucalypts produce a good honey flow the parrot maybe attracted to feed in noisy flocks on the prolific nectar supply. In December 1958 I found it in concentrations numbering

⁴² John Gould, *The Birds of Australia in seven volumes* Volume V (John Gould, Golden Square, 1848) <<https://www.biodiversitylibrary.org/item/188478#page/197/mode/1up>>.

⁴³ K A Hindwood and Michael Sharland, 'The Swift Parrot' (1964) 64 *The Emu* 310.

many dozens, feeding among eucalypt blossom in the midlands. The flocks consisted of birds in both immature and adult plumage, that of the younger birds being duller, whereas the plumage of the sexes is similar. Their excited chatter, while climbing about in the pendant foliage, could be heard from a considerable distance.

Their liking for sweet foods can result in their being attracted to a feed table if it is set up in a habitat where the birds may otherwise congregate for natural food. Once such an easy source of food supply is found the birds take full advantage and will return day after day to consume greedily all they can.

Flight is initiated by a downwards swoop on a rapid wing-beat and is often accompanied by a shrill, repeated “kisk-kisk-kisk” call as the birds dart off at great speed among the trees.

Breeding appears to take place mostly in the south of the island and commences soon after the birds return in September. Eggs, which may be produced in October and November, are pure white and four or five form the usual clutch. They are placed inside a hollow limb or tree trunk, where the nest chamber consists of just a perfunctory scrape among wood dust or fine chips. Incubation is believed to take about three weeks and the young fly at about six weeks of age.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#129). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Pallid Cuckoo *Cuculus pallidus*

Can birds count? This question has been raised in speculation about the habits of the Pallid Cuckoo, for when it deposits its egg in the nest of an intended foster parent it removes one of the original clutch. The theory is that, while the hosts might expect an egg of different size and colour, they may object to an excessive number.

The cuckoo was once thought to lay its egg on the ground and then carry it in its beak to its future home. However, recent observations have indicated that the egg is laid directly into the nest of the foster parents, which then proceed with the breeding, only to have all of the young from the remainder of their own clutch ejected by the young cuckoo soon after it has hatched. This is achieved by shouldering the smaller birds over the edge of the nest to perish on the ground below. Thus it is able to benefit from all the food its foster parents provide.

For the large Pallid Cuckoo such a supply may in fact be a necessity as its host is usually a species considerably smaller than itself. I have witnessed this when a pair of Black-headed Honeyeaters became the foster parents of a young Pallid Cuckoo. The cuckoo had only recently flown from the nest and had taken up a comfortable, sunny position on a low branch. To it the tiny honeyeaters continuously carried insects which they gathered from the foliage of eucalypts, their beaks loaded to capacity. Visits were only a few minutes apart and on each occasion the cuckoo simply sat there and opened its mouth wide while the little bird inserted its head to the back of the cuckoo's gape and deposited the food in its throat. After swallowing each portion the cuckoo settled back and began calling for more.

Black-headed Honeyeaters and other honeyeater species are, in Tasmania, the most favoured foster parents for the Pallid Cuckoo, but it also utilises other species which build cup-shaped nests, such as the Satin Flycatcher, Dusky Woodswallow, Dusky Robin and the introduced European Goldfinch. Almost all the honeyeaters produce salmon-pink eggs, almost identical in colour to that of the Pallid Cuckoo. Although honeyeater species might therefore seem to be a logical selection as hosts, it is doubtful whether egg colour is in fact advantageous in foster parent selection. Much remains to be studied and learned about the habits and requirements of these birds.

Of the four species of cuckoos which regularly migrate to Tasmania each Spring to breed and depart the Summer months, the Pallid Cuckoo is the largest and the most spectacular. It is mostly a bird of the lowland districts where light forests and woodlands provide it with the shelter and the food it prefers. Its general distribution extends all over Australia wherever the terrain and habitat are favourable, but during Autumn it migrates to the more northerly latitudes, no doubt in response to its food requirements.

It returns to Tasmania about September and from then on its plaintive call, which consists of a series of ascending notes, the first few repeated more rapidly than the later ones, become a regular reminder of its presence. To some people the call becomes monotonous and it was

because of this that it was referred to by some of our early pioneers as the brain-fever bird. To bird lovers the call is a pleasant announcement of the arrival of Spring, heralding the influx of the many migrating species which will then live in our forests and landscape for the ensuing half year.

The Pallid Cuckoo might be seen singly or occasionally in pairs, but whether the pairs are associated males and females is difficult to tell as both sexes have a similar plumage. Sub-adults, on the other hand, are distinguishable by their plumage being mottled in various shades of grey and brown.

Like other cuckoos it has a great fondness for caterpillars and will eat many large and hairy species normally shunned by other birds. It may often be seen perched or flying with a large specimen dangling from the tip of its beak, as if it were displaying its great catch for all to see. Fence posts are a favourite perching point from which it can call and watch for food items, and a drive along country roads in Spring will invariably provide an observant bird watcher with some excellent views of the species.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#130). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Fan-tailed Cuckoo *Chrysococcyx flabelliformis* [now *Cacomantis flabelliformis*]

A solitary bird, the Fan-tailed Cuckoo spends the day feeding quietly by itself or peacefully perched where it can view its surroundings, calling occasionally with a mournful trill, as if it were the loneliest bird in the forest. Its calls usually go unanswered except for the occasional harassment by a small bird of another species which might object to its presence in the vicinity, perhaps seeing it as a potential threat.

Like all our cuckoos it is a migrant from the Australian mainland, where its distribution extends as far north as Cape York. It arrives here in September to breed and departs during Autumn. Some individuals appear rather reluctant to leave and may stay well into the Winter.

In general appearance and behaviour it might, at first impression, be confused with a slightly larger Pallid Cuckoo, but a careful view will enable it to be distinguished by its ash-grey back and soft chestnut-brown underparts. Both sexes have similar plumage, but sub-adults lack the adults' depth of colour, especially on the breast, which is a more dusky grey. Its flight is undulating and usually only of a short distance, as if to seek a better vantage point. On alighting it often engages in a brief display, spreading its tail into a slight fan and waving it for a few seconds.

The Fan-tailed is probably the most common of the four cuckoo species which breed in Tasmania, occurring widely throughout the island and at altitudes of up to 1000 metres. Its preferred habitats are the eucalypt forests, woodlands and coastal scrubs.

Its calling is a feature of the forests during Spring and Summer, a mournful trill with a downwards inflection, repeated a number of times before a pause of perhaps half a minute. Then, having waited as if for a response, it repeats the call in what could be interpreted as a lonesome appeal for company. On still moonlight nights it can sometimes be heard calling from its roost with the same regularity, causing those who might be unfamiliar with its voice and habits to wonder as to the origin of the sound.

The Fan-tailed Cuckoo's diet appears to be principally grubs and caterpillars. While perched it seems always to be keeping a sharp watch for the movement of these larval insects, be they on the ground or in among the lower foliage of trees. Selected items are taken in its beak and carried to a perch where the bird further examines its catch before swallowing it.

Breeding takes place in Spring and, as it is parasitic and dependent upon other birds to hatch its eggs and rear its young, it must synchronise its egg production with the breeding times of the intended foster parents. Those it chooses include both domed and cup-shaped nest builders such as the Brown Thornbill, Scrub Wren, Superb Fairy Wren, Dusky Woodswallow, robins and honeyeaters, even the Black-headed Honeyeater which lives high in the pendant eucalypt foliage.

Just how the host is selected is not yet understood, it might be opportunism and simply a matter of luck or it might be well planned by the cuckoo. Certainly the cuckoo seems to spend a lot of time watching a pair of birds build their nest as if calculating when the eggs will be due.

The Fan-tailed Cuckoo's egg is white and heavily freckled with very fine reddish-brown markings. Usually there is a distinct band around the larger end. Its deposition into the nest must co-incide with the laying or commencement of incubation by the intended foster parents if best results are to be achieved. However, on rare occasions the cuckoo produces its egg too soon and places it in the nest before the lining is finished, resulting in the egg being bound into the base of the nest.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#131). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Horsfield's Bronze-cuckoo *Chrysococcyx basalis*

The general distribution of this bird extends all over Australia and beyond to the islands of Indonesia. In Tasmania, to which it migrates every September and stays until about April, it favours the more open forests, woodlands and coastal heathlands, and appears reluctant to ascend to the higher altitudes and heavy forests where its near relative, the Shining Bronze-cuckoo, occurs.

Though the two species are very similar in appearance and behaviour, Horsfield's Bronze-cuckoo can be distinguished by its less prominent barring across the breast and abdomen and by the bronze-green of its head and back being less brilliant. These differences are, however, difficult to determine in the wild without a good knowledge of the two species and the aid of strong field glasses. To confuse matters further, juveniles of both species are duller in their plumage than adults and this can complicate the task of identification in Summer and Autumn, when the young have grown to independence but have not yet moulted to assume the brilliance of the adults. For both species the sexes have similar plumage.

Once one becomes familiar of the calls of the two cuckoos, identification by voice may be possible. However, this is not easy either, as both have a monotone whistle which is repeated over and over.

Observations indicate that Horsfield's Bronze-cuckoo is far less prevalent here than its relative. Specimens are occasionally brought to museums, having killed themselves by flying against the glass of windows, an unfortunate habit which birds of this genus do not seem to have yet learned to avoid.

As with all our cuckoos it is parasitic and selects the nests of other small birds in which to deposit its eggs, leaving the foster parents to brood, feed and rear the young cuckoos. Just how many eggs a cuckoo might produce in a season is as yet unknown, but it is likely that it repeats the practice on more than one occasion.

Horsfield's Bronze-cuckoo parasitises mostly those species, such as wrens and thornbills, which build a dome-shaped nest, but it will occasionally deposit an egg in a cup-shaped nest, such as that of a robin, a chat or a honeyeater species which nests close to the ground. On hatching, the young cuckoo sets about evicting all other eggs and nestlings so as to obtain the whole food supply for itself.

On only one occasion have I found an nest with more than one cuckoo's egg. That was an instance where the nest of a Superb Blue Wren was found to contain one egg of its own and two of the Horsfield's Bronze-cuckoo. Whether they were laid by two different cuckoos could not be ascertained, and one wonders what struggles might have ensued after hatching as the young birds endeavoured to eject each other.

The eggs of this species somewhat resemble those of wrens and thornbills, being white with a peppering of fine reddish-brown spots. However, they can be distinguished by being slightly more heavily marked all over, whereas those of their hosts tend to have their markings more concentrated at the larger end.

Other English names given to this bird have been the Rufous-tailed Bronze Cuckoo and the Narrow-billed Bronze-cuckoo. The present name is from Horsfield, a British ornithologist, who described the bird in 1821 in *The Transactions of the Linnean Society*, London, from a specimen collected in Java.⁴⁴

Like other cuckoos, it has a fondness for insect larvae, but in particular those which feed on the foliage of acacias. Thus, despite its rather obnoxious and lazy parasitic habits, it, too, plays an important role in the maintenance of the balance of nature.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#132). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

⁴⁴ Thomas Horsfield, 'Systematic Arrangement and Description of Birds from the Island of Java' (1821) os-13(1) *Transactions of the Linnean Society of London* 133
<<https://academic.oup.com/transactionslinnean/article-abstract/os-13/1/133/2410788?redirectedFrom=fulltext>>.

Shining Bronze-cuckoo *Chrysococcyx lucidus*

This bird is much more likely to be heard than to be seen, especially during the breeding season, when its monotone call of “peere-peere-peere” is virtually incessant. The call announces the arrival, through September as the weather warms, of individuals returning from their wintering areas further north.

The reason for its constant calling is not clear, as it does not appear to be proclaiming a territory and defending it, nor does it seem necessary to call so vigorously in order to locate a mate. This cuckoo occurs mostly as solitary individuals and only occasionally is any interaction between members of the species observed. Perhaps the call is a demonstration of vigour and it is the male’s sheer persistence which eventually proves appealing to a female.

The range of the Shining Bronze-cuckoo’s distribution extends from Indonesia and some south-west Pacific islands to southern Australia, some reaching Tasmania as migrants, breeding here and leaving again in Autumn.

The beautiful iridescent bronze-green of its plumage, with prominent barring across the ventral surface blends with the colours of the foliage of eucalypts and acacias among which the small bird usually perches. This camouflage, along with the fact that it sits almost motionless, helps make it difficult to find. Good directional hearing and keen eyesight are needed to pick up where the call is coming from. Flights are short and irregular, and often prompted by the desire for a better observation point or the sight of a foliage feeding larva which could provide the bird with its next item of food.

Like all members of the cuckoo family which are found in Tasmania it is parasitic, laying its egg directly into the nest of another bird which then broods and rears the young cuckoo. This is apparently achieved by the bird squeezing itself into the previously selected nest, quickly laying in egg and then removing one of the eggs already in the nest. Rarely if ever does the parent foster parent reject the new egg or desert the nest, although it may become quite alarmed at the adult cuckoo’s temporary presence.

The Shining Bronze-cuckoo is a bird of the forests and woodlands and may occur at altitudes above those to which its near relative, Horsfield’s Bronze-cuckoo, aspires. It finds a range of potential hosts for its eggs, but has been found mostly to exploit those species which build dome-shaped nests close to the ground. Those of the Brown Thornbill and Yellow-rumped Thornbill are the most favoured.

Strangely enough the eggs of the Shining Bronze-cuckoo in no way resemble those of the host species. A dirty khaki-brown all over and without pattern or markings, they contrast markedly with the white and delicately spotted eggs of the thornbills. Only in size are they similar, but the foster parents seem to accept them readily and continue with their task of brooding.

A day or so after hatching the young cuckoo appears irritated by the presence of any other object with which it finds itself sharing the nest and dexterously evicts eggs or other young. Apparently it achieves this by pushing with its neck and back and thus edging them out of the entrance. From then on it is able to have exclusive access to all the food its foster parents bring, and they happily continue to rear it to independence.

Two subspecies of Shining Bronze-cuckoos occur in Australia, but one is merely a Winter visitor which breeds only in New Zealand. That was once thought to warrant full specific status and was then known as the Shining or Broad-billed Bronze-cuckoo, while the bird which breeds in Australia was called the Golden Bronze-cuckoo or simply the Bronze Cuckoo. Since the two are now lumped together as a single species, the name of the New Zealand subspecies takes precedence, as it was first described in 1788, 13 years before the naming of the Australian bird.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#133). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Southern Boobook *Ninox boobook*

On a still night the “more-pork” or “boo-book” calls of this small owl may be heard as it signals its whereabouts to its mate. By day it sleeps in the seclusion of dense foliage or, as is often the case, perched on the rafters beneath the roof of a disused building, preferably in a darkened corner. This habit has given rise to it often being mistakenly called a Barn Owl, a bird which belongs to a different family. Also known as the Spotted Owl or Mopoke, it is a favourite among farmers because of its liking for mice.

Although it is a bird of the forests and woodlands, the Southern Boobook has learned to utilise suburban parks and gardens, farm hedgerows, buildings and haystacks, in fact almost anywhere it might find food and shelter.

The species ranges widely, extending all over Australia and to Indonesia and New Zealand. Numerous subspecies are evident, but much more study remains to be done before satisfactory conclusions can be reached on their status. The Tasmanian population is generally considered to be a good subspecies and there is evidence to suggest some movement across Bass Strait.

As with all nocturnal birds of prey its feathers are exceedingly soft and adapted for silent flight, enabling it to glide down upon unsuspecting victims which it seizes in its strong, sharp talons with the minimum of commotion.

Prey is swallowed whole and digested over the following 12 to 24 hours. Indigestible parts such as bones, feathers, fur and chitinous insect remains are subsequently regurgitated and spat out to fall on the ground beneath its roost. This material is matted in the form of small pellets and their contents disclose which species the bird takes for its food. An analysis of 90 such pellets from near Launceston and from Rostrevor on the east coast revealed that trap-door spiders were the most common prey, followed by Brown Tree-frogs, mice, sparrows, starlings and other small birds, various insects and even the occasional bat.

I have observed these birds feeding at dusk on cockchafer beetles as they emerged from the grass to take flight. Watching from the vantage point of a fencepost until an insect was clearly and precisely located, the little owl would then silently glide to the ground, capture and carefully swallow its prey in a gulping motion and return to its post ready to repeat the sequence. The Southern Boobook has also been found to take scorpions, crickets and earthworms. It is undoubtedly an opportunist, its diet probably being governed by seasonal abundance of the various food species.

Seldom is the nest of the boobook discovered. Its secretive nocturnal habits make observation of its movements extremely difficult, but the peak of its breeding season appears to be from October to December. The nest chamber is inside a hollow limb or a cavity within the trunk

of a tree, the eggs being deposited in a shallow depression among wood dust. Rarely might a few dry leaves be added. Two or three round white eggs from the usual clutch.

Unlike other owls and most birds of prey, the males and females of the Southern Boobook are of approximately the same size and, as their plumage is also similar, they are difficult to tell apart.

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Barn Owl *Tyto alba*

It is not generally realised that the Barn Owl is but a rare visitor to Tasmania. It has never been found to breed here, and those individuals which reach our shores appear not to survive for very long, as records of their presence are usually the result of the recovery of dead birds. Some, in fact, apparently perish while crossing Bass Street, as evidenced by a beach-washed carcass picked up on the shore of Chappell Island in July 1970. Other recoveries are mostly from coastal locations and appear to have died soon after arrival.

The dates on which these birds have been found suggest a late Autumn or Winter movement from Victoria, possibly of birds in their first year of life. The Barn Owl is reported to be of nomadic habits and it could be expected that some first year and relatively inexperienced birds might become lost.

Occasionally very pale plumaged males of the Masked Owl have been mistaken for Barn Owls, but on closer inspection the more slender and delicate form and longer stilt-like legs of this species serve to distinguish it from its more heavily built and shorter legged near relative.

It is surprising, however, that the Barn Owl has never been able to establish and maintain a population in Tasmania. It is a cosmopolitan species, occurring almost world-wide and in Australia it is to be found in most woodland areas. In Tasmania plenty of suitable food, shelter and breeding sites are available, but it may be that this island is simply too small to support two species of the genus *Tyto*.

It feeds on small mammals and similar items, as does the Masked Owl, and, like the European birds from which its English name originated, is fond of roosting in barns and other man-made shelters.

These hunters of the night have developed a remarkable ability to locate and capture animals in the dark. The large concave facial discs surrounding the eyes and bordering the ears appear to be used as receivers, concentrating reflected light and gathering in sounds as a navigational aid to help pinpoint the whereabouts of potential prey.

Their large, powerful feet have the toes equipped with long and very sharp claws which have evolved to act like sabres when the bird lands upon its victim. These readily penetrate deep inside the body cavity to puncture the heart and other vital organs and thus kill within a few seconds. The prey is then held in the feet, torn to pieces with the beak and swallowed in lumps, skin, flesh and bones being consumed indiscriminately. The indigestible parts are later regurgitated and discarded.

In eastern Australia the Barn Owl breeds from August to the end of the year, its nest being inside a tree cavity well above ground, where the eggs are deposited on a scrape among wood dust. They are pure white and a clutch may consist of from three to six.

The sexes have almost similar plumage, but females slightly exceed males in body size.

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Masked Owl *Tyto novaehollandiae*

This large and powerful bird is the terror of the night for many small mammals. It hides and sleeps by day among the deep shadows of dense foliage or within a spacious tree cavity or a cave, setting out at dusk to prepare for its nightly hunting expedition. Rarely do we have the opportunity to witness its behaviour as its nocturnal habits, stealthy, silent flight and sparse distribution make it a difficult bird to locate and watch.

It occurs right around Australia but shuns the inland regions. For many years the Tasmanian population was considered to be a distinct species, separate from those of the mainland because of its much greater size, but more recently its status has been reduced to that of a subspecies.

The eucalypt forests and woodlands are its chosen domain. There it can find the mammals and birds upon which it preys. In the years when rabbits were in plague proportions they formed by far the greater part of its diet, but following their decimation by myxomatosis, about 1953, the Masked Owl was forced to revert to a much wider range of species for its prey.

The food it eats can be broadly determined from its habit of regurgitating bones and other such indigestible parts of its meal in the form of pellets. These tight balls, mostly of fur, feathers and bones, somewhat resemble faecal pellets and maybe as large as 50 x 75 mm. They can often be found beneath or near the bird's roosting sites and have formed the basis of several studies into its diet. One such study conducted on materials gathered at Triabunna on the east coast revealed that the [European] Starling, House Mouse, rabbit and shop rat were by far the most numerous species taken. Small marsupials, birds and large moths had also been eaten, but in smaller quantities.

In the Summer of 1959 I was fortunate to be able to watch the behaviour of one of these fine birds on many occasions as it prepared for hunting. Its diurnal roost was well concealed in the middle of a large Lambertiana Pine tree and, as darkness closed in, it would leave and fly to another tree about 50 metres away.

There for some 15 minutes it preened and fluffed its feathers, and occasionally passed faeces and regurgitated indigestible food pellets, as if emptying itself out for the night's intake of fresh prey. Several times it called, apparently signalling to a distant mate, offering a guttural "chirrp" followed by a strident, loud "karsh" like the expulsion of air under pressure. Eventually it would fly off into the distance, sometimes being joined by its mate.

Only very rarely has a nest of this bird been found. It generally selects a large hollow in the barrel of a tree, but has also been reported to nest on a concealed ledge in a cave. One nest reported to me in January 1962 at Pateena near Launceston was situated about 15 metres up, inside the decayed trunk of a large, old eucalypt which stood on an exposed hillside. After

dark the adults would appear in the vicinity, calling regularly. A single fledged young owl would then come to the entrance and call back, presumably for food. Soon afterwards the parents would fly away to hunt, having apparently satisfied themselves that all was in order.

The nestling was said to have been exceptionally noisy at night until about the first week of March, when it is believed to have flown. Beneath the tree were remains of rabbits, ship rats, Brush-tailed Possums, a Common Ringtail, Southern Potoroo and a Barred Bandicoot as well as mice, sparrows and starlings, providing a fine example of the Masked Owl's predatory powers and opportunistic feeding pattern.

Captive owls, held in zoos, have occasionally produced eggs. One such set brought to my attention was of three, perfectly white except for some nest staining, and about the size of small hen eggs. The female of the species is very much larger than the male, but is not otherwise distinguishable. The intensity of feather colour may vary between individuals, from deep chestnut to almost white, especially on the belly and the facial disc.

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Tawny Frogmouth *Podargus strigoides*

The soft grey, dappled plumage of this nocturnal bird so closely matches and blends with the dead boughs of eucalypts that its presence is often completely overlooked. Many is the time that I have been told of the experience of an unsuspecting person who had mistaken this bird for a dead, broken branch, only to be amazed when it took flight.

This is an excellent example of camouflage and mimicry, for the places where the Tawny Frogmouth roosts and sleeps during the day are generally exposed and easily viewed. The accompanying illustration shows the bird in a relaxed posture, but at the least alarm or threat detection it angles its face skywards, closes its eyes to mere slits and, with its tail resting on the bough, remains perfectly motionless.

The effectiveness of the Tawny Frogmouth's camouflage is increased by the fact that the fully fledged young and adults of both sexes all have similar plumage. It is a bird of the woodlands and eucalypt forests of Australia, occurring just about wherever such habitat exists.

At dusk it takes flight to search for food, most of which it takes from the ground by snapping up its victims in its exceptionally wide mouth, the feature which prompted its generally excepted English name. Unfortunately it often becomes another road casualty when, attracted to take frogs and insects, it is blinded by approaching headlights and hit by a vehicle before it is able to fly clear.

Such road-killed birds are regularly brought to me for study and subsequent examination of their gut contents has revealed the wide range of the Tawny Frogmouth's diet. Included have been various species of moths, beetles and their larvae, field crickets, lizards, a House Mouse and a Little Pygmy Possum. This varied prey reflects the opportunistic nature of the bird's feeding. I have also found it taking frogs when these move out over open ground in search of breeding ponds. The frail and exposed nature of its nest occasionally results in young being blown out and falling to the ground, and such orphaned or deserted nestlings have been reared to maturity on a diet of finely chopped raw meat.

Rarely does the frogmouth call. Its diurnal utterances are said to consist of a hissing or buzzing sound, and nocturnally it produces a low booming "oom" repeated many times and a double note resembling "chirk-chirk". The "more-pork" call which was many years ago attributed to this bird and which gave rise to it being called by that name is, in fact, made by the Southern Boobook, a species of owl quite unrelated to frogmouths.

Breeding takes place in the Spring and Summer months, and the nest is formed as a rather flimsy platform of little sticks balanced in the horizontal fork of a eucalypt or in the jagged end of a broken dead bough. The site selected might be from four to ten metres above ground and is usually in a rather exposed and quite visible position. A small amount of grass and

green leaves may be added as a lining. The egg chamber is barely concaved, only just sufficiently to prevent the two white eggs from rolling out. September and October are the main months in which eggs are laid, and the young are usually flying by the end of the year. It is not uncommon for the same nest to be used by a pair in successive years simply with the addition of some fresh green leaves for the lining.

On one occasion I was shown a nest containing a half-grown nestling and a single adult which had been adopted by a Laughing Kookaburra. The foster parent had been observed several times approaching the edge of the nest and feeding the nestling with a small skink lizard, with no apparent resentment on the part of the adult frogmouth.

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Australian Owlet-nightjar *Aegotheles cristatus*

This tiny nocturnal bird is rarely encountered in its natural state, but individuals are occasionally found after having suffered accidental death or having become the victims of domestic cats.

It occurs widely over Australia, favouring the woodlands and eucalypt forests where it hides by day in a tree cavity or inside a hollow limb. There it sleeps away the daylight hours in relative safety, protected from predators and the weather. If it is disturbed by an unusual noise or a vibration of its tree hide, it will sometimes climb to the entrance to investigate and if unduly alarmed it will leave its hole to fly some distance before perching to observe the cause of the disturbance.

Its normal period of activity begins at dusk when, under the partial protection of semi-darkness, it emerges to fly and hunt for the moths, beetles and other insects on which it feeds. At such times it will often alight on the ground to capture prey in its wide mouth and it is then that it is most vulnerable to cats and other such predatory mammals.

The Australian Owlet-nightjar's beautiful silver-grey plumage, which is the same for both sexes, is exceptionally soft. This softness, a feature of most nocturnal birds of prey, helps to reduce the noise of its flight, allowing a silent approach to its unsuspecting victim. The prominent feathery whiskers about its face indicate that it is also capable of taking insects in flight.

In all my birding experience I have never personally encountered this species in the bush. However I have, on two occasions, found it trapped in, and unable to fly from, a milk bucket in which some dregs of milk had been left overnight. Why this should be so I do not know, but I have been told of other similar circumstances. I doubt that the bird would be attracted to the taste of cow's milk, nor do I believe that the milk would attract insects upon which the bird might be tempted to feed.

As can be imagined of such a tiny nocturnal bird, there has been very little opportunity to observe and record its habits, behaviour or voice. The eminent Sydney ornithologist A J North described it as calling, especially on moonlight nights, with 'peculiar "churring" notes'⁴⁵ while M S R Sharland, in his *Guide to the Birds of Tasmania*, described its call as "chirk, chirk" and "bobble bobble".⁴⁶

⁴⁵ Alfred J North, *Nests and Eggs of Birds Found Breeding in Australia and Tasmania*, Volume II (Australian Museum, Sydney, 1906–1909) 343

<https://ia804707.us.archive.org/9/items/nestseggsobirds02nort/nestseggsobirds02nort.pdf>

⁴⁶ Michael Sharland, *Tasmanian birds: A field guide to the birds inhabiting Tasmania and adjacent islands, including the sea birds* (Angus and Robertson, 1958) 102.

It breeds in Spring, forming its nest on the bottom of a tree cavity or down inside a hollow limb. Eggs may be produced from October to December and are laid on a bed of gum leaves previously carried in by the birds. The height of the nest above ground may vary from two to ten metres, and the depth from the entrance is usually one or two metres.

Four eggs form the usual clutch and, like those of hole-nesting birds which brood in semi-darkness, they are pure white. It might be imagined that, in such situations, pigmented and patterned eggshells serve little purpose, and in fact white eggs would probably be easier for the brooding bird to see and care for.

Judging from accounts in bird books written fifty or more years ago the Australian Owlet-nightjar appears to be less plentiful than formerly. A reason for this could be the spread of the introduced European Starling which nests in similar sites and with which the nightjar would have to compete for nest occupancy.

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White-throated Needletail *Hirundapus caudacutus*

The appearance of these birds is a feature of the ornithological calendar to which bird-watchers look forward, for not only are their visits of brief duration, but their flight and aerial performance never ceases to amaze. The speed at which they slice through the air on swept-back sickle-shaped wings has to be seen to be fully appreciated. It is promoted by brief bursts of rapid wing beats, followed by long glides with birds appearing to come and go from and to all points of the compass, and from near ground level to altitudes which are at the limits of our ability to see them.

Such sightings are irregular and unpredictable, and may be of a few passing individuals or of a loose flock consisting of hundreds. The needletail, which is possibly known more generally by its alternative English name of Spine-tailed Swift, is a true trans-Equatorial migrant, appearing in Tasmanian skies about February and able to be seen until the beginning of April.

Although the movement of the flock may appear at first sight to be crazily unorganised and without general direction, a careful watch will reveal it to be otherwise. Just as the birds seem to appear suddenly in the sky so they will disappear, having moved onward in their migratory path, all the while wheeling, diving and climbing high and apparently feeding on flying insects as they go.

The eminent ornithologist of [the 19th] century, John Gould, actually described this bird's powers of flight in his *Birds of Australia*, saying: "The keel or breastbone of this species is more than ordinarily deep, and the pectoral muscles are more developed than in any other bird of its weight with which I am acquainted. Its whole form is especially and beautifully adapted for aerial progression, and as its lengthened wings would lead us to imagine, its power of flight, both for rapidity and extension, is truly amazing; hence it readily passes from one point of the country to another, and if so disposed may be engaged in hawking for flies on the continent of Australia at one moment and in half an hour be similarly employed in Van Diemen's Land."⁴⁷

The largest congregations I have ever witnessed were on the west coast in March 1981 while stationed on field work at Ordnance Point. In the first half of the month flocks numbered up to 200 birds, appearing almost daily and increasing in the latter half until they numbered up to 1,000 by the 29th. None were sighted after 2nd April.

I recall as a child been told that swifts had no legs as they never perched. In later years I was presented with a freshly dead individual and to my surprise no legs or feet were visible. Upon investigation I found them to be neatly folded and concealed beneath the streamlined body feathers. The legs are, in fact, very short and the feet weak. To rest the bird clings to the

⁴⁷ John Gould, *The Birds of Australia in seven volumes* Volume II (John Gould, Golden Square, 1848) <<https://www.biodiversitylibrary.org/item/187062#page/49/mode/1up>>.

vertical face of a tree or cliff, taking the weight of its body on its tail. The feet are simply used to hold the bird in position. Each tail feather is tipped with a needle-like point and when the tail is fanned against the surface of the resting place the points lightly penetrate and prevent slipping, thus acting as a kind of third leg.

The White-throated Needletail breeds in Siberia, Mongolia and Japan. Like other members of its family it forms a shallow saucer-shaped nest with a gelatinous substance produced from its saliva and fixed to a cliff face. Two or three eggs form a clutch and the sexes are alike in appearance.

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Fork-tailed Swift *Apus pacificus*

The sudden appearance of swift in our skies during Autumn provides a brilliant, but short-lived spectacle which is eagerly awaited by many people. The apparent ease with which these birds travel at such great speed and the way they circle, swoop low, then wheel to rise again high into the air is awe-inspiring. Then, having provided watchers with the joy of their performance, they vanish as suddenly as they had come, leaving doubt as to the direction of their passage.

The Fork-tailed Swift is much less evident in these performances than its nearly similar relative the White-throated Needletail, in whose company it flies and with which it is easily confused.

Its homelands extend from Siberia through eastern Asia to Japan and Taiwan, where it breeds. Its appearances in these southern latitudes are simply as passing migratory visits. There are, in fact, few well substantiated records of it from Tasmania, but it is included here in the belief that it may occur more regularly than is generally realised and in the hope that this illustration may prompt more people to watch for it in our skies during February and March.

Individuals flying among a flock of needletails are indeed difficult to distinguish at a distance, but if the observer is fortunate enough to have the birds fly fairly close they can be identified by the white feathers on the rump and the elongated tail. In direct flight the tail usually trails and the fork may not be noticeable. But when the bird turns and wheels it is fanned in a rudder-like action and can be seen to be markedly different from the much shorter, square tale of its more plentiful co-traveller. The form and plumage of both sexes are similar.

Very little is known of the Fork-tailed Swift's migratory life and it is not certain from which part of the world the birds come which grace our skies. Mystery surrounds its roosting and nesting routine, for here it seems never to cease its constant travelling, even to rest briefly.

It breeds during our Winter and at such times forms colonies on the face of cliffs and cave walls. The nest is a shallow, saucer-shaped structure formed by the bird from a glutinous substance, apparently regurgitated from its stomach, and adhering to the vertical surface in the same way as the mud nests of the Welcome Swallow. Two pure white eggs form the clutch.

An early name given to this bird was the Australian Swift, obviously an inappropriate choice, but a more recent and apt alternative was the White-rumped Swift, from one of the features which help in distinguishing it from the White-throated Needletail.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#140). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Laughing Kookaburra *Dacelo novaeguineae*

Only perhaps the emu could be considered as a bird more emblematic of Australia than this. The kookaburra has featured prominently in the accounts of the early explorers, in innumerable publications, on postage stamps, in advertising and in many children's books, one of the earliest and best loved of which was *Jacko – the Broadcasting Kookaburra*, by Brooke Nicholls, published in 1933.

A member of the kingfisher family, it has been referred to by various authorities over the years as the Great Brown Kingfisher, Laughing Kingfisher and Laughing Jackass. The name "Kookaburra" is said to have been used in differing forms in most eastern Australian Aboriginal languages. It was first recorded by Governor Phillip in 1789.

Though the species occurs naturally throughout eastern Australia it was not in Tasmania until introduced here about 1906 and on Flinders Island about 1940. Both introductions were highly successful and it is now common and widely distributed.

It first became established in Epping Forest and I well recall the excitement of sighting the occasional one perched on a roadside fence in about 1930, while travelling through the forest on what was, for a small boy, an otherwise long and boring trip before the Midlands Highway was sealed. First arrivals in a district always caused alarm among the native fauna and farmyard poultry. To them it was a strange and apparently dangerous new predator. Barnyard fowls would flee for shelter whenever a kookaburra appeared and remain hidden until it had moved away. With the passing years, as it has established itself, it has become accepted, but always respected and treated with some caution, by other animals.

What effect it has had on the population of native species is highly debatable. As an efficient and opportunistic predator upon invertebrate and vertebrate species it has no doubt competed successfully with other such predators, probably to the detriment of both its competitors and the prey.

The kookaburra's habit of killing and eating snakes is well known and I have witnessed this on several occasions. One instance involved a 750 cm long snake which was killed and carried to the bird's nesting hole in the barrel of a tree. When the snake was placed inside the chamber the nestlings became highly excited and noisy and I wondered how they eventually shared the meal.

Study of the gut contents of 15 salvaged kookaburras produced mostly insects and their larvae and covered a wide range of species. Only two small mammals and two lizards were found. As an introduced bird to Tasmania it is not protected and in consequence is sometimes shot in the belief that the shooter is assisting in the conservation of native fauna. Though no doubt it does eat useful and protected animals, the degree to which it has affected populations is yet to be determined.

Being a kingfisher, it takes great delight in eating ornamental fish from garden ponds, yet another habit which brings it into disfavour. Generally, however, it is now accepted as an established part of our fauna and loved and admired by most people. Its raucous, rollicking laughter-like call gives amusement and pleasure to many. It is the last bird to call at dusk, almost as if bidding goodnight as darkness settles over the forest.

The kookaburra's flight, which appears heavy and laboured, usually only covers a short distance and on alighting it raises its tail as if in salute. Its favourite nesting spot is inside a hollow tree trunk or bough, where three or four white eggs are laid in a depression among rotting wood chips. The familiar plumage is common to both sexes.

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Tasmanian Azure Kingfisher *Alcedo azurea* [now *Ceyx azureus*]

This is one of our rare avian gems. To view the Azure Kingfisher on a mild Summer day, its ultramarine blue back glistening in the sunlight and its form mirrored in the still waters over which it hunts for its food, is a cherished experience for anyone with a love of nature and beauty.

Of the several species of true kingfishers occurring in Australia this is one of only two which are to be found in Tasmania. Both are seldom if ever seen by most people. The Azure Kingfisher is distributed over much of northern and eastern Australia and is a sedentary species, remaining in one locality throughout the year. The Tasmanian population is therefore isolated from the mainland by the barrier of Bass Strait and has evolved as a separate subspecies, endemic to our island.

The Sacred Kingfisher *Halcyon sancta* occurs all over Australia and the islands to the north and east as far as Borneo, New Caledonia and New Zealand. It is a migrant and only rarely do individuals move as far south as Tasmania. It does not breed here and as records of its appearance are exceptional we have chosen not to include it in the illustrations.

Nor is the Azure Kingfisher by any means a common bird in Tasmania, although early records indicate that it was probably more numerous at the time of European settlement than it is today. It lives principally along the rivers in the north-west, west and south of the island and has occasionally been reported from lakes and rivers well inland, but not in the highlands.

Its small size, stealthy disposition and solitary habits mean that it is easily overlooked, for, like its near relative the Laughing Kookaburra, it will perch on a branch, silently watching over its surroundings for any sign of a potential meal. Not until it takes flight may its presence be evident.

It is then that its darting blue form, diving to take an item of food from the surface of the water or flying directly some short distance to another vantage point, contrasts brilliantly with its environment. When disturbed it flies swiftly and low over the water and generally utters a shrill twittering call as if giving a warning to its mate of possible danger.

The Azure Kingfisher's food is mostly aquatic life, small fish and water insects forming its basic diet. These are captured from near the surface of the water in its long, pointed bill and usually carried back to its vantage point to be inspected and either eaten or taken away to be fed to its young.

In Tasmania it breeds from October to January, laying five or six immaculate white eggs in an earthen chamber at the end of a tunnel which has been drilled into the bank of a river or

stream. The entrance is sited above flood level and the passageway to the egg chamber slopes gently upwards so as to facilitate drainage of rainwater or seepage away from the nest.

No lining material is added, but the chamber is often littered with the remnants of food items such as fish bones and insect remains which have apparently been regurgitated by the sitting bird after digestion of the softer parts.

Young birds resemble adults, though slightly duller in hue, and the plumage of the sexes is alike. Males strongly defend their breeding territory, pursuing swiftly any intruders. At such times their flight has been referred to as a “blue streak” and indeed they seem more like a blue meteor than a bird as they speed by.

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Skylark *Alauda arvensis*

In its traditional homeland of Europe the beauty of the Skylark's song has for centuries been a subject for poets, including Chaucer, Shakespeare and Shelley. However it was not only its melodious outpourings that attracted attention, for long ago Europeans trapped Skylarks in huge numbers and sold them as a culinary delight. Despite this predation the bird appears to have been able to maintain strong populations.

In Tasmania, to where it was introduced in about 1889, it has also become a greatly loved bird, although it has not caught on as a table delicacy, nor have local bards responded to it with deathless verse.

Since its introduction it has become well established and abundant in most areas of agriculture and introduced pasture. Whether its presence has displaced the indigenous pipit from such habitats, or whether the pipit simply does not like introduced pastures and has deserted such areas once the native vegetation has been destroyed, has yet to be determined. If the latter be the case then we have merely placed a European bird in the European kind of farmlands which we have established and, as is not the case with most foreign introductions, it is an adornment without the problems which such introductions often bring.

Despite its common name the Skylark is truly a ground dweller. It is in Spring and Summer, when it is engaged in its mating display and general breeding activities, that it performs its spectacular aerial performance, fluttering ever skywards, higher and higher, while bursting forth with that seemingly inexhaustible and endless song.

One English ornithologist recorded an instance of a Skylark performing for seventeen minutes before returning to earth, without sign of exhaustion. In districts where populations are strong the birds compete vigorously and the sounds of their singing can be heard for a considerable distance, providing a chorus-like effect. I once witnessed this over the pasture paddocks of Memana on Flinders Island and it was an experience never to be forgotten.

In Autumn the birds flock together, much in the manner of the migratory waders which visit here each Summer in large numbers. When settled and feeding on crop or grassland their plumage blends in with their surroundings and their presence may go undetected. However, if disturbed and forced to rise, the whole flock will take wing together, flying at great speed and often rising to a considerable height. They will turn and wheel *en masse* as a single unit, perhaps for several minutes, until their confidence is restored sufficiently for them to return to earth once more.

An interesting feature of the Skylark's development is the remarkable length of the claws on its hind toes. This is a wonderful example of adaptation in response to its environment. The bird is often exposed to strong winds and at such times must face into the wind so as to avoid having its feathers excessively ruffled. The long toenails, reaching back behind the bird, act

as a stabiliser or prop and help in maintaining balance. This feature is well depicted in the accompanying illustration.

As it lives on the ground, so the Skylark nests on the ground, forming a cup-shaped nest of fine dry grass in a slight depression which is usually well concealed among vegetation. Four or five heavily freckled grey eggs make up the usual clutch and young may be found in the nest as late as January. Males and females have similar plumage and the adults while breeding often display a slight head crest by elevating their crown feathers as if in anger.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#143). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Welcome Swallow *Hirundo neoxena*

Well known and well loved, the Welcome Swallow occurs widely over much of southern and eastern Australia, spending its Summers in the south and its Winters in the north. Despite a commonly held belief, it does not migrate to Europe to avoid our Winters. When its reappearance each Spring is welcomed by the many who eagerly awaited it, it has been no further north than southern New Guinea.

It can easily be confused with the Tree Martin, until one learns to distinguish it by its long, forked tail and purple-black rump, features which are well illustrated in the accompanying illustration and which, along with the rest of its plumage, are similar for both sexes and for young birds as well as adults.

The Welcome Swallow is a bird of the cities and suburbs as well as the woodlands, lagoons and open forests which are its original habitat. It has readily adapted to tolerate the presence of humans and to utilise buildings and other man-made structures for shelter and nesting sites. It can often be observed, quite at ease, swooping among buildings and low over pedestrians, occasionally resting on building facades or overhead wires. On numerous occasions I have found families of newly fledged young, just learning to fly, soliciting food from their parents above busy city streets.

An aerial feeder, the Welcome Swallow will take small flying insects in its mouth while in full flight and will drink by sweeping low over ponds and streams, skimming the water surface and dipping its beak to take in water without apparent pause. There can be few more delightful sights than the graceful and seemingly effortless movements of swallows feeding and drinking over a peaceful lagoon on a still summer evening.

Well known to most people is this bird's open, cup-shaped mud nest, beautifully engineered and fastened to the vertical face of the wall where it is sheltered by an overhanging eave or verandah roof. Some householders are intolerant of the mess which such an occupancy can create, but others consider it a symbol of luck, welcome the visitors and contain the mess by placing a catchment platform beneath the nest.

Open barns and road and rail bridges are also greatly favoured sites, as well as natural shelters such as on a cliff face or inside the cavity of a burnt out and hollowed tree. I once knew of a nest built and occupied in the cabin of a motor launch moored at Launceston. The parent birds remained in attendance, following the launch on river cruises, and successfully reared their brood.

The selection of suitable material with which to construct the nest must be important, for if it were not of the correct consistency and appropriately reinforced with some vegetable matter then the drying structure would surely crumble and give way. In Spring the birds can be observed as, having selected a satisfactorily wet quarrying site, they continually ferry

beakfuls of material back to where the nest is taking shape. The whole operation might take a couple of weeks to complete before the lining of feathers is finally added and the nest is ready for eggs.

The peak breeding time is from October to December, with young in the nests as late as January. Four eggs, white with reddish-brown spots, form the most usual clutch. Two broods may be reared annually. Old nests are sometimes re-used after the addition of new material, resulting at times in the formation of quite massive structures.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#144). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Tree Martin *Cecropis nigricans* [now *Hirundo nigricans*]

As with the Welcome Swallow, arrival of this bird heralds the approach of Spring, but where it has come from when it arrives in the north of the island at the end of August is a mystery. As its numbers build up with more migrants arriving during early September it progressively disperses to most parts of the State, favouring eucalypt forests and woodlands for its habitat.

Its range extends all over Australia into some islands to our near north, but how far the Tasmanian birds move to avoid the southern Winter is yet to be determined. Over thirty or so years I have netted and leg banded many hundreds of Tree Martins in the hope of having some recovered from other parts of their range, but without a single retrieval.

Because of its general appearance, flight and feeding habits, the Tree Martin is mistaken by many people for a Welcome Swallow. Both are aerial feeders, taking small flying insects while “hawking” in an endless circling and swooping manner, but with closer attention the Tree Martin can be distinguished in flight by its relatively short and rather square tail and by its off-white rump, which is visible from some distance when the bird wheels and turns to display its back. The plumage of both sexes, and of adults and sub-adults, is similar.

In Spring and Autumn loose congregations of the birds are formed, numbering up to several dozen, especially near the north coast when they gather there about March to await favourable conditions for the Bass Strait crossing. Flocks of dozens of Tree Martins may also be seen to congregate at dusk, over gravel patches, at roadsides or on charcoal beds, fluttering to settle on the ground for brief periods to “bill” gravel or charcoal as if seeking roughage. At the least disturbance the whole flock will rise in the air and circle for a few moments before settling again. While on the ground their short legs restrict their movements to a comical waddling, but in flight the legs are retracted like the undercarriage of aircraft and folded away beneath the sleek ventral feathers, thus giving the bird a more efficient body line for flight.

The beak of the Tree Martin is a fine example of adaptation for its specialised feeding method. It appears to be tiny and unsuited until it opens to reveal a gape which stretches almost from “ear to ear”, like the loading bay doors of a transport plane and well suited to gathering up insects in full flight.

Its favourite habitat is the eucalypt forests and woodlands, where it finds not only an abundance of its insect food but also trees with holes where it can nest and rear its young. Crevices in cliff faces are occasionally used for this purpose, and I once found a pair successfully breeding and feeding their offspring in a cavity in the wooden facade of a Launceston central city building, heedless of passing pedestrians. In Tasmania, however, there are generally sufficient tree hollows to provide enough suitable nesting sites.

The entrance to a nesting cavity is usually about mouse-hole size and if the bird considers it to be too large it will often reduce the aperture with mud so as to prevent the entry of larger

species or potential predators. The nest chamber may be from ten to fifty centimetres from the entrance and is generally lined with fine eucalypt leaves.

Nest site selection is made in late October and eggs are laid during November. The eggs are white and delicately freckled with reddish-brown. Three or four make up the usual clutch. The young emerge to fly in December and January and soon learn to catch insects for themselves before pre-migration movements and flocking commence.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#145). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Richard's Pipit *Anthus novaeseelandiae*

This is a widespread species, occurring in the Old World, Africa, Asia and, as its scientific name suggests, in New Zealand. In Australia it may be found in most areas of native grassland, and in Tasmania it occurs from mountain tops to the coast. The treeless native Poa grass or tussocky plains and hills are its favoured domain, but it is rarely, if ever, found in areas of agriculture or on improved pasture.

This may be because it finds such habitats unattractive or it may be because of competition from the introduced Skylark of Europe which has rapidly expanding its number and is now common throughout our pastoral lands. The Skylark appears to shun the native grasslands and treeless high country, leaving these areas to the indigenous pipit.

It is not clear whether the pipit is a trans-Bass Strait migrant or merely a nomad. Some early Tasmanian naturalists on the north-west coast refer to it arriving in Spring and departing in Autumn. Confusion with the Skylark may now result in its seasonal movements being overlooked. Both species are of very similar plumage and are difficult to distinguish from each other in the field, so a useful indicator of species is the habitat in which they are observed.

The pipit, or Groundlark, is a ground lover, its feather colouring, which is the same for both sexes, blending beautifully with its surroundings to afford camouflage and concealment. It seems to prefer running from point to point rather than flying; no doubt this helps to it avoid detection. As with all ground-dwelling birds, it is constantly on the lookout for predators, and will occasionally rise to view its surroundings from the top of a boulder, stump or fence post, and when alarmed or agitated will give an occasional flick of its tail.

Rarely does it sing except in Spring and early Summer when the males proclaim a breeding territory or display to a mate. Such vocal displays are usually performed in flight. The bird hovers some metres above ground on rapid wing beats and commences a pleasant trilling song. It continues, apparently without stopping for breath, rising gradually higher into the air, while sustaining the display for up to several minutes. When satisfied with its performance, or perhaps exhausted, it drops stone-like to earth. These aerial displays are very similar to those undertaken by the Skylark, but are not as spectacular nor performed at as great a height.

Richard's Pipit builds its cup-shaped nest on the ground, well concealed amongst vegetation. Favoured locations are the centre of a cropped Poa tussock or among long grasses along the edges of back roads. The nest is composed almost solely of dry grass with little if any other lining.

When flushed from a nest the bird may flutter and sham injury in order to attract attention to itself and away from its brood. Rarely will it move more than fifty metres away before alighting and awaiting the chance to return.

Being dependent upon a good growth of grass in which to hide its nest, it rarely starts to breed before November, by which time Spring growth is well advanced. Nests with eggs may still be found as late as mid-December. The usual clutch is three, and the eggs are basically white, but so heavily marked with fine brown spots as to give a brownish overall appearance.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#146). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Black-faced Cuckoo-shrike *Coracina novaehollandiae*

The gentle, unhurried note of this bird, which seems perfectly matched to its casual disposition, is often the first indication of its presence. The call, a plaintive purr resembling a drawn-out “cherrr”, is usually repeated several times and is uttered during flight and upon alighting on an exposed branch of a tall tree. Similarly smooth and relaxed is the undulating flight, punctuated by short glides with folded wings, as the Black-faced Cuckoo-shrike passes from tree to tree.

Upon alighting after every flight, the bird carefully and deliberately spends two or three seconds refolding its wings neatly into position, with the tips resting across the top of its tail.

Occurring all over Australia, and as far north as Indonesia, the Black-faced Cuckoo-shrike leads a nomadic lifestyle, only remaining in one locality while food lasts and conditions are satisfactory, or until breeding is accomplished.

In Tasmania it is considered a migrant and is also known as the Summerbird, as it arrives in Spring to breed and to rear its young, then depart northward in Autumn. In Spring it is to be seen mostly in pairs, but family groups are more common in Summer and Autumn, when juveniles follow their parents, calling to be fed.

The nest is usually a shallow, saucer-shaped structure, composed of small twigs, bark, leaves and grass matted together with cobwebs and occasionally containing lichens as well. It is invariably situated on a horizontal tree fork in such a way as to be almost invisible from below. In such a relatively exposed site the half-grown young have been known to be blown from the nest by the high winds of the Spring months. However, if they survive and are not disturbed by predators, the adults will continue to feed and tend them on the ground.

I once had two such young brought to me by well-meaning children who had picked them up from the roadside on a very windy Spring day. Fortunately my family was able to hand rear them successfully on a diet of finely chopped raw meat. They became so tame and used to being hand fed that after learning to fly and being liberated among nearby trees they continued to answer our calls and would fly down to eat from our hands. They would follow, calling, if not rewarded.

As they gradually learned to capture insects and other food for themselves, their demands for hand feeding progressively decreased and eventually they joined the others of their kind in the Autumn exodus. We did not see them again, although we often called to returning birds the following Spring in the hope of a response.

The clutch usually consists of three dark green eggs, heavily blotched with brown, but it is rare for more than two young to be reared in a brood. The eggs are produced in October and November and flying young can be seen from December.

The adult birds of both sexes have the soft silver-grey plumage highlighted by black in the wing and tail feathers, and a jet-black face mask. The young are readily distinguishable from their parents as they do not acquire the mask until moulting, later in Autumn.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#147). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-winged Triller *Lalage tricolour*

This bird is rare in Tasmania although it is common and occurs widely over much of Australia and the islands to the north. We have decided to include it here as it has been found breeding near Devonport and reports of sightings indicate that further such occurrences will no doubt be observed in the future.

In southern Australia it is a strictly migratory species, arriving in Spring and departing northwards again in Autumn. It generally shuns heavily forested regions, preferring more open country and woodlands.

The food of the White-winged Triller consist primarily of insects and their larvae, taken from among foliage or occasionally from the ground. An old name for it, the White-shouldered Caterpillar-eater, reflects this dietary preference.

It breeds in Spring and the nest near Devonport was found by David Pinner and Leo Bird, two competent ornithologists who had been observing and recording birds on the north-west coast for many years. They found a female and two males at Pardoe in October 1968 and, after revisiting the area to watch the birds on several weekends in succession, eventually discovered the nest containing two eggs on 16 December. It was a cup-shaped structure placed in the fork of a horizontal branch of a gum tree about six metres above the ground, and the male was in attendance. Their last observations of the nest were made on 17 January 1969 when two young were almost fully fledged and ready to fly.

Pinner and Bird later received reports of further probable sightings of trillers on the north-west coast at about the same time, and a male and female were observed on King Island in October and November 1968.

The song of the male is often the first indication of its presence, and the bird has been described as a fine performer with a melodious song. It may call while in flight from tree to tree, or from the vicinity of its nest, or when proclaiming its territory. The English name of “triller”, now generally accepted for birds of this genus, is most appropriate as it describes very well the bird’s call, which has been likened to a high-pitched trill, “joey-joe”, and a constant “pitter, pitter, pitter” regularly repeated.

When in breeding plumage, the male and female can easily be told part, as shown in the illustration. That of the male is quite striking with its black crown, nape and back giving it a significantly different appearance from all other birds of a similar size in Tasmania. Outside the breeding season, while spending the Winter in northern Australia, the males moult, losing their black markings and taking on a dull brown plumage which is somewhat like that of the females.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#148). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White's Thrush [now known as the Bassian Thrush] *Zoothera dauma*

One of the more secretive, subdued and stealthy of Tasmania's wet forest species, this bird is not often seen unless it reveals itself by flying or running. It spends most of its time on the ground, searching among the forest litter for its food, which consists mainly of invertebrates. Only occasionally will it leave such a cover and its flights are over a short distance; its general preference is to run along the ground.

When alerted to possible danger it may fly to a low branch or log in order to gain a wider view of its surroundings, or it may instead remain perfectly motionless so as to avoid detection. In this it is helped by its olive-brown dorsal plumage and remarkable scalloped or scale-like markings, which afford it excellent concealment among the litter on the forest floor.

White's Thrush occurs widely throughout the wet forests, dense tea-tree scrub and rainforest, not only on the mainland of Tasmania, but on both King and Flinders Islands. Over the years it has also been called the Large-billed Ground-thrush, Scaly Thrush, Mountain Thrush and Bassian Thrush. Confusion still exists as to its relationship with two other populations in Asia and elsewhere in the world, and it will no doubt have further changes made to its nomenclature before the matter is fully researched and settled.

In many ways it resembles the introduced English Blackbird, to which it is related, both in its appearance and its habits on the ground, foraging amongst the forest litter. Its nest, too, which is dish-shaped, composed of vegetable matter including green moss and lined with grass, is formed and situated as is that of the Blackbird, and usually well secluded among vegetation.

It lays two or three dull greyish-green eggs which are heavily mottled with fine brown markings and which could easily be confused with those of the Blackbird. The plumage of the juveniles, too, is similar to that of young Blackbirds, and even the occasional plaintive warble, or whistle, which it offers at dawn and dusk, is very like the Blackbird's call.

To watch one of these birds working over the litter on the forest floor, tossing leaves and bark aside with its beak as it searches for worms, insects and other such food items, is one of the great thrills of birdwatching in the forest. No doubt this industrious activity also helps in the aeration and breakdown of decaying vegetable matter.

Decaying material is massed together to form the base of the nest, which may be the remains of a structure surviving from the previous year. Occasionally the old disused nest of a Ringtail Possum will be utilised for a nest base. The nest itself is bowl-shaped and built at a height of from one to six metres above the ground, sometimes on top of an old stump, sometimes in a tree fork and sometimes on a ledge of a creek bank, but always well sheltered and hidden by shrubbery.

Fine twigs, bark and green moss taken from the forest floor or from logs are used for the main structure, and the lining is usually of fine, dry grass. Eggs may be produced between August and the end of November.

With land clearing and present day large scale tree harvesting methods, it is apparent that the habitat of this most handsome thrush is being progressively reduced. Competition from the introduced English Blackbird, as it establishes itself in areas of wet forest and increases its number there, may also prove to be to the disadvantage of White's Thrush.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#149). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Blackbird *Turdus merula*

For many Tasmanian gardeners, 1933 is not a year to commemorate with joy, as it was then that the Blackbird was introduced to this State. Having been released in Hobart, it quickly multiplied and spread into the Derwent Valley, to the west coast, the midlands and the north. I recall finding a nest with grown young in a pine hedge in Launceston in 1937 and by 1940 it was common in the parks and gardens of that city.

Though dispersal was rapid, populations were initially patchy, with Blackbirds settling in one locality and not in another. By about 1950 they were established in most settled areas and ten years later could be found in native forests far from human habitation. Today they occur almost everywhere in Tasmania, including the Bass Strait and offshore islands, and there is even a record of a sighting on Macquarie Island, although how the bird reached there is a mystery.

Like so many introduced species, the Blackbird has acquired a reputation as a pest, especially in fruit growing areas, because of its fondness for berries and other small fruits. Its numbers now are so great as to deplete significantly some crops, and orchardists and home gardeners need to take adequate precautions against its depredations.

When its diet of fruit is not available it is an avid feeder on worms and insects, but even the industrious activities it engages in in this regard can bring it into disfavour with gardeners. The vigour and enthusiasm with which it searches for food for itself and its young, especially by digging for worms with its beak, often results in garden mulch being scattered in all directions or in newly sown beds being disturbed.

On the other hand it must not be overlooked that it can also be of assistance in the garden by taking a great number of harmful insects. To many it is a joy and adornment in the garden, readily coming to a feed table or bird bath, and rewarding its provider by its trusting nature and melodious song, especially in Spring. It is one of the first birds to herald the dawn, singing vigorously at the first glimmer of light in the east.

Though the Blackbird is tolerant of others of its kind for most of the year, the arrival of Spring brings a change of disposition as males establish and strongly defend their breeding territories. Squabbles and fights break out regularly between neighbouring birds, with an intruder being chased back into its own domain from where it will dare its pursuer to follow. All this takes place to the accompaniment of a variety of loud alarm calls.

Breeding commences in September with the construction of a bulky, bowl-shaped nest in the seclusion of dense foliage, somewhere from one to three metres above the ground. The nest is composed of a mixture of sticks, leaves, bark, grass, moss and even pieces of paper, all matted together with mud to form a heavy, solid structure, with the egg chamber lined with dry grass.

Up to three broods may be reared each season, with each three to five pale greyish-blue eggs, heavily marked with dull brown speckling, in each clutch. Late broods may not leave the nest until the end of January. The Blackbird's reproductive capacity was demonstrated to me once when, eleven days after removing three half-grown young from a nest, I found the parent bird sitting on four more eggs.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 3 (#150). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

THE UNPUBLISHED
PORTRAITS OF TASMANIAN BIRDS

200 illustrations by Sue Lester

with accompanying text by Bob Green

These plates were reproduced from 35mm slides of the original paintings. The text was computed, edited and printed by Tim Thorne with progressive amendments by the author; end pages give a brief outline of the production and failure to publish.

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Volume 4

Pink Robin *Petroica rodinogaster*

To visit the home of the Pink Robin on a still Spring day, to sit there, listen and watch, is a most moving experience. In the wet rainforest dominated by myrtle beech trees, where the majestic tree-ferns grow prolifically in the valleys and green, wet moss, decorated with multi-coloured lichens, covers trunks and branches and densely carpets much at the forest floor, lives a very specialised fauna. Among its most striking species is the Pink Robin.

Sighting a male of the species, its breast colour contrasting with the vivid greens of the surrounding foliage, is enough to bring excitement and expressions of delight to every bird lover, no matter how many times the experience has been repeated.

The Pink Robin lives mostly in the sub-canopy and shrub layer of the forest and, like other robins, it perches on a vantage point to watch for the revealing movements of the tiny insects upon which it feeds.

The Tasmanian rainforests are its stronghold; it otherwise occurs in only a few restricted areas of southern Victoria and south-eastern New South Wales. Outside the breeding season it may move out from the shelter of the rainforest into adjacent dry sclerophyll areas where it briefly leads a nomadic existence. Rarely, however, are adult males found in such a habitat and the dull grey-brown females and sub-adults are easily confused with the nearly similar females and young of the Flame Robin.

Though somewhat secretive, it is not a difficult bird to find once its requirements and habits are understood. It occurs in almost all our rainforest areas and is perhaps most easily observed within National Parks set aside for the conservation of such environments by a patient vigil from the edges of lesser used but established walkways and byroads.

The Pink Robin is relatively tolerant of human presence and a sufficiently stealthy observer in a secluded glade may well be rewarded by the appearance of a pair investigating the stranger's presence. Often the first indication is a faint metallic "tick" uttered by the birds in agitation or subdued alarm. This call also provides the best method of locating them while quietly walking along forest trails. In Spring, while breeding, the birds are more easily aroused and detectable and at this time they may respond to mimicry or to a squeaky bird-caller.

The nest is almost as handsome a sight as the male bird. Situated two or three metres above ground in heavy wet forest and placed on a moss-covered branch, it is so well camouflaged as to be practically impossible to find unless the bird's movements disclose it. It is constructed from pieces of green moss packed together to form a deep cup which is lined internally with soft hair-like fibres from the base of a tree-fern and occasionally with possum or wallaby fur. Externally the mossy form is bound and decorated with pieces of lichen and the whole structure blends beautifully with its surroundings.

A clutch consists of three off-white eggs which are heavily marked with small brown spots. These are laid for October, but the young of some late clutches may not fly until January.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#151). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Flame Robin *Petroica phoenicea*

“As if someone had taken a case of mandarins and scattered them over the rolling grassland”: this is how Derek Smith, naturalist and long-time resident of Flinders Island once described to me the scene in Autumn on the island, when large numbers of Flame Robins occur there, as if they are using the Furneaux Islands as “stepping stones” on their way to the Victorian coast. Indeed, at such times when they are exposed in open areas and readily visible perched on fences, dry thistle stems and about the ground, they do form a most attractive spectacle with their bright orange or flame-coloured breast feathers reflecting the sunlight.

The most numerous and widely distributed of our robins, the species occurs over much of south-eastern Australia. In Tasmania it may be found in eucalypt forests, woodland, heathland and open pasture country, from the coast to the highlands. It is a highly mobile species and has long been believed to be a trans-Bass Strait migrant, with at least part of the State’s population departing northwards during April and May, returning again in August and September. For these periods of apparent migration it forms loose congregations which may be found in open grasslands areas searching for their invertebrate food items.

In an endeavour to prove the migration theory large numbers have been leg-banded with identifiable rings by amateur and professional ornithologists, but to date no interstate recoveries have been recorded. I have myself banded a number at my field station on Maggs Mountain in the upper Mersey Valley at an altitude of 450 metres. The Flame Robins abandon this location in Autumn and are absent from there until September. On several occasions I have later recaptured individuals at the original banding site – a small clearing in the midst of heavy forest – after one or two years have elapsed. This indicates that the birds may be following a constant migration path or, more likely, that they have a strong homing instinct, coming back to breed in the same locality in successive years.

Nest building usually starts in September or October and the site chosen may be in the roots of an upturned tree, in the crevice in an old stump, a ledge on a creek bank or earth cutting, or even on a ledge inside a farm building or bush hut. On several occasions I have witnessed a most interesting event when a pair chose to build a nest inside a shearing shed only four metres from where the sheep were actually being shorn. The birds were incubating eggs when shearing began, but refused to abandon the site despite the busy activity and the roar of the electric shearing machines. The eggs hatched and the parents carried food to their young as normal, eventually completing the task of rearing them at about the same time as the shearing finished.

Three white eggs with a greenish tinge, spotted with brown markings, form the usual clutch, which is laid in a cup-shaped nest constructed of dry grass, rootlets and strips of bark fibre. The nest, which is often adorned with old spider egg-sacs, cobwebs and bits of fire-blackened vegetable matter, is rarely placed more than two metres above ground level. On only one instance have I found a clutch parasitised, with the egg of a Horsfield’s Bronze-cuckoo.

Males have occasionally been known to breed before attaining their red breast colouring, so caution must always be taken when attempting to sex adults and it cannot be assumed that all grey-breasted individuals are females.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#152). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Scarlet Robin *Petroica multicolor*

It would be difficult to suggest which of the three brightly coloured Tasmanian robins is the most impressive, but there is no doubt that the Scarlet Robin is the most brilliant, with the black plumage of its back contrasting vividly with the white forehead and wing bars and the deep scarlet of its breast.

It is widely distributed, occurring in south-eastern and south-western Australia, including Flinders Island (but not King Island) and also on some islands of the Pacific. Unlike the Flame Robin, it is not a migrant, the Tasmanian population remaining here all year. It can be readily distinguished from the Flame Robin because of the black throat of the male, the red breast colour not extending to the chin, and the reddish wash on the breast of the female. A bird of the forests and woodlands, it occurs mostly in pairs, not gathering in large congregations as the Flame Robin does during Spring and Autumn migration.

Robins are members of the flycatcher family and it is a delight to watch this brilliantly coloured bird hunting its prey. Perched on a rock, low branch or any other vantage point, it will be motionless for only a few moments before suddenly darting through the air to seize an insect or spider from a twig or from the grass. The prey may either be eaten on the spot or carried in the robin's beak to some more elevated site for further examination before being consumed. Then the search begins again. At such time as the bird may give regular flicks of its drooped wings, as if in excited anticipation, in much the same way that a cat will gently wave its tail while stalking its prey.

About December a pair of Scarlet Robins maybe accompanied by two or three recently fledged young, dull grey birds yet to have any red on the breast, and the parents will periodically catch and carry food items to them as they are learning to seek and capture prey for themselves.

With the onset of Spring a pair will settle in a selected territory and defend it against others of their kind. Nest building begins in September or October, and a neat cup-shaped structure is constructed in the fork of a tree such as an oak (*Casuarina* sp), among the twigs of a honeysuckle (*Banksia* sp) or, rarely, on the branch of a eucalypt. The nest is usually at a height of between two and five metres from the ground.

The building material is mostly fine, fibrous, dry bark bound together with a liberal quantity of cobwebs, with the occasional addition of some dry grass or moss. The egg chamber is invariably lined with soft fur. The outer rim and sides of the nest are usually decorated and camouflaged with pieces of lichen and the attractively neat result bears some resemblance to the nest of the species' rainforest relative, the Pink Robin.

The usual clutch is of three eggs, which are basically white with a slight greenish tinge and always heavily blotched with brown markings. Although the nest is built in relatively

exposed situations, it is rarely if ever subjected to the parasitic attentions of cuckoos and this is perhaps an indication of the bold tenacity with which the Scarlet Robin protects its nest against intrusion.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#153). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Dusky Robin *Melanodryas vittata*

Though not adorned with the bright colours of most robins, this bird is still a favourite with many Tasmanian bird observers. Common and widely dispersed throughout the dry forests and woodlands of the State, including both King and Flinders Islands, it does not reach the Australian mainland and so is counted among our endemic species.

The Dusky Robin's quiet tolerance of humans has helped endear it to bush folk and it can quickly distinguish friend from foe, readily visiting the vicinity of camp sites to search for possible food items. Orchards, too, are often among its destinations, as are country gardens and other places where the soil may be tilled and worms exposed.

In my youth it became one of my most loved birds and was a regular visitor to the vegetable garden when I was digging. With little hesitation it would fly down from a nearby fence to grab in its beak any worm which had been brought to the surface, carrying it away to thrash it on the ground or on its perch until satisfied it was fit to swallow.

Established pairs appear to mate for life and remain within a rather limited home range. I have often recaptured individuals at the same location where I had leg banded them for study purposes some years before.

The Dusky Robin is one of the earliest birds to call at dawn, as with the first gleam in the east its plaintive single, drawn-out note, occasionally doubled into a "pee-peep", can often be heard in the forest. The call has a ventriloquistic and penetrating quality and somewhat resembles the communication calls of a quail. If mimicked in Spring it will usually approach to investigate the caller, remaining only long enough to assure itself that it is not one of its own kind, and therefore a potential adversary, which is responsible.

It was once known to many as the Stump Robin because of its favoured perching sites and because the top and sides of broken, fragmented tree stumps are where it often nests. Over the years I have found a great many nests of this robin, some inside the butt of an old hollow tree, some on ledges in buildings, others in old swallows' nests and one even in the nest of a New Holland Honeyeater. This nest, although deserted by both species, contained three eggs of each.

Perhaps the most untidy of all the robin family's nests the cup-shaped structure of small twigs, bark and leaves may be lined with fine dry grass and sometimes a little wool. Three or four eggs form a clutch and they may range in colour from dull brown to olive-green and even a dull blue. In some instances a faint darker spotting may be present, especially around the larger end. Late season clutches may also contain a Pallid Cuckoo's egg.

The Dusky Robin is one of the earliest among the small birds to start breeding, and in the dryer lowlands I have found it with eggs in August, although the nesting season generally runs from September to January.

Males and females are of similar plumage, but juveniles are more speckled and flecked, especially on the breast and head and for the first few months of flight can easily be distinguished from adults. Juvenile plumage moults out completely by Autumn and from then first year birds are indistinguishable from their parents.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#154). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Olive Whistler *Pachycephala olivacea*

This can be one of the most elusive and frustrating of our birds. On many occasions, having been fascinated by its calling, I have attempted to approach and watch but all too often it seems to be able to stay tantalisingly out of sight, beyond the next bush.

The call is a whip-like, strong, liquid, slow “I’ll-whit-chu” or a drawn out single note as if tuning up for the full phrase. If agitated it will repeat the call at intervals of perhaps thirty seconds. There is something of the ventriloquist about the Olive Whistler, for when it cannot actually be seen the call seems to be coming from different directions, at one moment from the forest canopy and the next from among the tree-ferns on the forest floor. Perhaps the best way to view the bird is to sit quietly and still, from time to time mimicking its call or making squeaking noises. Then it, or sometimes a pair, may shyly come to find out who is intruding upon its domain.

The Olive Whistler is one of two whistler species which occur in Tasmania, but whereas its more brightly coloured relative favours a dry habitat it prefers the wet forests. Here its comparatively dull plumage blends beautifully with the shadowy dim greens of the sub-canopy and ground cover shrubbery. This plumage and the general appearance of the bird is very similar for males and females and for adults and juveniles. Its food consists of invertebrates which it seeks among the dense foliage, loose bark or forest litter.

With the clearing of much of the wet forests for agriculture since European settlement and, more recently, the clear-fell method of tree harvesting, its habitat range has been reduced considerably. On the Australian mainland it is restricted to the south and east of Victoria and New South Wales, and it also occurs on King and Flinders Islands. The Olive Whistler is probably a relatively sedentary species, not moving far from an established territory outside the breeding season.

Breeding may commence in September and young might still be found in the nest as late as January. During the breeding season the birds are at their most vocal and easily become agitated, disclosing their presence and the likely location of the nest.

The chosen site is invariably in dense scrub or foliage, quite often in a wet gully near to water. A bulky bowl-shaped nest is formed from fine twigs, bark, leaves, grass and sometimes a little green moss. The lining is usually a fine dry grass placed so as to form a smooth, soft bed for the eggs and the young. Two or three creamy-white eggs, spotted with brown and grey markings, form the usual clutch, and in some instances the eggs have the unusual characteristic of being slightly pointed at both ends.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#155). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Golden Whistler *Pachycephala pectoralis*

The powerful, penetrating, whip-like whistle of this bird is usually heard long before its utterer can be seen. If the call is mimicked, the male bird, sometimes accompanied by a mate, will approach within a few metres to investigate. The close-quarters view thus afforded is an experience to enjoy, as the brilliant golden breast, contrasting with the black and white head and throat plumage makes the adult male Golden Whistler one of our most striking birds. As one watches its confident, inquisitive movements, it returns the gaze and seems to be summing up its observer for any potential threat.

A widely distributed species which favours dry forest and tea-tree scrub, the Golden Whistler occurs outside the breeding season mostly as solitary individuals, which roam through the bush and occasionally visit suburban and country gardens. Most sightings at such times are of birds in grey plumage, as they are sub-adults or females. These occasional appearances suggest that the species may be somewhat nomadic in Autumn and Winter.

When a little agitated, the whistlers have a habit of slightly raising their head feathers, which gives their heads the appearance of being rather thick. This no doubt gave rise to their generic name, which translates as “thick head”. In the early literature of Australian birds this species was usually called the Grey-tailed Thickhead, a most uncomplimentary name and much less appropriate for such a beautiful bird than the one in current usage which pays tribute to its most striking feature.

Early ornithologists considered the Tasmanian population as a distinct species, *P glaucura*, on the basis of very minor, superficial characteristics in which it differed from mainland populations. Today it is considered to be part of the same species which ranges from Western Australia to south-eastern Australia (including King and Flinders Islands) to north Queensland.

Geographically separated populations may differ slightly in size and in depth of colour, but this alone does not necessarily justify classifying them into separate species. Likewise their calls may differ in richness and repertoire, even from one district to another, and this, too, induced some early workers to suspect differences at a specific level. Nowadays good taxonomists have the advantage of more advanced technology and are more cautious about separating populations into distinct species.

In Tasmania the Golden Whistler may build its nest and produce eggs from August to October, and the young are flying before the end of the year. A deep bowl-shaped nest is formed from strips of paper-bark, dry leaves and small twigs and is lined with fine grass, rootlets or similar soft material. The site chosen is usually among the thick foliage of a tea-tree, but nests have also been found in tall, dense bracken fern, eucalypt saplings and introduced pine trees.

The usual clutch is of three rounded cream eggs, spotted with markings of brown and slate-grey, mostly at the larger end. Both sexes share in incubating the clutch and sit very closely on the eggs, being most reluctant to be disturbed from the task.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#156). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey Shrike-thrush *Colluricincla harmonica*

Perhaps one of the best loved “rogues” in the land, this bird’s happy, friendly disposition endears it to most people, but careful observation will show it to be a major predator not only of invertebrates but also a small vertebrate animals. The love one can so easily form for its presence in and around a country garden or a favourite bush haunt may be quickly dispelled by the sight of it raiding the nest of small birds to steal the eggs or young, which it regards as delicacies.

However, it must be remembered that such predatory habits are part of nature’s balance and it is not for us to condemn or attempt to interfere with a system which has existed for countless generations in successful equilibrium. Indeed I once found a Grey Shrike-thrush nesting within one metre of a Yellow-tailed Thornbill without any apparent interference with the thornbill’s brood. Once one accepts nature’s seeming cruelties and this bird’s role in the balance of bush life, it can become an extremely appealing and interesting species.

It occurs throughout Australia, but principally in forests and woodlands, where its powerful, harmonious, deep-throated call announces its presence and proclaims its territory. This song, which varies from a single note to a combination of several, has earned it to the name of “Jo-whickie” or “Whistling Dick”.

The Grey Shrike-thrush is so strongly territorial, especially at nesting time, that, if one can copy and repeat its call, it will eagerly seek out the apparent intruder with business-like curiosity until satisfied that the voice is not that of another of its own kind. On occasions it will become extremely distressed at seeing its reflection in, say, a window or a car hub-cap and will repeatedly attack its own image to the point of exhaustion.

In its natural bush setting it searches among loose bark on tree trunks for insects and spiders, occasionally perching on some prominent branch as if to look over its surroundings for the best place to try for its next meal. All the while it repeats its calls at intervals of about half a minute. It will also visit a feed table for a variety of scraps and crumbs, and when regularly fed may become quite tame.

Breeding takes place in the Spring, when pairs, having successfully established exclusive dominance over their territories, build their bulky, bowl-shaped nests among the foliage or hidden in a broken stump, up to five metres above ground level. The base of the nest is formed of fine twigs and strips of bark and the deep egg chamber is composed of finer material and lined with rootlets and a little fine grass. Within is laid a clutch of three white eggs, liberally marked and spotted with brown and slate-grey.

In their first year young birds retain a great deal of chestnut-brown about the face, and are more heavily streaked on the throat than older individuals. Mature males have an immaculate pale throat and clear grey breast, while females are more mottled.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#157). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Leaden Flycatcher *Myiagra rubecula*

It is the plumage colour of the adult males which has given this bird its English name. To the trained eye the head and back appear more of a leaden-grey than the iridescent, glossy purplish-black which so brilliantly adorns its near relative, the Satin Flycatcher. However, the slight difference can be easily overlooked, especially from a distance or without careful scrutiny.

Consequently the odd Leaden Flycatcher can easily be mistaken for just another member of the Satin Flycatcher species, which is by far the more numerous in Tasmania. A careful check of identity may be rewarded by the realisation that one has found one of these rare visitors to this island.

Both species are migratory, arriving in Spring and departing in Autumn. The Leaden Flycatcher occurs widely through the forests of eastern and northern Australia and New Guinea, spending the winter months in the far north and flying south to breed. It is then that occasional pairs move as far south as Tasmania. The rarity of its recorded presence in Tasmania may, however, be the result of confusion with its relative.

Frank Mervyn Littler in his *Handbook of Birds of Tasmania*, published in 1910, recorded it from several Northern districts and states that Colonel Legge first recorded it from Tasmania when he collected a specimen near Falmouth in 1874.⁴⁸ In 1969 Leonard Wall made the first actual breeding record in Tasmania when he reported in the *Tasmanian Naturalist* that the species had been found nesting on Maria Island in January 1968.⁴⁹ Occasional sightings of single birds have since been recorded, mostly in the north of the State.

As the Satin Flycatcher arrives here rather later in Spring than many of the trans-Bass Strait migrants, it could be assumed that any Leaden Flycatchers which make the crossing would do likewise, probably not arriving before the end of September. Nesting would thus be most likely to take place from November until as late as February. In fact Wall's record seems to confirm this.

The nest is a beautiful, neat cup formed from fine bark fibres with cobwebs used to bind it together and to aid in securing it to a dead eucalypt branch in such a way as for it to be almost undetectable from below. Pieces of lichen may also be added to the exterior for decoration and as camouflage. It is usually placed well up in the sub-canopy.

⁴⁸ Frank M Littler, *A handbook of the Birds of Tasmania and its dependencies* (Frank M Littler, Launceston, 1910) 20–21 <<https://www.biodiversitylibrary.org/item/34662#page/1/mode/1up>>

⁴⁹ Leonard E Wall, 'Bird Notes' (November 1969) 19 *The Tasmanian Naturalist* 3 <<https://www.biodiversitylibrary.org/item/245913#page/79/mode/1up>>.

Eggs, which number two or three to a clutch, are creamy-white and spotted with brown and grey markings, principally in a ring around the larger end. Sub-adults greatly resemble the rather less spectacular females.

Like all flycatchers, this is an active and sometimes vocal species as it busily scans its surroundings for the flying insects upon which it feeds, while at the same time keeping up what appears to be a nervous jerking action of the tail. As with its near relatives it is a fascination and a joy to observe.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#158). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Satin Flycatcher *Myiagra cyanoleuca*

To view a pair of Satin Flycatchers at close range is one of the greatest pleasures of watching birds. The brilliance of their plumage, especially that of the male in full display, will thrill even the casual observer.

This is a bird of the eucalypt forests, which favours the higher rainfall regions and wet gullies and is consequently not often seen. Rarely does it visit settled areas, parks or gardens.

The species ranges throughout eastern Australia from Tasmania to Papua New Guinea, and is a seasonal migrant, moving northwards in Autumn and returning to its breeding area in Spring. Here it arrives later than most other migrants, and is seldom found before October. It is at this time that it can be seen and heard at its best as it sets about its annual routine of nest-building, brooding and rearing its young.

The male repeatedly displays its beautiful iridescent purplish-black head and back, shimmering in the sunlight as it moves about the sub-canopy, proclaiming its territory and displaying to its mate with quivering body and wings and constantly twitching tail. At the same time it utters its territorial call, which has been described as “chuee chuee chuee”. Sometimes it admits a buzzing call rather resembling that of the introduced English Greenfinch.

My first real encounter with this species was in December 1959 when I found a pair breeding in Saint Peters pass in the Tasmanian midlands. The nest was situated, typically, on a dead branch in a green gum tree growing in a steep gully. It was about ten metres above the ground and contained three half-grown young.

In an attempt to photograph the birds I climbed to the nest and started to secure my camera about half a metre from its edge. Before the job could be completed and I could climb back down to fire the camera by remote control when the birds returned, the female flew in and sat partly covering her brood. In the ensuing half hour I was able to take numerous pictures of both the male and female without needing to retreat from my position beside the nest as both birds insisted on returning at regular intervals to tend the young despite my presence.

The nest of the Satin Flycatcher is a beautifully formed, cup-shaped structure, composed of finely shredded, soft, dry bark which is bound together and fastened to the dead branch, upon which it is invariably placed, with a liberal amount of spider web. The coloration blends with that of the branch and the camouflage is further improved by matching pieces of lichens decorating the sides of the cup. From the ground the nest is almost impossible to see, but a brooding bird may be located when it calls from the nest in response to its mate.

As most Satin Flycatchers do not return to Tasmania before October, breeding is relatively late in the season. The eggs, three or, rarely, four to a clutch, are produced from late

November to the end of December. They are off-white with numerous brown markings. Occasionally the clutch is parasitised with the pink egg of the Pallid Cuckoo. Some broods are still nest-bound as late as early February.

The bird feeds exclusively on insects, mostly taken in flight. Adult males are readily distinguished from females by their plumage, as is beautifully shown in the accompanying illustration.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#159). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey Fantail *Rhipidura fuliginosa*

This is one of the best known and most loved of our birds. It occurs widely throughout the island and may be found in almost any habitat, from heavy forests to suburban parks and gardens.

A member of the flycatcher family, it is indeed a truly skilled exponent of that specialised mode of feeding. What a fascination it is to watch one of these tiny birds securing its prey in mid-flight! Constantly alert while perched where it can watch for its next victim, it repeatedly twitches its body and beautifully fanned tail from side to side. When a flying insect ventures within a convenient range, the bird launches itself into a short chase to capture it.

In these flights it often performs almost acrobatic movements, a habit which has gained for it the nickname of Cranky Fan. Indeed, a casual observer could not be blamed for gaining the false impression that the bird is simply indulging in play, as the insects it catches are usually so small as to be invisible to us. Its large, rudder-like tail and stocky wings make it extremely agile and, aided by the bristle-like whiskers protruding from the sides of its relatively large mouth – a characteristic of flycatchers – it rarely misses its target.

The Grey Fantail occurs all over Australia and on some of the larger islands to the north and east, and many geographical races have evolved. It is also a migrant, and most of the Tasmanian population is thought to fly northwards across Bass Strait each Autumn and to winter somewhere on the Australian mainland. September usually brings its return, and its excited, “zitting” song and friendly disposition are a welcome and delightful reminder of the onset of Spring.

From October to December is its breeding season and the nest construction at this time is one of the most attractive examples of avian skills. The chosen site is usually from two to four metres above ground and on a fine, bare twig or fork. Wineglass-shaped and tiny – barely five centimetres across – the nest is delicately but firmly woven about the twig. It is composed of fine threads of dry bark and the interior of the chamber is formed from the finest rootlets, but without other lining. The external surface is tightly bound with spider-web, giving the whole structure a smooth, compact appearance.

The Grey Fantail’s tolerance of humans makes it one of the easiest birds to observe, and on occasion it will even nest inside a building. This I experienced when a pair built on a wire hook inside a dairy and successfully incubated and reared their brood despite the dawn and dusk activities less than a metre beneath their nest.

The usual clutch is three off-white eggs which are heavily blotched with brown markings. Two or three broods may be reared each season, but I have known members of the species to produce up to five nests and clutches in a season when earlier nests have been subject to predation.

The sexes are similar in appearance, but juveniles are not so boldly marked and generally show some brown colouration about the face.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#160). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Spotted Quail-thrush *Cinclosoma punctatum*

On the verge of a rarely travelled bush road, or in a clearing in open eucalypt forest, especially in heath land or along stony ridges, you might be lucky enough to come across this ground-dwelling bird in pairs or small parties, foraging for seeds or invertebrates, which, it is believed, constitute its diet.

Although it is widely distributed, the excellent camouflage of its plumage and its shy disposition mean that it is seen only rarely.

This was not always the case. Over a century ago the eminent ornithologist, John Gould, wrote in his *Birds of Australia*, in which he referred to it as the “Spotted Ground-Thrush”:⁵⁰

It is everywhere a stationary species and enjoys an extensive range of habitat, being distributed over the whole of Van Diemen’s Land and the eastern portion of Australia ...

In Hobart Town it is frequently exposed for sale in markets ... where it is known by the name of Ground-Dove, an appellation which has doubtless been given both from its habit of running and feeding upon the ground like Pigeons, and the circumstance of its flesh being very delicate eating; to its excellence in this respect I can bear testimony.

In fact, the culinary qualities of many of our birds were investigated by early naturalists. In many instances the fleshy carcase, a by-product left over from the preparation of a study skin, prepared in the field, must have been a welcome addition to their menu.

No doubt the succulence of the Spotted Quail-thrush, together with land clearing and grazing by domestic animals in the dry open forests and adjacent grasslands, greatly contributed to the reduction of its numbers.

If, by chance, it is flushed, it flies for only a very short distance, and its preference for a terrestrial life is further demonstrated by its nesting habits. The Spotted Quail-thrush is almost unique among the birds of its Order, PASSERIFORMES, or perching birds, in that it nests on the ground, where it depends largely on the colour of its plumage blending with its surroundings and on its stealth of movement to protect it from detection by predators. The chosen site is often sheltered against the side of the tree, log or large rock, and the nest is dish-shaped and formed of grass and leaves. The breeding season is from September to November, and a clutch consists of two or three pale cream eggs heavily blotched with lavender and grey. This colouring, together with that of the brooding bird, affords excellent camouflage.

One unexpected sighting was of a pair, feeding at dawn, on the edge of a logging road through heavy forest and dense ground cover on the side of Maggs Mountain in the Arm

⁵⁰ John Gould, *The Birds of Australia in seven volumes* Volume IV (John Gould, Golden Square, 1848) <<https://www.biodiversitylibrary.org/item/191229#page/25/mode/1up>>.

Valley, at an altitude of 600 metres. When flushed, the birds flew just a few metres from the road edge to alight on a fallen log, along which they ran some distance before going to ground.

Interestingly enough, although the Spotted Quail-thrush also occurs in the south-east of the Australian mainland, it is not found on any of the Bass Strait islands. Its sedentary nature apparently precludes any movement across the Strait.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#161). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Clamorous Reed-warbler *Acrocephalus stentoreus*

The strong and melodious warbling song of this bird is likely to be the main indication of its presence in its Summer home. It can be heard among the tall reed beds which fringe the banks of the Tamar and North Esk Rivers near Launceston, the Derwent near Bridgewater or some rivers and lagoons in the midlands.

Even when its song has been heard and recognised, there is little chance of the Clamorous Reed-warbler being seen, as it is naturally shy and retiring, preferring to stay within the shelter and protection of the reeds, its specialised habitat, where the sombre plumage of both sexes helps it remain inconspicuous.

Occasionally it will venture to fly briefly above the reeds before returning to cover, but mostly the good fortune of gaining a glimpse of the bird only comes as a reward for long periods of patient stealth, sitting, listening and watching.

Though its distribution is limited by the availability of suitable reed beds, the species ranges widely, occurring in the African and Asian regions as well as Australia.

A migrant, it arrives in Tasmania during September and almost immediately sets about breeding. By March the offspring have become independent and the population leaves for northern regions.

The nest, which usually contains a clutch of three greenish-white eggs, heavily mottled with brown and grey spots, is a deep cup-shaped structure formed from the foliage of aquatic plants.

Fine strips are taken from reeds and the nest is lined with even finer material including the flowering seed heads of the rushes. This is securely woven between three or four standing reed stems and the whole structure sways with the movement of the reeds.

The Reed-warbler's food is believed to consist solely of insects and other invertebrates secured from among the reeds.

Characteristically the birds cling to the sides of vertical rush stems as they move through the foliage and the young adopt the same behaviour when they leave the nest, even before they can properly fly.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#162). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Little Grassbird *Megalurus gramineus*

A weak and mournful monotone whistle of two or three syllables coming from a densely vegetated marsh, reed bed or other such wet area is usually the first, and sometimes the only, indication of the presence of this shy little bird.

It occurs in every Australian state but is restricted to the confines of its specialised habitat. Localised populations are to be found in many parts of Tasmania, including the islands of Bass Strait.

The Little Grassbird is perhaps more noticeable in the months of Spring, when breeding occurs. Then, if it is disturbed, it becomes agitated, utters a harsh, scolding chatter, and may briefly emerge from cover and expose its presence as if attempting to lure the intruder away from the vicinity of its nest or young.

Often, if faced with danger, it is reluctant to take flight at all, preferring to seek protection by hiding deep among the grasses. Even beating the vegetation will not necessarily make it rise, for it will probably have avoided the intruder by creeping away unseen, or will stubbornly remain unmoved, relying on the camouflage afforded by its plumage, which is the same for both sexes.

Indeed, flying does not seem to be a forte of the Little Grassbird, for it is never seen to take wing for more than a few metres at a time before dropping to cover in the dense vegetation where it nests.

The nest is cup-shaped and composed of grass with a lining of feathers. A striking feature of its construction is the addition of one or two body feathers from a much larger bird, such as a swamphen, which are carefully inserted so as to form a semi-dome or delicate hood over the brood chamber. Three or four white eggs, heavily spotted all over in various shades of reds and greys, formed the clutch.

Little is known of the movement of this bird outside its breeding season. It is apparently resident throughout the year, but no doubt some exchange of young birds takes place between the geographically isolated populations.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#163). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Golden-headed Cisticola *Cisticola exilis*

Although this dainty little warbler is common in certain parts of King Island there is only one account of it having been found living on the mainland of Tasmania.

It also occurs widely across northern and eastern Australia and into South-East Asia and India. Its favoured habitat is areas of coarse, long grass and rank vegetation such as that which grows in marshy or damp, low-lying country.

On King Island I was shown this bird by Max McGarvie who had for some years known of its presence in coarse grassy flats on his property at Egg Lagoon in the north of the island. Max informed me that occasionally, to his distress, he discovered a nest while slashing excessively rank growth in certain parts of his cow pastures. Such unavoidable encounters invariably resulted in destruction of the nest and its contents. Unfortunately the long-established practice of draining and ploughing marshy land for agriculture has destroyed much of the cisticola's habitat and consequently it has disappeared from some districts.

The Springfield district near Scottsdale is a good example of general draining, land clearing and establishment of improved pasture resulting in the decline of bird species. Extensive wetlands were a feature of the valleys in the district last [19th] century, and they supported tall, rank vegetation and numerous marshland birds. Today most such areas have been transformed for highly productive pastures and crops, and among those birds which have suffered is the Golden-headed Cisticola.

It was first recorded there in 1913 by Miss Jane Fletcher, who taught at the local school and was a most competent ornithologist and the author of many books and papers on Tasmanian natural history.⁵¹ Writing in the quarterly journal of the Royal Australasian Ornithologist Union she recorded the findings of several of her observant young students and of her own investigations which had been prompted by these accounts. These resulted in several sightings of this shy little bird and the discovery of a number of its peculiarly characteristic nests and eggs. Sadly, it has not since been recorded from the Springfield district, nor from anywhere else in Tasmania except King Island.

Because of its shyness it prefers to seclude itself in the ground cover, making it difficult to see clearly. However, when all is quiet and the bird is not disturbed it will venture to perch in some exposed position such as on a fence, a bush or a tall clump of grass. There it may utter its peculiar little song, which, considering the size of this tiny bird, is surprisingly penetrating. It has been described as a rapid "zit-zit-zit" musical chatter. At the least disturbance the bird will dive for cover and remain there until its confidence is restored. Its food apparently comprises tiny insects taken from among the vegetation.

⁵¹ J A Fletcher, 'Occurrence of Cisticola in Tasmania' (1913) 12(3) *Emu* 171
<<https://www.biodiversitylibrary.org/bibliography/16355>>.

Breeding takes place in Spring, the nests found at Springfield by Miss Fletcher's students containing eggs in September, October and November. The nest is a remarkable structure, domed with an entrance near the top. Often it is formed between broad leaves which the pair of birds have drawn and sewn together with coarse cobweb to form a framework. This habit has earned the species the alternative name of "Tailorbird". The body of the nest is composed of very fine grasses and lined with down and spider webs. A clutch consists of from three to five vivid sky-blue eggs marked on the larger end with reddish-brown spots.

The plumage of both sexes is much alike, except that the golden head of the female is streaked with dark markings. Outside the breeding season the male assumes plumage similar to that of the female, but can be distinguished by its longer tail.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#164). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Superb Fairy-wren *Malurus cyaneus*

This, one of the most loved and best known of our birds, occurs throughout the State. It lives near the ground in eucalypt forests, scrubs and heathlands, but also visits suburban parks and gardens, where, if unmolested, it becomes quite tame. A constant supply of crumbs of biscuit, cheese or fat at a feeding station will entice it to become a regular visitor.

There is a commonly accepted, but false belief that the Superb Fairy-wren is polygamous. This misconception has arisen because some males of less than four or five years old lose their conspicuous, bright plumage outside the breeding season. These younger, mature males sport their eye-catching colours only during Spring and Summer. In Autumn they moult and assume what is called “eclipse plumage”, which gives them an appearance resembling that of the females. However, close observation will enable a distinction between the sexes to be made. Males retain the dark blue colouring of the tail, and can always be distinguished by their black beak, as shown in the accompanying illustration.

For such a small bird the Superb Fairy-wren is admirably equipped with long and slender, almost stilt-like legs. This adaptation giving it an advantage when feeding on the ground, providing it with a better view of what food is available among the grasses, and lessening the chance of the feathers becoming soiled should the grass be wet.

The Superb Fairy-wren is a sociable species, and usually occurs in groups of from five to ten. These groups might include males in full breeding plumage, males in eclipse, adult females and first year birds of both sexes. A group like this will generally remain within a restricted home range and only split up into pairs with the onset of breeding.

The domed nest is usually well hidden among long grass or other dense vegetation, either native or introduced. In fact these birds have adapted well to the introduction of the blackberry and will often construct their nests within its protective tangle.

Three or four eggs form a clutch and only the female broods. The eggs hatch in about two weeks and after another two weeks the young are flying. A second nesting usually follows and the young of the first brood may assist in feeding the second. It is at this time that they are most vulnerable to predation by domestic and feral cats, as well as numerous native predators such as snakes and hawks.

The Superb Fairy-wren is strongly maternal, especially when its young first venture from the nest. If there is a threat of danger to them, the mother immediately attempts to create a distraction by prominently exposing her own presence. She often does this by assuming a distressed posture, as, for example, shamming a broken wing and fluttering along the ground in apparent helplessness. In this way she is, of course, putting her own life at risk in the endeavour to draw the would-be predator away from her young.

If, however, this ruse has proved successful, she will escape by full flight or by seeking shelter among dense vegetation, only returning to the brood after the invader has moved on.

By the end of December, with the arrival of Summer holidays, the breeding season is over and the Superb Fairy-wren contents itself with moving around the general vicinity of its territory accompanied by its young family. At this time it is perhaps most attractive to bird lovers, its dainty, frail form darting over the ground and in and out of bushes in a constant search for the ants and other tiny insects upon which it feeds. In Autumn and Winter groups wander over a wide range to seek food and maintain contact by their social chatter.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#165). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Southern Emu-wren *Stipiturus malachurus*

The name sounds like an impossible contradiction. How can a wren be like an emu? The answer, as exemplified in this tiny bird, lies in its extraordinary tail feathers, which somewhat resemble the plumes of an emu.

The Southern Emu-wren has a timid nature and secretive habits which, together with its restricted distribution, result in its rarely being observed unless one sets out with that objective.

Its favourite haunts are the bogs and wet heathlands where the sedges and other vegetation are tall and dense, providing shelter and protection from predators. Occasionally it climbs mouse-like up the plant stems for a brief view of its surroundings and upon taking flight flutters for only a few metres before dropping to cover.

To the stealthy observer its presence may first be detected by its whispering call which is similar to that of a Superb Fairy-wren but which is so faint as to be barely audible to us. If this call is mimicked back to it, it may put in a brief appearance, rewarding the cautious observer with a view of its remarkable tail held high above its back.

If danger threatens it is reluctant to take flight at all, preferring instead to hide deep among the grasses. One instance has been related of when, being hunted by a dog, the Southern Emu-wren took shelter down a yabby burrow rather than fly away.

In Tasmania the strongest populations are in the wet sedgeland and heathlands in the west and south of the island. Elsewhere its numbers have been progressively reduced by draining and reclamation of the swamps and bogs it once inhabited.

Early this century this beautiful little wren was common in dense vegetation growing in the drains and bogs near Springfield and Scottsdale where Jane Ada Fletcher, an eminent educationist and author of children's literature, studied its habits and wrote accounts of it in journals.⁵² Her patience and familiarity with the bird enabled her to find many of its nests.

⁵² J A Fletcher, 'Bird notes from Wilmot, Tasmania' (1904) 4(1) *The Emu* 33 14–17, 16 <<https://www.biodiversitylibrary.org/item/38293#page/28/mode/1up>>; J A Fletcher, 'List of birds observed in the Wilmot district, north-west Tasmania' (1908) 8(1) *The Emu* 32–33, 32 <<https://www.biodiversitylibrary.org/item/88007#page/52/mode/1up>>; J A Fletcher, 'Field notes on the Emu-wren (*Stipiturus malachurus*)' (1913) 12(3) *The Emu* 168–70 <<https://www.biodiversitylibrary.org/item/81122#page/234/mode/1up>>; J A Fletcher, 'Springfield (Tasmania) Notes' (1913) 13(1) *The Emu* 49–51, 50 <<https://www.biodiversitylibrary.org/item/55265#page/82/mode/1up>>; J A Fletcher, 'Further field notes on the Emu-wren' (1915) 14(4) *The Emu* 213–17 <<https://www.biodiversitylibrary.org/item/81388#page/307/mode/1up>>; J A Fletcher, 'Notes from Springfield' (1915) 15(1) *The Emu* 193–4, 194; see also, Charles Barrett, 'Emu-wrens in Tasmania' (1915) 15(1) *The Emu* 48 <<https://www.biodiversitylibrary.org/item/35754#page/75/mode/1up>>; Anonymous, "Stories from Nature" by J A Fletcher (Book review) (1915) 15(1) *The Emu* 65;

Unfortunately for the species, drainage and agricultural development in this district have greatly reduced its numbers there.

Breeding occurs in Spring and early Summer, when a well-hidden, domed nest is built among dense vegetation. Three white eggs, peppered with fine, reddish-brown spots, form the clutch. From these, three young are usually reared and then a second setting, in a new nest, closely follows the fledging and flight of the first. The young might remain in the company of their parents for some months.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#166). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Brown Scrubwren (now Tasmanian Scrubwren) *Sericornis humilis*

Although generally shy and elusive, this bird will sometimes respond to a squeaky whistle by emerging from cover to investigate the cause of the sound, especially when it has newly fledged young.

When greatly concerned for the safety of its dependent offspring, it may become almost aggressive, approaching the intruder and announcing its presence volubly with a tirade of scolding chatter. At other times its movements are quiet and almost mouse-like as it creeps beneath the ferns, logs and dense vegetation. Occasionally it appears for a few moments before again returning to cover, later to emerge somewhere else if all is quiet and undisturbed. Then it will resume its search for food among the moss and litter on the forest floor.

The Brown Scrubwren is widely distributed in Tasmania, favouring wet forest, but it also occurs among tea-trees, in fern gullies and in dense scrub, beneath which it finds shelter and protection. Rarely does it fly more than a few metres at a time and it is hesitant to ascend more than a metre or two above the ground, where it feeds on a range of small invertebrates and, occasionally, seeds.

Breeding may commence as early as July in the warmer lowlands but is usually a little later at cooler altitudes. The domed nest is always well hidden beneath vegetation and is composed of a variety of grasses, leaves, rootlets and green moss which blend with the surroundings. The egg chamber is deep, well concealed and copiously lined with feathers and fur. The clutch consists of two or three mottled, chocolate-brown eggs.

The Brown Scrubwren occurs only in pairs or family groups and remains within a limited home range of perhaps 100 metres or so throughout the year. One which I captured and leg-banded during forest fauna studies at Maggs Mountain in the Arm River Valley in 1965 was recaptured in exactly the same spot three years later.

Although there is some debate and confusion about the taxonomy of scrubwrens and the degree of divergence and specialisation between the species of which there are at present some half dozen or so recognised in various parts of Australia, *Sericornis humilis* is the only scrubwren found in Tasmania.

The Tasmanian population was originally described as a full species by John Gould in 1838⁵³ and for many years was considered distinct from the Australian mainland populations and thus endemic to Tasmania. Later it was lumped with the White-browed Scrubwren *Sericornis*

⁵³ John Gould, *The Birds of Australia in seven volumes* Volume III (John Gould, Golden Square, 1848) *Sericornis humilis*, Sombre-coloured Sericornis
<<https://www.biodiversitylibrary.org/item/187975#page/197/mode/1up>>.

frontalis of the eastern Australian mainland and considered as only a subspecies. More recently, however, studies have indicated that the Tasmanian population does in fact warrant full specific status and the present author follows that opinion.

The Tasmanian birds are larger, darker and generally not as distinctively marked as those of the mainland and, to add to the confusion, a degree of variation occurs within the species which is apparently related to age. First year birds are duller and lack a defined pale eyebrow. There is, however, no difference of plumage between the sexes.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#167). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Scrubtit *Acanthornis magnus*

This bird, a truly endemic Tasmanian monotypic genus, inhabits rainforests in many parts of the State and rarely ventures far from the cover provided by this dense, damp and shaded environment.

It can be distinguished from its fellow denizens of the rainforest, the scrubwren and the thornbill, by a pale lemon tinge in its breast feathers. Superficially, its plump form and plumage more closely resemble the scrubwren but it is more akin to the thornbill in its feeding behaviour, climbing among logs, tree-ferns, branches and foliage in a seemingly incessant search beneath the bark and amongst the leaves for its diet of insects.

The Scrubtit's vocabulary is similar to that of the thornbill but its call is more subdued and lacks the note of excitement often heard in the thornbill's.

Although it is not uncommon within the limits of its specialised habitat, the denseness and inaccessibility of this preferred terrain makes observation difficult. A good deal of luck is required if one is to obtain a satisfactorily clear view of this rather timid and peculiarly Tasmanian bird.

The Scrubtit may be found occurring singularly or in pairs, and both sexes have similar plumage. Breeding takes place from September to the end of the year, the nest being domed and hidden beneath the dead fronds of a tree-fern or among pendant foliage, up to four metres above ground. The usual clutch is of three white eggs which are blotched on the larger end with reddish-brown.

The taxonomic status of this bird has long intrigued and confused ornithologists. Because its general behaviour somewhat resembles that of a thornbill *Acanthiza* sp and its superficial appearance is rather like that of a scrubwren *Sericornis* sp, it has at various times been assigned to one or other of these genera. However, in 1886, Colonel W V Legge, a prominent Tasmanian ornithologist and later President of the Royal Australian Ornithologist Union, considered it sufficiently distinct from them to be assigned to a monotypic genus of its own.⁵⁴ He combined parts of each name to erect the genus *Acanthornis*, which is here retained for this most interesting and unique bird.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#168). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

⁵⁴ William Vincent Legge, 'Systematic list of Tasmanian birds' (1886) *Papers and Proceedings of the Royal Society of Tasmania* 235 at 236 <<https://eprints.utas.edu.au/view/collections/royalsociety.html>>.

Striated Calamanthus (now Striated Fieldwren) *Calamanthus fuliginosus*

Early this century, when quail were more plentiful and quail shooting was a popular pastime, specially trained dogs were used to put the birds to flight. As these birds often occur in the same areas as quail they could cause considerable confusion for the shooters' bird-dogs who were apt to mistake their movements and scent for those of quail. This once earned for this field-wren the uncomplimentary nickname of "stink-bird" among the quail shooting fraternity.

Poa tussock grass and coastal heathland are its favoured habitats. It is widely distributed throughout Tasmania and also occurs in the south-east of the Australian mainland. With a rather timid disposition and the sombre plumage which is common to both sexes, it is inconspicuous and not readily recognised, except by those familiar with its habitats and song.

This bird was once known as the Striated Fieldwren, a name which is most descriptive of its plumage and life style, but in recent years some research is considered that this bird should be placed with the scrubwrens in the genus *Sericornis* and chose to use the name "Calamanthus" as its English name. The new English name is now generally accepted, but the old generic classification is here retained.

Spring and the onset of breeding is perhaps the best time to view the Striated Fieldwren, as it is then that it is at its most vocal; the male can be observed proclaiming its territory while perched on a fence, a stump or the top of a bush to sing its pleasant song. Its warbling repertoire may continue for some time, interrupted for short periods as if for breath and to view its surroundings. At these times it might give a few swift lateral flicks of its erect tail.

If disturbed it immediately darts earthwards to gain protection and security beneath the grass and bushes, reappearing only after it has regained confidence. Only when hard pressed will it take flight, and then only for a short distance, flying just above the vegetation in order to escape pursuit. Otherwise it prefers to run or hop along the ground from bush to bush and hide beneath the vegetation while it can.

The food of the Striated Calamanthus consists mostly of small insects taken from among the grass and when feeding it moves about, mostly by hopping, in the manner of a fairy-wren, but with the difference that it usually carries its tail horizontally.

Breeding might take place from September to the end of the year. The nest is domed and very well hidden in grass or dense vegetation on or near the ground. Three buff eggs form the usual clutch.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#169). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Brown Thornbill *Acanthiza pusilla*

In the Autumn and Winter months Brown Thornbills may congregate in nomadic flocks of up to two dozen birds and at such times often can be observed visiting suburban gardens.

They feed on small invertebrates, both larval and adult, which they take from beneath the bark and amongst the foliage of trees and shrubs in a constant search which will continue in apparent disregard of any observer. While feeding, the birds maintain an almost incessant chattering conversation, which may be a means of communication between individuals, enabling them to keep their association and flock formation and preventing single birds from becoming lost from the party.

The call is a complex array of rapidly repeated “zits”, “phees” and “chirrup” which blend to form a rather pleasant little song. Occasionally this routine is interrupted by mimicry of other bird calls at a subdued, almost imperceptible level, as if the thornbill is quietly practising to itself. This habit of mimicking is well known to bird banders as the thornbill is prone to engage in it when nervous, for example while being handled or upon being extracted from a net.

Breeding occurs in Spring, when a deep, domed nest of finely shredded bark, dry grass, wool and feathers is built in a secluded place among dense vegetation, either near the ground or, sometimes, at a height of up to four metres in thick foliage. Three or four eggs form a clutch, which is occasionally parasitised with an egg of the Fan-tailed Cuckoo or one of the bronze-cuckoos.

Thornbills are among the birds which maintain a high level of nest hygiene by removing the faecal sac of nestlings. This is usually done immediately following a visit with food, a time when the young are most likely to pass faeces. The parent will often wait a few moments as if to see if this is going to happen and if it does it will take the sac in the tip of its beak as it leaves the cloaca and fly with it for some distance from the nest before dropping it.

There are a dozen or so thornbill species in various parts of Australia, with three of these being found in Tasmania. Although the taxonomic status of some is not yet fully understood and agreed upon, those which occur in Tasmania are quite distinct.

Of these the Brown Thornbill is probably the most common and best known, as it may be found in eucalypt forests, woodlands and wattle and tea-tree scrubs throughout the island. It occurs also on the Australian mainland, but is absent from the Furneaux Islands, its place there being taken by the endemic Tasmanian Thornbill.

These two species can be easily confused, but the Tasmanian Thornbill lives principally in rainforest, a habitat which the Brown Thornbill does not enter. In areas of wet eucalypt forest, where the two species occasionally overlap, some confusion of identification might

occur, but here the plumage, which is the same for both sexes, can be a guide. The Brown Thornbill can be distinguished (more easily with the aid of binoculars) by buff feathers beneath the butt of the tail. These feathers are white in the Tasmanian Thornbill. This distinction is shown in the respective illustrations.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#170). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Tasmanian Thornbill *Acanthiza ewingii*

This is a bird of the wet forests, endemic to Tasmania, and occurring widely in association with myrtle beech. Only occasionally does it venture into dry eucalypt forest. However, on some offshore islands and on the islands of Bass Strait where the Brown Thornbill is absent, it has extended its range and has successfully colonised drier habitats.

The Tasmanian Thornbill was originally described by John Gould in 1844 and named in honour of his friend, the eminent naturalist Rev Thomas James Ewing.⁵⁵ However, because of its great similarity to the Brown Thornbill, it was confused with that bird for much of the last century and was rejected as a separate species until undoubted status acceptance was eventually established in 1903.⁵⁶

By careful observation, preferably with the aid of binoculars, it can be distinguished from the Brown Thornbill by a few tiny white feathers beneath the butt of its tail. These often curl up on either side. The Brown Thornbill, by contrast, has buff coloured under-tail feathers.

The breeding season is from October to December and the body of its tightly woven nest includes, as might be expected of a rainforest species, green moss and soft fibre from the tree-fern. The nest is domed and neatly constructed. Feathers usually line the deep egg chamber, the entrance to which is well concealed beneath an overhanging, verandah-like lip. The siting of the nest can vary. In some cases it will be found near ground level among accumulated forest litter, but it may be beneath dead fronds in a tree-fern or even up to several metres above the ground in the foliage of a myrtle beech tree. Three white eggs, finely peppered with reddish-brown spots, form the usual clutch.

At nesting time and when tending fledglings the bird will readily respond to squeaking sounds, investigating the cause and approaching to scold the intruder with a constant and vigorous stream of chatter. Its calls are very similar to those of its close relative, the Brown Thornbill, although some observers consider it to be slightly more melodious and high-pitched. It has a complex and varied vocabulary, some components of which may be described as “tit-a-woo” or “zit-a-whorl”.

Outside the breeding season the Tasmanian Thornbill forms small parties which move through the forest in a seemingly never-ending search for food, during which they may ascend to glean among the high foliage of the myrtle canopy.

⁵⁵ John Gould, *The Birds of Australia in seven volumes* Volume III (John Gould, Golden Square, 1848) *Acanthiza eqingii*, Ewing’s *Acanthiza* <<https://www.biodiversitylibrary.org/item/187975#page/229/mode/1up>>.

⁵⁶ ‘Australian Ornithologists’ Union: Hobart Congress’ (1904) 3(3) *The Emu* 150 <<https://www.biodiversitylibrary.org/item/36066#page/178/mode/1up>>, 159 <<https://www.biodiversitylibrary.org/item/36066#page/187/mode/1up>>.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#171). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Yellow-rumped Thornbill *Acanthiza chrysorrhoa*

Pine trees which have been introduced to Tasmania are normally shunned by native birds, but the Yellow-rumped Thornbill is an exception and has often been known to build its nest among the foliage of a pine.

The nest is domed, relatively large and roughly constructed of dry grass, wool, spider webs and the egg sacs of spiders. It is heavily lined with wool, feathers and fur, and placed among dense foliage at a height of between two and six metres above the ground. Its most remarkable feature, however, is that it has a second storey, which is apparently never used.

It has been suggested that this extra chamber might be for the male to sleep in at night while the female broods. Another theory put forward has been that it is there to try to fool the parasitic cuckoos into depositing their eggs there instead of in the occupied egg chamber. The question is as yet unresolved and this unique practice still offers a challenge to those who would study the habits of this bird.

The clutch, which usually consists of four white eggs, is often parasitised by a bronze-cuckoo, a bird which on fledging is about twice the size of its foster parent.

The Yellow-rumped Thornbill belongs to the grasslands and woodlands, shunning the heavy forests which are favoured by the other two Tasmanian thornbill species. It has a pleasing tolerance of humanity, and sometimes briefly visits country and suburban gardens.

Outside the breeding season, which extends from September to the end of the year, it is gregarious, feeding on the ground in small flocks which, if alarmed, will take flight to perch on a fence line or in the shelter of nearby trees. Members of a flock produce a soft, chattering song which appears to be their means of maintaining communication. This song is often the first indication of the bird's presence, as its plumage colour, which is the same for both sexes, blends with that of the grasses among which it searches for its diet of insects, thus making visual detection difficult.

The Yellow-rumped Thornbill is widely distributed over most of Australia, with the exception of deserts and heavily forested regions. Thus, in Tasmania, it is to be found principally in the eastern half of the island, shunning the high altitudes and heavy wet forests of the west. It is apparently less numerous today than at the beginning of the century, when F M Littler in his *Birds of Tasmania* suggested that it was "perhaps the commonest of the *Acanthiza*".⁵⁷ This claim certainly could not truthfully be made now.

⁵⁷ Frank M Littler, *A handbook of the Birds of Tasmania and its dependencies* (Frank M Littler, Launceston, 1910) Yellow-rumped Tit, 39
<<https://www.biodiversitylibrary.org/item/34662#page/85/mode/1up>>.

Why the numbers have apparently declined to such an extent is not known, and reasons that have been given are merely postulation. It does, however, appear to have a preference for areas of native grass land as opposed to introduced pasture, and the gradual conversion of the former into the latter by such things as top dressing and the introduction of exotic clovers, together with the resultant higher domestic stock numbers, may have contributed.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#172). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Yellow Wattlebird *Anthochaera paradoxa*

Perhaps the most distinctive characteristic of this bird is its strange guttural call, which, as it feeds in the forest canopy on a still day, may be heard up to a kilometre away. The loud and unmistakable “Kalak” uttered by one bird will often be answered by a “Kalok” from another, in such rapid succession as to give the impression that both calls are coming from the same bird.

The Yellow Wattlebird is the largest of the many species of honeyeaters which occur throughout Australia. It is endemic to Tasmania and, although a close relative of the Red Wattlebird of the mainland, it is of much greater size and this, together with its spectacular, elongated face wattles, enables it to be distinguished from that species and also from the smaller Little Wattlebird.

It is primarily a bird of the eucalypt forests, where it forages among the foliage and beneath loose and pendant bark for the invertebrates upon which it feeds. Flowering eucalypts hold a particular attraction, for amongst these it feeds on nectar and also, no doubt, on the insects which are attracted to the blossom. As well, it will visit orchards, where it indulges its fondness for over-ripe fruit. When competing for food it is rather aggressive towards other species and even to others of its own kind. In fact, squabbles between pairs or between individuals take place quite commonly.

Outside the breeding season it is gregarious and nomadic, moving in loose flocks to take advantage of any temporary food source. Leg banding with numbered rings, conducted under special fauna license by trained personnel, has revealed that the Yellow Wattlebird travels considerable distances in search of favourable feeding areas. Birds have been recorded as moving from the Central Highlands to the east coast or vice versa, a distance of more than 100 kilometres.

During Winter it becomes exceedingly fat, a characteristic which, until 1973, led to many of the species falling to the shooter’s gun. Prior to that year an open season was proclaimed annually for the months of June, July and August, and wattlebird shooting was an esteemed sport, with the fat-enriched bodies considered a great delicacy.

Its flight is generally in a direct line from point to point on a steady wing beat as it moves through the tree tops in search of food. The sexes have similar plumage, but the males are considerably larger than the females.

Breeding occurs in Spring and the nest, which is bulky and dish-shaped, is built high up in a eucalypt. Two or three pink eggs form a clutch.

In the years when it was subjected to open season shooting, the Yellow Wattlebird was extremely wary and difficult to approach. It had obviously learned to distrust the presence of

humans. Hunters had to hide beneath a likely feed tree, usually a lofty eucalypt with plenty of blossom, and wait patiently or stalk their prey with great stealth in order to come within gunshot range. Fortunately today, following some years of total protection, this most handsome bird is becoming much less timid and will occasionally visit city or suburban gardens.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#173). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Little Brush Wattlebird *Anthochaera chrysoptera*

Imagine the scene: you are holidaying at a Tasmanian coastal resort, a peaceful spot where banksia and tea-tree scrub runs down to the sea. Free from the pressures of work, you are looking forward to sleeping well into the morning. Just as the first light of dawn appears you are woken by a raucous sound which will not let up.

The culprit is likely to be the Little Wattlebird, whose harsh guttural call, described by the eminent ornithologist John Gould as “Goo-gwar-ruck”,⁵⁸ is apparently uttered as a warning to others that it has occupied its territory, perhaps as a feeding zone or perhaps for nesting. It is serving notice that it will aggressively defend this domain against intruders.

There are some who find amusement in this bird’s call, as it appears to exert great effort in producing the sounds, forcing them out as if from deep within its body, its head thrown back, body pulsating, tail jerking and beak clapping together as if stuttering. The combined effect of all this exertion is to produce a vocal presentation far removed from the poet’s stereotype of “full-throated ease”.

The Little Wattlebird is the smaller of the two species of wattlebirds occurring in Tasmania. It is also found in the south-east and south-west of the Australian mainland. Unlike its larger relative the Yellow Wattlebird, it is restricted in its distribution to the lowlands, mostly in the eastern half of the island. It is absent, however, from the islands of Bass Strait.

It favours areas of banksia, tea-tree and coastal scrubs, a preference which gave rise to it once being known as the “Brush Wattlebird”. Extensive land clearing for agriculture has greatly reduced the incidence of the Bottle-brush *Banksia marginata* and this has no doubt been responsible for a corresponding reduction in the distribution and population of the Little Wattlebird. Wherever this banksia is to be found, so too is the Little Wattlebird.

Being a member of the honeyeater family, it eats both nectar and invertebrates. It is an active and highly vocal bird, especially in Spring and early Summer when it breeds. Males and females are of similar plumage, but males have larger body proportions. The harsh-sounding call is not only uttered in the comic boastful posture described above, but also while the bird is moving about in search of food. Unlike the Yellow Wattlebird it rarely forms nomadic flocks, remaining for the most part in family groups, and apparently staying within a particular territory throughout the year.

The Little Wattlebird is a relatively late breeder. Rarely does it lay its eggs before mid-October and eggs may be produced even as late as January. The bowl-shaped nest of twigs is

⁵⁸ John Gould, *The Birds of Australia in seven volumes* Volume IV (John Gould, Golden Square, 1848) *Anthochaera mellivora*, Brush Wattle-Bird
<<https://www.biodiversitylibrary.org/item/191229#page/236/mode/1up>>.

lined with shredded bark, grass, wool and fur, and placed at a height of between one and five metres above ground, usually in the smaller branches of a tree.

The clutch is almost invariably two. One observer who examined in excess of 100 nests in 1919 stated that only in two instances was the complement three. This statistic is also an indication of an apparent decline in the bird's population, as such a number of nests could now scarcely be found in one season.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#174). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Noisy Miner *Manorina melancephala*

This member of the honeyeater family is well named as, when an intruder enters its territory, its vocal aggression and behavioural displays can be amusing to the eye and strident to the ear. It has a gregarious nature, and lives mostly in colonies or family groups. These groups will often gather to investigate the presence of an intruder or to attempt to drive away any would-be predator with the repeated scolding of their “tee-tee-tee” alarm call. Such activity is most evident at breeding time.

Hence this otherwise attractive and pleasant bird has also been called the “Soldier Bird”. The name “Snake Bird” has been applied, too, as its aggression towards a snake entering its territory is similarly bold and noisy. However, this aggression is generally tempered with a cautious wisdom and usually fall short of actual physical encounter unless the offender be adjudged sufficiently small and inoffensive to take on in combat.

At other times it may engage in elaborate social activity, displaying and vocalising with others of its group as if holding court, a performance which might end in peaceful agreement or in the chastisement of a group member.

Dry, open forest and woodland is the favoured habitat of the Noisy Miner. It occurs throughout eastern Australia, but in Tasmania it is confined to the eastern half of the State. Its distribution is patchy and often very localised; small populations formed of family groups may spend a lifetime in one locality but never enter another adjacent and apparently similar area. The species does not occur on the Bass Strait islands.

Land clearing and the removal of trees has certainly been responsible for the eradication of some of the population of the species. During the present [20th] century it has disappeared from many localities in the midlands, apparently as a result of habitat change as trees have died or have been removed.

As one of the honeyeater family, this bird feeds on nectar as well as on insects taken from among foliage and branches. Sometimes it will visit orchards for ripe fruit and will descend to the ground to search for food. It has also learned to visit farmyards and picnic areas where discarded items such as fat or bread might be available. Under these conditions it becomes very tame and trusting, returning at regular intervals as if such were its rights. Unfortunately today its population and distribution are so reduced as to make such visits exceptionally rare.

It often shares an area with magpies, butcherbirds and the White-cheeked Rosella, and where one of these species occurs so, usually, do the others. These other birds have different food requirements from those of the miner and thus do not directly compete with it for a livelihood.

Breeding takes place in Spring, a dish-shaped nest of twigs, bark, grass, wool and hair being placed in the branches of a tree, from three to six metres above ground level. Three or four pinkish, spotted eggs form a clutch. The sexes are of similar plumage.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#175). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Yellow-throated Honeyeater *Lichenostomus flavicollis*

The rich golden-yellow throat of this bird, contrasting as it does with the brilliant green of the back, makes its plumage, which is similar for the female and for the significantly larger and somewhat brighter male, one of its most striking features. With this colouring and its slender form, it is one of the most elegantly beautiful of endemic Tasmanian species.

The Yellow-throated Honeyeater appears well adapted to a range of habitats. Though it is principally a bird of eucalypt forests, where its colouring helps it blend harmoniously with the foliage, it is widely distributed, ranging from the high altitude wet forests to the dry woodlands of the midlands and the south-east, and also visiting heath, orchards and even suburban gardens in search of food. It can also be found on most offshore islands and on the islands of Bass Strait.

Little is known of its seasonal movements. Some birds appear sedentary, remaining within a home range of perhaps a kilometre throughout their lifetime, whereas others, probably young birds which have not yet become territorially established, move about the countryside as if seeking the best place in which to live and establish residency.

Unlike some other honeyeaters they do not congregate in loose flocks outside the breeding season, but live throughout the year as solitary individuals or loosely associated pairs which maintain contact by an occasional call.

The call of the species can be regularly heard, especially in Spring, and is audible for up to half a kilometre on a still day. Several phrases are used, but those most frequently heard might be described as either a "chok" repeated many times, or a loud and rapid trill as if scolding or growling.

The Yellow-throated Honeyeater has a most inquisitive nature and, though cautious in its approach, will often come to within a few metres of an intruder entering its territory, especially if nestlings or fledglings are present.

As with other members of the honeyeater family, it is equipped with a brush-tipped tongue for extracting nectar from blossom, but it also feeds on invertebrates, for which it searches among the foliage and loose bark of eucalypts. At times it hangs upside down in its efforts to find and secure its food.

Breeding commences as early as August and nests may be found as late as November. The nest, which is cup-shaped, is built of dry grass, bark, cow hair and fur. The site chosen is usually not more than a metre above ground, in bracken ferns or similar dense vegetation. Two or three pink eggs form a clutch, which is sometimes parasitised with an egg of a Pallid Cuckoo.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#176). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Strong-billed Honeyeater *Melithreptus validirostris*

The patchy distribution of this honeyeater might at first give the impression that it is rather uncommon. It generally shuns the woodlands and is mostly restricted to heavy eucalypt forest. In this habitat, however, its numbers are strong and it can be easily located by its communal chattering call, which is uttered as small parties or family groups feed together in the forest canopy or in flight as they move from tree to tree.

Though this call might at times appear to be the result of individuals squabbling, it is more likely to be social, for the purpose of communicating or keeping order within the flock. At such times this bird can be easily confused with the somewhat similar but slightly smaller Black-headed Honeyeater, which behaves in a like manner. However, the Strong-billed Honeyeater can be distinguished by the prominent white stripe running from eye to eye around the back of its head, as shown in the illustration.

It is endemic to Tasmania, including Flinders and King Islands, and is relatively sociable and tolerant of humanity. It can be observed feeding in the manner of a tree-creeper, ascending and descending the vertical trunks of trees, working from high in the canopy to, occasionally, quite near the ground. In search of the invertebrates upon which it feeds, it will pry beneath loose bark and into small crevices. Its method is to use its beak as a chisel or lever, working to uncurl strips of bark or to prise open tiny cracks where insects might be hiding. On a still day the sound of a party of these birds working is audible for some distance.

If an observer is patient and dedicated to the interest of birdwatching it is possible that this honeyeater will feed to within a few metres. I have, on King Island, watched a party feeding among tall paperback tea-trees, busily tearing off loose strips of bark in search of the insects and spiders beneath. As I sat motionless the dozen or so birds worked their way from the canopy down the stem, their attention completely directed to their task. Some actually reached the ground and briefly search through the litter at my feet before moving off to recommence their feeding a little distance away.

With the onset of breeding in September pairs form and occupy their territories. The nest is a deep, cup-shaped structure of shredded bark, grass and wool, lined with finer, softer material including the down from tree-ferns. Its site may be high in a eucalypt or as low as three metres in forest foliage.

Three pink eggs form the usual clutch, which is often parasitised by the Pallid Cuckoo. When this occurs, the cuckoo removes one of the honeyeater's eggs after laying one of its own in the nest. The honeyeater then becomes the foster parent and, after hatching, adopts the young cuckoo, which eventually grows to about three times the size of its host.

Both sexes of the Strong-billed Honeyeater have similar plumage, but juveniles are distinguishable because the head band, which, white in the case of adult birds, is yellow for

the first few months after fledging. The young bird's beak is also yellow, gradually maturing to black in the Summer or Autumn. These features are well illustrated in the accompanying picture.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#177). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Black-headed Honeyeater *Melithreptus affinis*

Widely distributed throughout Tasmania, including the larger Bass Strait islands, this honeyeater is one of our endemic species. John Gould aptly described it as being lively and animated.⁵⁹ It is an inhabitant of the eucalypt forests, where it secures its invertebrate food from among the leaves, often hanging upside down as it gleans incessantly in the swaying foliage.

It also feeds, to a lesser extent, in trees other than eucalypts but it shuns rainforest and is rarely found at an altitude of above 700 metres. Outside the breeding season it congregates in small social parties of about a dozen, moving from tree to tree in search of food and communicating in a chatter which, during flight, can become quite animated.

Breeding occurs from September to the end of the year, and the tiny, deep, cup-shaped nest is well secluded among pendant eucalypt foliage. It is usually so well hidden, in fact, as not to be at all visible from the ground, and on a calm day it appears to be a pleasant and peaceful place of repose. On days of high wind and springtime storms, however, when the average observer is not afield, a very different picture is presented.

At these times the fine, outer foliage thrashes about violently and the contradiction presented by the choice of nest site becomes clear. What seems to have been a wise selection from the point of view of concealment is then shown to result in apparent insecurity. In such adverse conditions the sitting bird will ride out the storm and secure its brood by clutching the floor of the nest with its claws and holding on grimly, even though nest and bird may be tossed about mercilessly by the flailing foliage.

Black-headed Honeyeaters' nests are, in fact, sometimes found on the ground, having been flung far from their bindings by strong winds, but this is an exceptional occurrence and probably only happens to unoccupied or abandoned nests.

The Black-headed Honeyeater appears to be one of the most favoured hosts for the Pallid Cuckoo, as its eggs, which are usually in a clutch of three, are of a similar pink colour to those of the cuckoo, although much smaller. Upon hatching, the baby cuckoo ejects any other young or eggs from the nest, thus laying claim to all the available food for itself.

In Saint Peters Pass I once watched and photographed a young Pallid Cuckoo being fed by a pair of Black-headed Honeyeaters. The parent birds are extremely busy flying to and fro from the nest when tending their own, but in this case they seemed frantically overworked as they kept carrying what appeared to be an endless supply of insect food in their attempts to satisfy

⁵⁹ John Gould, *The Birds of Australia in seven volumes* Volume IV (John Gould, Golden Square, 1848) *Melithreptus melanocephalus* Black-headed Honey-eater
<<https://www.biodiversitylibrary.org/item/191229#page/313/mode/1up>>.

the appetite of their adopted offspring, which was by then four or five times their size. The honeyeaters' little heads would almost disappear in the gaping beak as they placed food items deep in the cuckoo's throat.

The sexes of this species are alike in their plumage, but juveniles of up to about six months old lack the characteristic black cap, the feathers on the top of the head being, in their case, of a similar colour to those of the upper back. This is very well shown in the accompanying illustration.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#178). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Crescent Honeyeater *Phylidonyris pyrrhoptera*

Alfred North, who was once the Curator of Birds at the Australian Museum, Sydney, stated in his 1906 work *Nests and Eggs of Birds* that this honeyeater “is familiarly known both in Australia and Tasmania as the Horse-shoe Honeyeater”.⁶⁰ This name was given in reference to the dark, crescent-shaped markings across the breast, a feature which clearly distinguishes it from other Tasmanian birds. These markings are darker and more boldly defined in adult males than in juveniles or females. The male birds, too, have generally brighter plumage.

With a State-wide distribution and a nomadic nature, the Crescent Honeyeater may be found in a variety of habitats ranging from wet highland forests to coastal heathlands. It feeds mostly among the foliage of smaller trees, such as banksia and tea-tree, and is also attracted to flowering heath where insects and nectar are abundant.

It has become a regular visitor to city and suburban gardens in Autumn and Winter, when its powerfully projected and penetrating call, which might be described as “Egypt”, is often the first indication of its presence. The call can be so strong as to deceive the uninformed into supposing that it must be uttered by a much larger bird.

An individual which has come into a garden in search of nectar and insects from among the exotic flowering shrubs may call from one of the high branches which have recently become bare of leaves, or as it moves energetically and erratically through the foliage. To the suburban bird lover these annual Autumn visits are most welcome, as the bird then becomes relatively tame and tolerant of humans. Its call brings a little of the natural wilderness to enliven exotic gardens during the colder Winter months. Then, with a little persistence, it can be encouraged to utilise a feed table regularly stocked with syrup.

By early Spring it again departs for the forests to breed, a response to its inherited instincts and requirements which evolved with its metabolism long before the arrival of European man and his exotic gardens.

Breeding takes place in Spring, and the clutch, which usually consists of three pink eggs, is laid in a deep, cup-shaped nest made of bark and lined with fine grasses. This is built near to the ground among ferns or similar dense vegetation.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#179). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

⁶⁰ Alfred J North, *Nests and Eggs of Birds Found Breeding in Australia and Tasmania*, Volume II (Australian Museum, Sydney, 1906–1909) 68–71, *Meliornis australasiana* Horse-shoe Honey-eater <<https://ia804707.us.archive.org/9/items/nestseggsobirds02nort/nestseggsobirds02nort.pdf>>.

New Holland Honeyeater *Phylidonyris novaehollandia*

This was one of the first birds to be described from Australia, being named by Latham in 1790 after its homeland. It occurs on the Australian continent as well as in Tasmania and on the larger Bass Strait islands, living mostly at lower altitudes where it favours the dryer eucalypt forests, tea-tree scrubs and heathlands.

It is a regular visitor to parklands and gardens, being attracted to flowering shrubs. To the bird lover who diligently endeavours to encourage honeyeaters and other native species to visit the garden and feed table, however, it can become a most exasperating “customer”. This is because of its aggressive character which will lead it to dominate the food source to the exclusion of most other species, with the possible exception of the large Yellow Wattlebird.

Such greed and vigorous defence of its access to the food supply can, in fact, prove detrimental to it for, if the food provided is merely sugar-water and does not comprise a mixture containing the necessary protein and vitamins, it may almost “starve on a full stomach.”

When the New Holland Honeyeater is feeding from flowers the feathers around its face sometimes become so heavily coated with pollen as to appear quite yellow.

While conducting captive studies on honeyeaters at Exeter in the 1960s I housed several species in large areas of enclosed garden, feeding them and successfully breeding them, on a balanced syrup food. Experience carried out with syrups of different strengths illustrated that the birds could instantly determine mixture strengths and would immediately compensate for any reduction in nutrient level by increasing their intake correspondingly. The stronger the mixture the less they required, but pure saturated sugar solution was insufficient to retain vigour for more than a few days and eventually could result in death, even though some insects were available in the shrubbery.

The lesson from this is that anyone feeding nectar-eating birds at a feed table should consult the various suitable recipes to be found in books specifically written on the subject of encouraging birds to the garden.

Breeding commences in September and young, presumably from second clutches, may be found in the nest as late as January. The nest is cup-shaped and composed of fine twigs, bark, wool and soft vegetable matter. It is placed in a shrub or bushy tree at a height of between one and four metres. A complete clutch is almost always three pink eggs, although occasionally one is removed by a Pallid Cuckoo which replaces it with one of its own.

After the breeding season the New Holland Honeyeater often congregates in small parties, working among the branches, foliage and blossoms of banksias, tea-trees and heaths for invertebrates and nectar. At such times it may become quite vocal, chattering and squabbling

as the group moves from place to place or displaying to each other in a boastful or threatening manner.

The sexes are of similar plumage but juvenile birds are duller and often have a noticeable yellow gape to the beak.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#180). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Tawny-crowned Honeyeater *Phylidonyris melanopus* [now *Gliciphila melanops*]

In his *Birds of Australia*, published in 1848, John Gould refers to this honeyeater as being “abundant on the north side of the island” of Tasmania.⁶¹ This is scarcely the case today as much of the specialised habitat which it prefers has, since Gould’s time, been cleared to make way for introduced pasture.

The Tawny-crowned Honeyeater also occurs on the Australian mainland, but in Tasmania its stronghold is in the undeveloped areas of stunted eucalypt growing in heathland, especially along the west and east coasts, on the Furneaux Islands and on Bruny Island.

It has a rather shy disposition which, together with its inconspicuous plumage, result in it being easily overlooked or perhaps mistaken for Richard’s Pipit if viewed from a distance and perched on top of shrubbery. When disturbed or threatened by danger it generally flies swiftly for only a short distance and seeks shelter and seclusion among foliage.

At other times its flight, too, can be rather pipit-like, as it skims just above the heath with occasional bursts of rapid wing beats or, in Spring when proclaiming its breeding territory, ascends high into the air for brief flights over greater distances.

Its song has a plaintive tone, and the bird seems almost to have the talent of a ventriloquist. In seeking to view a Tawny-crowned Honeyeater after having been alerted to its presence by hearing its call I have regularly been deceived both as to the direction and the distance from which the sound came. Its timidity is such that all too often one finds that the bird has moved to another spot without the flight having been observed, or at best one has gained a fleeting glimpse of it passing in the distance. It is only with care, stealth, patience and a pair of good binoculars that clear and satisfactory views of it can be obtained.

Breeding takes place from September to the end of the year, with nestlings and fledglings occasionally being fed as late as January. The nest is a deep cup, formed from strips of bark, grass and wool, sometimes covered with spider webs and beautifully lined with soft material such as thistledown and feathers. The site chosen is not more than 40 centimetres above ground, among heath or other such stunted vegetation. The normal clutch is two or, rarely, three eggs of a very much paler colour than the typical pink of other Tasmanian honeyeaters.

The sexes are of similar plumage, but juveniles can be distinguished by a yellowish throat patch and by the crown of the head, which has not yet developed the distinctive tawny fulvous colour of the adult birds, a feature which gave rise not only to its current English name but also to an earlier one, the Fulvous-fronted Honeyeater.

⁶¹ John Gould, *The Birds of Australia in seven volumes* Volume IV (John Gould, Golden Square, 1848) *Gliciphila fulvifrons*, Fulvous-fronted Honey-eater
<<https://www.biodiversitylibrary.org/item/191229#page/125/mode/1up>>.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#181). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Eastern Spinebill *Acanthorhynchus tenuirostris*

Of all the honeyeaters this has perhaps the most remarkably evolved features for its task of food collecting. The long, curved bill is perfectly proportioned and shaped for extracting insects and nectar from the deep throats of tubular flowers. This has resulted in the name nickname of “Cobbler’s Awl” and in the selection of its rather long scientific name, which may be translated as “spine-beaked and slender-billed”.

As the first part of its English name implies, it ranges over most much of eastern Australia. In Tasmania it is common and widely distributed, occurring in wet and dry forests, tea-tree scrubs and coastal heathlands.

The Eastern Spinebill is extremely active, although relatively tame and tolerant of human presence. While feeding it moves about the foliage in short, darting flights, and often hangs upside down from pendant flowers or hovers on rapid wing beats with its tail fanned before a flower while probing for food in the manner of a hummingbird. If disturbed it rarely flies very far before alighting and recommencing its search for food.

Though nectar is a major attraction for it and forms an important part of its diet, it also, like other members of the honeyeater family, takes many kinds of tiny insects. So, when we see it plunging its beak deeply into the throat of a flower, it may well be seeking the insects which have likewise been attracted to feed on the nectar.

The seasonal flowering of the trees and shrubs which thus directly and indirectly sustain it necessitates a rather nomadic lifestyle for the Eastern Spinebill and it will remain in a location only while its food source is plentiful. It favours the blossoms of heaths and tea-trees, and regularly visits parks and gardens to feed from introduced plants, being especially attracted to grevilleas, banksias, fuchsias and abutilon.

Its lively, acrobatic movements, both in flight and among the foliage, its brilliant colouring, delicate form and unobtrusive but busy nature all combine to make it one of the most popular of visitors to a garden shrubbery, a “gem” among birds.

Its most common call is a piping note which might be described as “pep-pep-pep” rapidly repeated perhaps twenty or thirty times in the space of three or four seconds. This is uttered when the bird is perched in a prominent position, as if proclaiming its ownership of a feeding territory. To the trained ear of a person familiar with the identification of birds by their calls this may well be the first evidence of the Eastern Spinebill’s presence in the vicinity. It also provides a useful means of monitoring its distribution.

Breeding takes place from September to the end of the year. The nest is a deep and finely constructed cup, delicately suspended among slender foliage, up to six metres or so above ground level. It is composed of fine grasses, moss and occasionally hair, and lined with

feathers which are carefully placed so that their curvature conforms to the shape of the egg chamber. Two or three pink eggs form a clutch and two broods may be reared each year. Unlike many of the honeyeater species it appears to be free from the parasitic attentions of cuckoos.

Adult males are slightly larger than females and immature birds, and have a brighter and more lustrous plumage.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#182). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-fronted Chat *Epthianura albifrons*

Most people, when they see an apparently badly injured little bird flapping along the ground, will instinctively react by approaching it with a view to picking it up or at least observing it more closely. If the bird in question is a White-fronted Chat, however, chances are it will continue to flap ahead, staying just beyond reach, until it suddenly flies off, seemingly miraculously restored to perfect health.

Small children and even unwitting adults have often been fooled and frustrated by this trick, which is the way the bird protects its brood. If disturbed while setting on eggs or with dependent young it will pretend to have a broken wing and thus lead the would-be predator away to a safe distance from the nest.

The chosen habitats of the White-fronted Chat are the coastal salt marshes and vegetated sand dunes, the surrounds of receding lagoons and poa grasslands. It has also adapted, in some localities, to areas of introduced gorse in which it often builds its nest. It occurs throughout the southern part of Australia and in Tasmania it appears to have expanded its distribution and increased its numbers since European settlement, as John Gould, in volume three of his *Birds of Australia*, published in 1848, stated that he “did not observe it in Van Diemen’s Land”, seeing it only on some smaller islands in Bass Strait.⁶²

F M Littler in his *Birds of Tasmania* (1910) commented that its range and numbers had greatly increased “during the last few years”.⁶³ Today this striking little bird is a relatively common species in all localities with suitable habitat. It socialises in small parties which feed on the ground, presumably taking small invertebrates. When disturbed while feeding it moves only a short distance with undulating flight to perch on a fence, bush or similar vantage point and if none is available it will go to ground again and return to its search for food. In general it is relatively tolerant of human presence, allowing an observer to approach to within twenty metres or so before taking flight.

For those unfamiliar with it the White-fronted Chat presents a most arresting sight, particularly the male, whose immaculate white front, transversed by a black bar, creates a very handsome impression. This colouring has occasionally resulted in it being mistaken for the Double-barred Finch which lives on the Australian mainland. Females are not as boldly marked as males, whose striking plumage has given rise to nick-names such as “nun” and “mooney”. The name “tang” has also been used by some, an allusion to the plaintive, bell-

⁶² John Gould, *The Birds of Australia in seven volumes* Volume III (John Gould, Golden Square, 1848) *Epthianura albifrons*, White-fronted Epthianura
<<https://www.biodiversitylibrary.org/item/187975#page/265/mode/1up>>.

⁶³ Frank M Littler, *A handbook of the Birds of Tasmania and its dependencies* (Frank M Littler, Launceston, 1910) 44, 45 <<https://www.biodiversitylibrary.org/item/34662#page/92/mode/1up>>.

like monosyllable of its call, which is repeated at brief intervals when the bird is disturbed or in flight.

The White-fronted Chat's breeding season is from September to the end of the year. The cup-shaped nest is simply constructed from fine grass and lined with fine rootlets and occasionally a little hair. It is placed near to the ground, usually less than half a metre up, in grass or in bushes such as gorse. Three or four white eggs with a few pink spots from the usual clutch. It is a bird which maintains careful nest hygiene, removing faecal capsules of nestlings with its beak and dropping them some distance away from the nest.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#183). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Spotted Pardalote *Pardalotus punctatus*

A voice so often heard from among the dense eucalypt canopy is a doubled “pip-pip”, regularly repeated, which has been likened to the ringing of a telephone. For most of the year this is the call of the Spotted Pardalote. However, during the breeding season it is replaced by an incessant double syllable call resembling “pit-too”, by which the bird signals the proclamation of its territory.

The Spotted Pardalote is one of our most numerous and widely distributed birds, occurring throughout the State wherever there are eucalypt forests or woodlands, and occasionally visiting parks in the towns and suburbs. The species extends its range over much of eastern Australia, but the Tasmanian population is believed to be permanently resident, remaining here through the Winter.

Often its call is the most obvious indicator of its presence, which might otherwise, because of its tiny form and the excellent camouflage afforded by its plumage, remain undetected.

Nomadic individuals will roam widely during Autumn and Winter wherever there are eucalypts to support the native insects which form the Spotted Pardalote’s food supply. With September and the approach of the breeding season, it sets about its task of proclaiming its territory in selecting a site for its nest.

To make its nest it uses its beak to drill a burrow, like that of a mouse, into a vertical face of earth, such as a cutting or a river bank. The burrow is usually about 30 centimetres long, and at its end is an enlarged egg chamber lined with strips of very finely shredded soft bark.

As is generally the case with hole-nesting birds which brood in the dark, the eggs are pure white. The advantage of this is probably that they are a little easier to see in the darkened nesting chamber. Of course, unlike those of birds which lay their eggs in exposed nests, there is no need for them to have patterns of colour as a camouflaging decoration. Four eggs form the usual clutch.

The Spotted Pardalote is generally tolerant of human presence, and it may be easily observed while going to and from its nesting hole. However, if a predator threatens its nestlings or if another of its own kind comes within its territory, it is quick to display aggression.

Males, females and juveniles are all readily distinguishable by their plumage, as common to all members of the species are the prominent markings on the crown and the back. It was this feature which prompted the use of the name, “Diamond Bird” for this and other pardalotes in

earlier years. It is also the feature for which its scientific name was selected, as the Greek “pardalotus” can be roughly translated by Keats’ phrase, “freckled like a pard”.⁶⁴

At a distance, and with the fleeting glimpse which is all one can usually manage, its plumage might appear but a dull and uninteresting green-grey, but if the observer is keen and fortunate enough to gain a close-up view, the hues and patterns of its feathering reveal the Spotted Pardalote to be one of the most colourful little birds of our forests.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#184). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

⁶⁴ John Keats, *Lamia* <<https://www.gutenberg.org/files/2490/2490-h/2490-h.htm>>.

Forty-spotted Pardalote *Pardalotus quadragintus*

This tiny bird is one of the rarest in Australia and its rarity presents one of the great one ornithological mysteries. It is endemic to Tasmania, occurring only in a few restricted locations in the south-east and on Flinders Island.

Historical records show that it previously enjoyed a greater distribution range and population than it does today. The Field Naturalists Club of Victoria found it on King Island in 1887⁶⁵ and it also occurred in areas of eastern Tasmania and the southern midlands, where it was found breeding in the Ouse and Bothwell districts in 1876. Near Hobart it was recorded by numerous authorities, including John Gould who found it “very abundant in the gullies under Mount Wellington”.⁶⁶

Since then its numbers have significantly declined and its distribution has contracted to a few isolated populations in the south-east of the Tasmanian mainland, with a small number of pairs in each, and on the offshore islands of Bruny and Maria, where it is rather more common.

Reasons for the decline have been postulated and debated by many eminent ornithologists and in recent years several studies have been made in an attempt to ascertain the cause. Suggestions have included natural factors such as competition from other species, in particular the other two more widely distributed pardalotes with which it shares its range. Habitat reduction, which has also been suggested, seems unlikely as there are areas of its favoured eucalypt forest from which it has disappeared but which appear perfectly suitable.

So the mystery remains, although studies and counts over the last decade also indicate that its population has remained stable over that time and that it is at present in no imminent danger of extinction.

The difficulty of assessing the population of the Forty-spotted Pardalote are exacerbated by its habits. It lives and feeds in the leafy canopy of *Eucalyptus viminalis*, the Manna Gum or White Gum, where it takes a range of invertebrates such as small flies, wasps, beetles and spiders as well as manna. Its sombre green back and light grey underparts blend beautifully with the colour of the leaves and on other than dead calm days its activities are masked by the movement of the foliage. Consequently it is easily overlooked, even by the most diligent observer.

⁶⁵ A J Campbell, ‘Field Naturalists’ Club of Victoria: Expedition to King Island, November, 1887’ (1888) 4(9) The Victorian Naturalist: The Journal and Magazine of the Field Naturalists’ Club of Victoria 129, 147 <<https://www.biodiversitylibrary.org/item/94972#page/154/mode/1up>>.

⁶⁶ John Gould, *The Birds of Australia in seven volumes* Volume II (John Gould, Golden Square, 1848) <<https://www.biodiversitylibrary.org/item/187062#page/157/mode/1up>>.

To complicate the matter even further, juveniles of its near relative, the Spotted Pardalote, when still in the immature plumage during late Summer and Autumn, can very easily be mistaken for it, especially when high up in the treetops on a windy day. This confusion has undoubtedly led to erroneous reports of its occurrence in areas now known to be beyond its present distributional limits.

For those who wish to add this, the rarest of Tasmania's endemic birds, to their list of sightings it would be wise to include Maria Island or Bruny Island in their itinerary and to seek advice and guidance from a ranger or local birdwatcher lest they, like many before them, be disappointed or deceived by its elusiveness.

The Forty-spotted Pardalote commences breeding in late August and the season may extend to the end of the year, over which period it establishes family territories and defends them vigorously. Like other pardalotes it builds its nest in a tiny hole, usually in a stump, tree trunk or hollow limb. The site can be up to 50 metres above ground, but it has also been found and photographed nesting in a hole drilled in the ground.

The nest is domed and composed of shredded bark and fine dry grasses to form a lining in a chamber about 15 centimetres from the entrance. Three or four round white eggs make up the usual clutch and the same site may be used in successive years if not unduly disturbed. Both male and female incubate and tend the nestlings, which leave the nest when three or four weeks old.

The bird has received its English name from the tiny white spots, about 20 on each wing, which, as with the rest of the plumage, are common to both sexes.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#185). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Striated Pardalote *Pardalotus striatus*

This is one of our most numerous birds, living in association with eucalypt forests and woodlands and occasionally visiting suburban parks and gardens where there are eucalypts. Unlike the other two pardalotes to be found in Tasmania, it is a migrant, arriving in early Spring to breed here but departing again in Autumn to spend the Winter in the south-east of the Australian mainland.

With the onset of warmer, sunny days in September it heralds its arrival by vigorously and continuously calling with a triple syllable “pit-a-woo”, as it re-establishes its territory and commences its breeding programme. In Autumn, prior to its departure, the call becomes a plaintive trill.

The complexity and divergence within the pardalote group led early ornithologists to erect numerous species, many of which are now considered merely subspecies or geographically isolated populations. The Striated Pardalote, in its several forms, ranges over most of Australia, and was originally described as early as 1789, but in Tasmania only the nominate subspecies occurs. It is known locally as the Yellow-tipped Pardalote because of the yellow spot on each wing.

The canopy and foliage of eucalypts are its favourite feeding places. There it gleans invertebrates, such as tiny insects and spiders, as well as manna, from amongst the leaves. In November and December it can be seen carrying large beakfuls of such items to feed its young.

The cup-shaped nest is composed of dry grass and very fine strips of shredded bark fibre. It is placed in a chamber at the end of a narrow tunnel drilled in the side of a vertical bank of earth or in a small cavity in a decaying tree, sometimes up to 15 metres above ground. Four white eggs form the usual clutch.

I once found this pardalote nesting deep among the sticks and other debris in the base of a Wedge-tailed Eagle's nest, in a wooded gully near York Plains in the midlands. At the time the eagle's nest was occupied by an almost fully fledged eaglet. The pardalotes were not deterred in any way by the eaglet's activities nor by the comings and goings of the adult eagles. They continued to enter and leave the area, bringing food for their own nestlings, quite unconcerned by the eagles above.

On another occasion I found a pair nesting in a crevice between the stones which formed the foundations of the platform at a busy main-line railway station. The breeding bird was sitting tight within its nesting hole despite the roar and shudder of the passing steam train.

In favourable sites, nesting might occur in colonies with holes as close as half a metre apart, and dozens of pairs may breed in close proximity, holes being used by the same individuals in successive years.

This habit of forming colonies for nesting was beautifully demonstrated to me during the years 1964 to 1970 when I studied such a breeding colony at Kelso near the mouth of the Tamar River. There, in a 30 metre section of a two metre high bank of a tidal creek were nesting about 30 pairs of Striated Pardalotes.

To trace their habits I numbered each nesting hole and from these the adult pairs were trapped and leg-banded with individually numbered rings as part of a nation-wide research programme. This operation was repeated over successive breeding seasons and over the seven years a total of 147 adults and young were banded. From these 122 multiple recaptures were made, indicating a very strong bondage to their established nesting sites.

One bird was found to have returned in at least five of the seven years. In 28 instances burrows were found to be re-used by at least one of the occupants of the previous season, and in two instances both birds of the pairs returned to their previous year's burrows. On several occasions returning pairs were found to have separated and mated with other partners.

Males and females are of similar plumage, but immature birds are duller and less boldly marked. The white streaking of the crown of the head is a sure characteristic by which one can distinguish this bird from the Spotted Pardalote which, as the name implies, has a spotted head instead.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#186). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey-breasted Silvereye [now simply ‘Silvereye’] *Zosterops lateralis*

The genus *Zosterops*, to which this bird belongs, is widely distributed throughout the world and has diverged to form a great many species and subspecies. The Grey-breasted Silvereye occurs commonly over southern and eastern Australia and several subspecies are presently recognised. Only one of these is found in Tasmania and although it migrates across Bass Strait it always returns here to breed.

In the Autumn many of the Tasmanian silvereyes leave the island, moving in flocks as far north as New South Wales. This has been proven by the leg banding of a great number of birds over many years and the subsequent recapture or recovery of individuals in a programme designed and conducted by amateur and professional ornithologists under the direction of the CSIRO and the Australian National Parks and Wildlife Service. Birds banded in Tasmania have been recovered in the Sydney area and vice versa.

Why only part of the population leaves Tasmania is a subject of speculation. Those which remain appear to fare quite well, moving through the lowlands and coastal regions in flocks and taking advantage of available food sources such as aphids, household scraps and winter berries. I have, on occasion, observed flocks of silvereyes taking aphids from the green foliage of field turnips in midwinter and during heavy early morning frost.

Studies at my field station at Maggs Mountain in the central northern highlands have shown that silvereyes abandon the high country when Winter approaches but return again in September. From then on they feed almost exclusively on insects and their larvae, until about January when their diet changes to native fruits. This may be a response to food availability or it may also be because of the need for a high protein diet to feed their young, followed by a high sugar diet in Autumn in order to fatten and build energy reserves for migration.

The Grey-breasted Silvereye is one of the most numerous native birds in the Tasmanian bush, and regularly visits parks, gardens and orchards in search of food. Because of its liking for the ripe fruits of not only native plants but also exotic crops such as grapes, it has come into disfavour with some producers. Others, however, who are not so affected, consider it a most useful bird, as it is a major predator of insects which feed upon foliage.

The chestnut flank patch is significantly darker in males than in females and more so in the Tasmanian subspecies than in other Australian subspecies. The plumage is inconspicuous and blends in well with its general surroundings, and the bird's presence is often first detected by its plaintive “cheee” contact call.

Breeding may commence in September and nests, containing eggs, can sometimes be found as late as December. The nest is an extremely delicate, cup-shaped structure made out of fine dry grass, hair and green moss. It is suspended among foliage usually no more than three

metres above the ground. The clutch is mostly three, occasionally four, eggs of a beautiful sky-blue colour, a shade very similar to those of the introduced Common Starling.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#187). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

European Goldfinch *Carduelis carduelis*

Introduced from England about 1880, this bird quickly multiplied and established itself, spreading all over the island with some individuals even reaching Macquarie Island in recent years. Of the half dozen foreign species which have become part of our avifauna the European Goldfinch is undoubtedly the most popular.

It has adapted to live in native forests as well as in parks, gardens and plantations of European trees, but it does not appear to be displacing or otherwise interfering with the indigenous fauna. On the contrary, it is often the prey of butcherbirds and other predators of small birds, especially at nesting time when the nestlings and juveniles are highly vocal and easily located and captured.

During Autumn and Winter it congregates in nomadic flocks and feeds on the ground in agricultural areas, forest clearings and along road sides. With the onset of Spring and the urge to breed it abandons the native bushland and almost always returns to areas of human settlement or farmland, a habitat more in conformity with that of its ancestral homeland.

I well remember, as a very small boy, being fascinated by the numerous pairs which nested annually in our garden, selecting sites in rose bushes, lilac, pines and the like. The adult birds appeared ever tolerant of my inspecting their nests to see when the eggs had turned into tiny helpless nestlings and watch the subsequent rapid development to fledglings and, finally, their acquisition of the ability to fly.

They were indeed my favourite bird, their brilliant colours and inoffensive habits making a sharp contrast to the drab plumage and obnoxious ways of sparrows, starlings and other farmyard birds.

Nest building, brooding and all domestic responsibilities appear to be undertaken by the female, while the male acts as a guardian or look out, accompanying the little hen on all her flights to and from the nest and perching nearby, but otherwise playing no active role in the direct nurturing tasks.

Being primarily a seed eater, the European Goldfinch is attracted to the flowering heads of various thistle species, plucking away the down to extract the ripening seed beneath, either for itself or to take back to the nest for its young. When agitated, its call might be a combination of “seerer” and “tit-a-wit” uttered with a lateral jerking of the tail. But other times and when in flight a rather liquid “twit-it-a-twit”-like song is repeated, apparently to maintain social contact.

Breeding commences in Spring with second clutches sometimes being produced as late as January. Gardens, orchards and plantations of trees and shrubs of European origin are its favourite nesting sites, and the cup-shaped nest, built of rootlets, fine grass, wool and hair is

placed from one to four metres above ground, usually well hidden among foliage. Four or five blue-green mottled eggs form the usual clutch, with some young from early broods leaving the nest as early as late October. At nesting time, with its great tolerance of humans, the European Goldfinch is an object of charm and a most welcome adornment to our gardens and parklands.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#188). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

European Greenfinch *Chloris chloris*

The Greenfinch is of European origin and since its introduction to Australia it has become well established in the south-east. The first sightings of it in Tasmania were at Marrawah in the north-west of the State about 1940. While I was visiting the district in 1941 its presence there was drawn to my attention by a local resident, Mr Bill Nichols, who had known the bird very well during his youth in England. Convinced that the strange bird was a Greenfinch, he made a point of showing me several, providing my first encounter with the species.

It had apparently arrived from Victoria by its own efforts and was living in and around *Pinus radiata* trees, in which it was said to have been nesting. As its numbers increased it extended its distribution along the north coast and into the midlands. In the latter district I recorded a solitary individual near Antill Ponds in 1960.

At about that time a population was found to have established itself at Greens Beach where it could regularly be seen and heard around the sand dunes and golf course. By 1967 it was common in the Launceston area and numerous pairs were then found nesting in the suburb of Riverside. The Greenfinch now occurs over much of the island, generally in association with parks, gardens, plantations and areas of human settlement, especially near the coast.

As it is a bird with a rather secretive nature its presence is often best detected by its repeating calls which may be described as “sweee” or alternatively as a buzz. Its flight is undulating or bounding and as it flies it often utters a twitter call which can draw attention to its presence.

In appearance it could be likened to a green canary because of its shape and the beauty of its green and yellow plumage. The colouring helps to camouflage it among the foliage of green trees in which it often perches and calls. This camouflage and its inconspicuous behaviour allow it to reside in a district, perhaps for years, without being recognised, but once one is familiar with its calls it can be regularly found in many localities.

Like its near relative and fellow immigrant the European Goldfinch, it seems to be an inoffensive introduction which feeds mainly on seeds and the occasional small insect. It does not appear to interfere or compete with indigenous birds. On the contrary, it is a rather pleasant addition to the bird fauna of our parks and gardens where it may be attracted to a feed table if regularly offered bread, seeds or fruits.

The Greenfinch breeds in Spring and the eggs, which are bluish-green and blotched with brownish markings, are laid in a clutch of four or five. The nest is cup shaped and made of fine twigs, dry grass, rootlets and hair. It is usually placed in the foliage of trees of European origin, although I have found several nests at Launceston which were built in Australian Cootamundra Wattles.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#189). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

House Sparrow *Passer domesticus*

The House Sparrow has established itself over much of eastern Australia since being transported from Europe in the nineteenth century. It is believed to have been introduced to Tasmania about 1867 and subsequently spread throughout the island, but always in association with human settlement.

Farm yards, hedgerows, towns and urban areas are its favoured habitat. It has not been able to adapt to the Tasmanian native environment, populations being restricted to those regions where the landscape has been altered to simulate that of its original European homeland. Therefore it rarely competes or interferes with the indigenous fauna, as few of our native birds have as yet been able to adapt and live as permanent residents in the settled areas which the sparrow frequents.

Its close association with humans has brought it into both favour and disfavour, as its bright and chirpy disposition charms some people to hand feed it while others regard it as a pest. Being a seed eater it is attracted to poultry yards where it congregates to feed on grain and in doing so can transmit poultry diseases. To the home gardener it can cause havoc by dirt bathing in seed beds or eating succulent young plants when they first appear above ground.

Perhaps one of the sparrow's most offensive habits is that of carrying quantities of dry material into roof and wall cavities or into drainpipes to build its bulky nest. This material consists mostly of dead grass which can create a fire hazard or block spouting or downpipes and both nesting material and accumulated droppings can foul water tanks.

The nest may also be built in the dense foliage of trees and hedges of European origin. In such sites it is a bulky, domed structure about 30 centimetres in diameter, the brood chamber being heavily lined with feathers. Four or five mottled grey and white eggs form the usual clutch and more than one brood may be reared each Spring and early Summer. Occasionally it will congregate to nest in colonies and I have, on occasions, found up to a dozen occupied nests in one large, densely foliated Lambertiana pine tree.

To its credit the House Sparrow can present a pleasant, cheerful picture when in Autumn and Winter a party of a dozen or so gather to feed and generally socialise in a sunny spot within an urban or suburban setting. At such times its gregarious nature and its ability to survive against many apparent dangers and adversities does stimulate admiration on the part of bird lovers who have not had to endure, or who are able to overlook, its more obnoxious habits.

Even its plumage, which may generally be considered as an uninteresting grey-brown, is in fact beautifully patterned in a pleasant, albeit sombre design if one studies it closely enough.

Fortunately the sparrow's numbers do not exceed tolerable limits and its presence in most places is now an accepted component of our bird life.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#190). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Beautiful Firetail *Stagonopleura bella*

This is one of the most loved species by birdwatchers and its appearance never fails to thrill those who sight it. Though are not at all shy and generally tolerant of humans, it is nevertheless sometimes difficult to find because of its quiet and inconspicuous behaviour. A plaintive, drawn out “sweee“ call is often the first indication of its presence and if the call is answered the bird will usually respond by approaching to investigate, rewarding the caller with an excellent view.

This call appears to be one of communication, and means of locating the whereabouts of other firetails. A response, mimicking the sound, seems to be what the bird is seeking and on many an occasion I have enjoyed the pleasure of drawing one or more to within a few metres, to watch them search in bewilderment for some minutes for another of their kind before realising the hoax and moving away.

The Beautiful Firetail is well named, the scientific name also alluding to the beauty of its appearance. The brilliant red feathers on top of the rump are a most striking feature and contrast in a delightful way with the fine black transverse barring over the silvery-grey breast and belly region. This plumage is identical for both sexes, but that of juveniles is less boldly marked and their beaks are dark brown.

As a consequence of their attractiveness Australian weaver-finches, to which family this bird belongs, have always been highly esteemed as aviary birds. The Beautiful Firetail was, in the years before fauna legislation outlawed indiscriminate trapping, taken in considerable numbers for the trade. It proved, however, a difficult species to keep and breed in captivity and was therefore never as popular as some of the more tolerant species.

It is the only one of the 18 weaver-finch species which has extended its distribution to Tasmania. On the Australian mainland it is restricted to the south-east but nowhere is it today considered a common species. In Tasmania it occurs widely and, although apparently less numerous now than in former years, possibly because of land clearing and habitat alteration, its general distribution and numbers make this island its strongest centre of population.

The Beautiful Firetail can be found from the highlands to the coast, living in wet and dry forest, woodland, tea-tree and coastal scrub, especially in association with casuarinas, the seeds of which form part of its diet. It appears to be a quite sedentary species, holding to an area where it finds the conditions, food and water supply to its satisfaction. Thus, once a pair or a small colony can be located, it is usually possible to find them in the same general area on subsequent occasions.

It breeds in Spring and early Summer, building a relatively large and bulky domed nest of grass, the entrance to which is elongated in the form of a tunnel, often slightly curved downwards at its opening. The site chosen is in a bush or tree and may be from one to five

metres above ground. In selecting nesting material the bird usually chooses long, standing stems, cutting them off near the ground with its beak and trailing them one at a time to the nest site. Some feathers or wool may be included when lining the eggchamber. The clutch consists of four to six pure white eggs and a nest might continue to be used as a roosting place by a brood for some time after the young have flown.

To sit quietly and watch a pair of these finches busily but peacefully going about their task of nest building or tending their brood is indeed a privilege, a pleasure and a memorable experience.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#191). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Common Starling *Sturnus vulgaris*

Of the birds introduced to Tasmania this has undoubtedly be in one of the most successful in establishing itself. Unfortunately it is also a serious competitor with some indigenous species, especially those which utilise tree hollows for nest sites.

F M Littler, writing in the first issue of the ornithological journal *The Emu* in 1901, stated that some English starlings were purchased in New Zealand and brought to Hobart about 1800.⁶⁷ This date, however, was a misprint and should have read 1880. From there they multiplied and spread throughout the agricultural and woodland areas of the island. As land clearing extended the limits of pastoral activity, so the starling followed, utilising not only cavities in man-made structures for its nesting sites but also natural hollows in tree trunks or limbs, which had previously been the exclusive domain of native fauna.

When it has chosen a potential breeding site the starling goes about its nest construction with such vigorous determination that other species which might be competing for the site have little chance of success. It has even been found to displace wild ducks from nest-boxes erected to propagate duck breeding at the edges of lagoons.

But it is parrots which have borne the brunt of its interference. It is sad to reflect on the decline in the numbers and distribution of several species of parrots, apparently as a direct result of their sites having been usurped by starlings. The starling's practice is to part-fill a parrot's nest cavity with grasses and other materials to form its own nest, that's ruining the site for the parrots, which then usually fail to breed in that season.

The starling is a devoted parent with strong maternal instincts. Should a human or potential predator approach an occupied nest, a great ruckus is likely to ensue as both adults will voice their alarm at full volume and attempt to drive away or otherwise distract the intruder. The industry of parent birds feeding their nestlings is also most impressive, as they keep up a continuous shuttle service, gathering beakfuls of assorted insects for the seemingly ever hungry and demanding young.

Once the clutch of from four to six blue eggs has hatched and the young birds have grown to the stage when they can fly, in December, starlings congregate in large social flocks and feed on small fruits and, later, on insects picked up from grasslands. Near the close of a day as dusk approaches these flocks will fly considerable distances to gather in roosting congregations at predetermined sites such as buildings, trees or large bushes. These congregations might number many thousands of birds and can cause a great nuisance and potential health hazard as, night after night, their droppings accumulate.

⁶⁷ Frank M Littler, 'European Birds in Tasmania' (1902) 1(3) *The Emu* 121, 122
<<https://www.biodiversitylibrary.org/item/183569#page/140/mode/1up>>.

To watch a flock of thousands of starlings feeding on grassland, the rear of the flock leap-frogging to the front in a rolling, wave-like motion as they cross large tracts of the countryside, leaves the observer wondering about the volume of invertebrates these birds must consume. Unfortunately no studies have yet been conducted here to identify their diet, so it is not known whether the species they take are in fact detrimental to pasture growth.

Vocally the starling can be quite amazing. We tend mostly to think of the rather humdrum squawking of juveniles when they first leave the nest and incessantly call for food. However, in late Winter and early Spring, when a male is selecting a breeding territory and proclaiming possession from some vantage point, it produces a startling array of songs, grinding them out from deep in its throat with apparent vigour and pride.

At such times it readily adds to its own repertoire of drawn out “weeil” and “whyee” sounds excellent imitations of other bird songs, and occasionally even mimics the bark of a dog or some sounds of human activity.

Although on first impression and at a distance its plumage may appear little other than an uninteresting black, there is beauty in its feathers which glisten with iridescence, reflecting a variety of shades of blue, purple, bronze and green.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#192). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Masked Woodswallow *Artamus personatus*

Of the six species of woodswallows found across Australia this has probably the most attractive appearance. Its black facial mask stands out prominently and serves to make it readily distinguishable from other members of the genus.

To date it has not been recorded from the Tasmanian mainland, but in November 1963 two were found at Egg Lagoon on King Island by Max McGarvie. This was followed by the discovery of nine, three of which were in juvenile plumage, in February 1964 and the assumption that the birds had bred on the island in the previous few months.

In late November 1972 large numbers of both White-browed and Masked Woodswallows were found in the Lake Martha Lavinia area by McGarvie and within two weeks many had begun to breed. Two occupied nests of Masked Woodswallows were found and subsequently many juveniles were observed on the wing, indicating that a good number of pairs had bred successfully.

The Masked Woodswallow occurs over much of Australia, favouring open woodland habitat. Each Autumn it makes long nomadic flights northwards across the continent, returning again with the approach of Spring to breed in the more southerly latitudes. It is such flights that have terminated on King Island and it seems likely that some birds could, or even occasionally do, reach the Tasmanian mainland.

It is a gregarious species and congregates in flocks outside the breeding season. Even when nesting it prefers to stay within reasonable proximity of others of its kind. It feeds mostly on the wing, taking flying insects while maintaining flock contact with its often repeated, chirping call. Occasionally part of a flock will alight in trees as if to rest briefly, and while there will glean among the foliage.

The nest is typical of woodswallows, being constructed of fine twigs in the form of a bowl and lined with grass and rootlets. Usually it is situated within two metres of the ground amongst the twiggy branches of a bush or on a broken stump. Two or three white eggs marked with brown and purple spots constitute a clutch. Incubation is said to take about twelve days and to be a task undertaken by both parents. The sexes are very much alike in appearance, but juvenile birds have fine, cream speckling about the face and upper body.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#193). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

White-browed Woodswallow *Artamus superciliosus*

Rarely does this bird visit Tasmania, but when it does those who are fortunate enough to be permitted a close view of it are treated to one of the most exquisite sights nature can offer. The adult male White-browed Woodswallow is renowned for its immaculate feathering, its elegance and beauty of form.

Only within the last quarter century has it been included in listings of the birds of Tasmania. On the Australian mainland it occurs commonly and has a wide distribution, but it is strongly migratory and thus is absent from much of southern Australia during the colder months. Elsewhere its presence appears to be influenced by the availability of a food supply.

Perhaps these factors are responsible for its occurrence in Tasmania being but spasmodic, for only on King Island does it appear with any degree of regularity. There it arrives about November to breed and departs northwards again in March or thereabouts. In 1972 it was found breeding near Penguin and irregular sightings have been recorded in other parts of the north and also on Flinders Island.

The rich chestnut coloured breast and black face mask, surmounted by the prominent supercilious white eye stripe from which it derives its scientific name, combined with the smoky-grey back and blue-grey beak to produce a colour combination so striking that the visual appearance of this bird is rarely equalled. These features contrast with those of the Masked Woodswallow *Artamus personatus*, in which the breast is a pale grey and the stripe above the eye is absent, and which has, on rare occasions, also been found visiting King Island.

The White-browed Woodswallow's most favoured habitat is the open forest and woodlands. It is there that it breeds, building its cup-shaped nest of fine twigs, rootlets and dead grass a few metres above the ground. It seems to have no preferred specific nesting site as long as the nest can be secured in relative safety. Two or three pale grey eggs, marked with brown blotches, are produced about October or November.

Insects form the bulk of its diet and are taken mostly on the wing, with the bird uttering an occasional whistling note. Outside the breeding season it congregates in loose social flocks to migrate and at such times the calls of numerous individuals combine to form a chorus.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#194). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Dusky Woodswallow *Artamus cyanopterus*

Of the six species of Australian woodswallows only the Dusky Woodswallow occurs regularly and commonly in Tasmania. It is a trans-Bass Strait migrant which arrives here each September and remains until April, during which time it breeds before returning to its wintering areas in eastern and southern Australia.

Three additional species of woodswallows have been recorded visiting Tasmania but such instances are rare. These are the White-breasted Woodswallow *Artamus leucorhynchus*, and the Masked Woodswallow *Artamus personatus*, both of which have been found on King Island, and the White-browed Woodswallow, illustrated and described on the preceding pages, which, on rare occasions, reaches the Tasmanian mainland and has been found breeding here.

The Dusky Woodswallow lives mostly in areas of eucalypt forest and woodlands, occurring in pairs or family groups when breeding and in small flocks outside the breeding season and when on migration. It feeds mostly on the wing, taking flying insects including honeybees, a habit which has earned it the nickname of "Bee-eater".

In Autumn, especially during the month of April, loose flocks can be seen gathering for migration and gradually moving northwards. As such times one's attention may be drawn to its presence by its gentle purring call while it is perched among trees or on overhead wires. It also calls in flight, which, during migration, may be at considerable height.

At all times it is a most graceful and attractive bird. Its smooth flight is promoted by intermittent series of wing beats followed by short glides during which it might call softly with a pleasant chirping sound. A close-up view, however, cannot fail to impress the lucky observer with the beauty and softness of its plumage and the immaculate, smooth smoky-grey and grey-blue of the beak, as illustrated in the accompanying plate. The plumage is similar for both sexes, but that of juveniles is duller.

The white terminal tail bar is usually displayed prominently and is most conspicuous when the tail is fanned. While perched and watching alertly for flying insects which might become its next meal it regularly twitches its tail from side to side as if in excited anticipation.

The Dusky Woodswallow's nest is a roughly constructed, shallow bowl of twigs lined with rootlets and placed on a broken limb, behind loose bark or on any such ledge in a dead or living eucalypt. It is usually not more than five metres above ground. November and December mark the peak of the breeding season, and a clutch consists of three or four off-white eggs with brown markings.

The presence of an occupied nest is often indicated by the nervous disposition of a pair of birds and, if one is sufficiently patient to sit quietly and observe from a short distance, one of

the pair might be seen to return to the nest to brood or feed the young. With patience and stealth thus rewarded, a cautious approach will then afford a more intimate view of this beautiful bird.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#195). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey Butcherbird *Cracticus torquatus*

The song of this bird is possibly the strongest and most melodious of all Tasmanian birds. In Spring it proclaims its domain by singing with full voice from a high vantage point its sustained, rollicking, yodel-like song. This song is most impressive wherever it might be heard, but when it comes from a suburban garden it generally creates great interest and curiosity as to the identity of the vocalist.

Such indigenous songbirds are rarely heard in the suburbs, and whilst the butcherbird's full throated melody on a bright Spring day is a source of great pleasure to some people, to goldfinches and other small birds it is a dread sound of warning. These potential prey species have learn to recognise the sounds of danger and the song of the Grey Butcherbird and its passing flight instil fear into all. Most people who have kept canaries or other small cage birds in exposed places have experienced problems with visits from butcherbirds, who are attracted by what appears to them to be a bird in distress and therefore easy prey.

Of Australia's six species of butcherbirds only this one occurs in Tasmania. It is a sedentary bird, living in pairs which strongly defend a limited territory in which they breed and remain throughout the year. Its distribution is patchy, and it is mostly restricted to areas of light forest and woodland where it may be found in association with magpies, miners and rosellas.

However, it has also learned to live in the vicinity of farmyards and suburban parks and gardens, where it sustains itself no doubt by preying on sparrows and other such introduced small birds as well as insects. Nowhere does it occur in sufficient numbers to be classed as a common species.

The Grey Butcherbird was also known, to early settlers and farmers, as the "Derwent Jackass" and its notoriety as a predator was soon established because of its raids on poultry yards to take young chickens. It was also quick to develop its taste for sparrows and house mice which lived in and around farm yards and stacks of oaten hay where they did considerable damage by eating grain and fouling stored fodder. Thus perhaps the butcherbird compensates farmers in a way for its less popular habits.

Its natural prey consists of large insects, spiders and small vertebrate animals which it catches by sweeping on them from above and taking them in its powerful beak. The tip of the beak is equipped with a hook or tooth which is an aid to securing and tearing apart its food. It also has a habit, which gave rise to its English name, of storing excess prey items by spiking or hanging them on a thorn or twig, or in the fork of a branch, presumably to be eaten later.

The Grey Butcherbird breeds in Spring, building a bowl-shaped nest of twigs well woven together and lined with grass. The nest is placed among the smaller branches of a tree such as a casuarina or banksia. Three or four reddish-brown, spotted eggs form the clutch, which is usually produced in September. The young are flying by the end of November.

The plumage of males is more boldly marked than that of females, while juvenile birds can be distinguished by their significantly duller grey colouring.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#196). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Australian Magpie *Gymnorhina tibicen*

Once favoured as a pet because of the ease with which it could be domesticated and for its comical behaviour and vocal attitudes, this bird is perhaps best known now for the vigour with which it defends its nest and young at breeding time. It can be a most aggressive bird, even to humans, as those know only too well who have unwittingly approached too closely and suffered from its diving attack to the head with its sharp and powerful beak.

The magpie occurs throughout Australia as a single species, although this was once thought to consist of three geographically separate species. The form which is found in Australia's south-east is called the "White-backed Magpie" and, in Tasmania, it has a patchy distribution, occurring only in the eastern half of the island. It is a bird of the woodlands and grasslands where it feeds upon worms and insects taken from the ground.

Pairs or small parties can be seen busily searching for food in open pasture-land, standing on the ground, listening and watching until an item is detected, then running the intervening distance to secure it the prey in the beak. Though the spread of introduced pasture must have enhanced its food supply, the removal of trees in some areas may have been an impediment to its breeding success.

Why it is absent from some apparently suitable locations is something of a mystery. Areas in the midlands where it once occurred now no longer support magpies and though there are far fewer trees in some pastoral districts than in former years, such habitat alteration does not appear to be the prime reason. It is also absent from agricultural areas and woodlands in the north-west where the habitat seems to be perfectly suitable for magpies.

In Spring it sings its "chordaling" song with great vigour, but if disturbed from its normal routine it will often respond with raucous squawks of protest. Domesticated individuals which were reared from nestlings have been found to mimic, and I recall one, which was hand reared in association with poultry, that cackled in the manner of a hen and possessed none of the normal magpie vocabulary. Fortunately the magpie is now totally protected and it is illegal to keep one as a pet without special license.

A strong population lives on King Island where it became established following the introduction of birds from Victoria about 1901. It was also introduced on Flinders Island about 1940 and there, too, it is now firmly established. The magpie is one of the few indigenous species to adapt to and use introduced pine trees, such as *Pinus radiata*, for shelter and nesting sites, favouring these along with the native eucalypts and acacias.

The nest is a bulky, dish-shaped, tangled mess of sticks, wire, string and grass placed among twigs and foliage towards the end of a branch, from five to 20 metres above ground level. Nest building may commence as early as August in some districts, with three or four greenish, heavily blotched eggs forming the clutch.

Females and juveniles are duller than adult males, the back being a dirty white or pale greyish shade as opposed to the immaculate white back of the male.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#197). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Black Currawong *Strepera fuliginosa*

This bird of the Tasmanian mountains is familiar to those who visit highland holiday resorts and picnic areas. It often congregates at such places in considerable numbers, having learned to take advantage of the discarded food scraps which are available there.

At the Cradle Mountain resorts it has become close to semi-domesticated and along with wallabies it sits in wait, almost begging, for a handout of bread. Then, the first evidence of generosity to one bird will inevitably bring an avalanche of others cascading from the trees where they have been quietly watching for an opportunity. Even the purposeful flight of a single bird seems to alert others to the chance of food.

An endemic Tasmanian species, the Black Currawong, or Black Jay as it is also called, occurs widely throughout the State especially at higher altitudes. Its near relative the Grey Currawong, from which it can be readily distinguished by the absence of white beneath the base of the tail, rarely ventures into the high country, so there is little risk of confusing the two.

The resounding call of the Black Currawong may be described as “killock-killock” and it can be heard ringing through the forests and valleys in Winter and Summer, a familiar sound to the highland bushwalker. When snow covers the ground its black plumage contrasts vividly and attractively with its surroundings.

Though it is well adapted to living in snow country, populations also occur in some coastal regions and on the islands of Bass Strait, where it exists to the exclusion of the low-land dwelling Grey Currawong. The explanation for this rather strange pattern of distribution and habitat selection has not yet been discovered.

During the Winter months the Black Currawong is a sociable bird, forming flocks which may number over one hundred, their calling keeping them together as they move through the forest in search of food. At times this nomadic habit and the quest for sustenance can lead sub-alpine populations down to the edge of the lowlands where they might raid farms and gardens.

Its diet is not selective but rather opportunist. Fruits of native plants are favoured, especially in Winter when animal food such as insects, grubs, spiders, lizards and mice are rarely available. Prey is taken with its powerful bill and I have witnessed it dexterously extracting and eating tiny ant eggs from among the roots of a tree which had been upturned by a bulldozer. It has learned that forestry work exposes potential food items and parties usually accompany any such operations, becoming constant companions of bush workers. Unwary campers or picnickers who leave food exposed risk losing it to a hungry currawong as soon as their backs are turned.

Spring is the breeding season, and a large bowl-shaped nest of sticks and bark, lined with rootlets, is built in the twiggy branches of a tree, usually between five and 20 metres above ground. Three chocolate-brown eggs form the usual clutch.

The female is slightly smaller, with similar plumage to the male. Sub-adults can be distinguished by their yellow skin at the gape of the beak and by the dark iris which turns golden as the bird matures.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#198). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Grey Currawong *Strepera versicolour*

The origin of this bird's local name, the "Clinking Currawong", was the penetrating metallic "clink-clink" of its call. It was once treated as a full species endemic to Tasmania, and was also called "Black Magpie". It is now considered as but a geographically isolated sub-species of the Grey Currawong which occurs over most much of southern Australia. The Tasmanian form is darker than birds of the mainland, being nearly similar to the Black Currawong but distinguishable from it by prominent white feathers beneath the base of the tail.

It is a bird of the lowland forests and woodlands and is principally a ground feeder, taking a wide range of invertebrate animals, fruits and small vertebrates, as opportunities are presented to it. Outside the breeding season it is sociable and nomadic, moving about the island in small parties to search for food, visiting orchards and farms and occasionally feeding upon scraps discovered from the kitchen.

To the early settlers the Grey Currawong's flesh was a welcome addition to the menu, and, like its near relative the Black Currawong, it was readily trapped when attracted to suitable baits. Today it is, as with most Tasmanian birds, totally protected by law. John Gould wrote in 1848 of it as being "abundantly dispersed over Van Diemen's Land"⁶⁸ but this is scarcely the case now.

Much of its day is spent on the ground, in forest clearings or other such areas of grassland, where its inquisitive nature and alert disposition are obvious to any observer who patiently watches its behaviour. In general it walks in search of food but if haste is called for it will run or leap to secure its prey.

The months of September and October are its breeding season, at which time it becomes shy and timid. It will quietly leave its nest whenever anyone is near and will wait and watch from a distance, offering an occasional call as if in an attempt to distract attention from the location of the nest. When the intruder has moved on, the currawong will once more return to its task of brooding.

The nest is bowl-shaped and built of twigs, lined with grass and rootlets. It is placed well up in a eucalypt, usually in the twigs towards the end of a horizontal branch. Three reddish-brown eggs form a clutch.

The sexes are of similar plumage, though the female is slightly smaller. Some adults can be distinguished by yellow skin in the gape of the beak and by their rather greyish-black plumage.

⁶⁸ John Gould, *The Birds of Australia in seven volumes* Volume II (John Gould, Golden Square, 1848) *Strepera arguta*, Hill Crow-Shrike <<https://www.biodiversitylibrary.org/item/187062#page/185/mode/1up>>.

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#199). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

Forest Raven *Corvus tasmanicus*

Until 1967 ornithologists generally accepted that Australian ravens comprised but a single distributed species. It was then that Dr Ian Rowley of the CSIRO, who had been working on the ecology of these birds, disclosed his findings.⁶⁹ These resulted in the recognition of three species with overlapping distributions in southern and eastern Australia. Of these only one, the Forest Raven, occurs on the Tasmanian mainland, although a second species, the Little Raven, *Corvus mellori*, which is found mostly in mainland Australia, occurs on King Island.

In Tasmania the Forest Raven is to be found everywhere, from mountain tops to the coast, in all habitats and even in cities and towns. Several isolated populations also occur in the south-east of the Australian mainland.

It was once considered the villain of the bird world, especially by farmers, because of the habit indulged in by some individuals of taking hens' eggs and young chickens from farm yards, and of the revolting practice of picking out the eyes of "cast" sheep and new-born lambs. To a shepherd tending his flock, particularly at lambing time, the sight and sound of mobs of ravens (or "crows" as they were generally called) prompted the use of a gun, recourse to poison baits or the setting of cage traps in an attempt to reduce their number.

In more recent years many people, including some farmers, have learned to recognise the raven for what it is, an opportunistic feeder. Its dietary habits include scavenging, but also the taking of many invertebrates, such as grasshoppers, which may damage pastures.

When pasture-feeding invertebrates are in plague proportions the raven is likely to congregate in order to capitalise on the temporarily abundant food supply, sometimes assembling in numbers of up to a hundred or so. In the days of the great rabbit plagues and before the introduction of myxomatosis decimated rabbit numbers the raven found dead rabbits an inexhaustible smorgasbord, especially along road ways. A dawn chorus of dozens, or even hundreds of ravens, "cawing" their melancholy, drawn-out phrase of "I'm-half-starved", usually indicated the presence either of a recent rabbit poisoning campaign or of a flock of sheep at lambing time.

⁶⁹ See, eg, Ian Rowley, 'A fourth species of Australian corvid' (1967) 66 *Emu* 191; see also: Ian Rowley, 'Sympatry in Australian Ravens' (1967) 2 *Proceedings of the Ecological Society of Australia* 107. Ian Rowley, 'The Genus *Corvus* (Aves: Corvidae) in Australia' (1970) 15(1) *CSIRO Wildlife Research* 27; Ian Rowley, 'The Comparative Ecology of Australian Corvids. VI: Why five species?' (1973) 18(1) *CSIRO Wildlife Research* 157; Ian Rowley, L W Braithwaite, Graeme S Chapman, 'The Comparative Ecology of Australian Corvids. III. Breeding seasons' (1973) 18(1) *CSIRO Wildlife Research* 67; Ian Rowley, 'The Comparative Ecology of Australian Corvids. IV. Nesting and the rearing of the young to independence' (1973) 18(1) *CSIRO Wildlife Research* 91; Ian Rowley and W J M Vestjens, 'The Comparative Ecology of Australian Corvids. V. Food' (1973) 18(1) *CSIRO Wildlife Research* 131.

So the Forest Raven has beneficial, as well as destructive, aspects to its feeding practices. It helps in the control of some pests, and also removes decaying carrion which would otherwise attract flies and become a potential source of disease.

Spring is its breeding time and it builds a large, bowl-shaped nest out of sticks and bark, lined with grass, wool, hair, feathers or even paper, usually high up in the branches of a tree. Four or five greenish, mottled and blotched eggs form the clutch.

Outside the breeding season it is partially nomadic and some birds have been known to move considerable distances in search of food.

The sexes have similar plumage; juveniles have yellow skin at the gape of the beak, and as they age the hazel-brown iris of young birds gradually changes to milk-white

Source: 'The unpublished portraits of Tasmanian Birds: 200 illustrations by Sue Lester with accompanying text by Bob Green', volume 4 (#200). Limited to two sets in two [sic] volumes, for the artist and author. Prepared and bound by Foot and Playsted Pty Ltd, Launceston 1998.

The Artist

Sue Lester was born in Tasmania and presently lives in Hobart, working as a qualified diagnostic radiographer in a local private practice.

She began painting 16 years ago and has held three exhibitions. She has undertaken commissioned art work, both locally and overseas, in addition to a five year contract for the production of the present volumes.

Sue paints in watercolour and her preferred subject is natural history, specialising in flowers and birds where very fine detailing is essential and is a keen bushwalker with a deep interest in nature and the environment.

The Author

Bob Green was born in Launceston in 1925 and spent his early life as a pastoralist and sheep breeder in the midlands of Tasmania. It was then that his deep interest in natural history, particularly ornithology, was fostered and developed.

After leaving the land in 1960 he was appointed Curator of Zoology at the Queen Victoria Museum and Art Gallery, Launceston, a position which he held until his retirement in 1990. Since his first article on birds was published in *The Emu* in 1950 he has undertaken numerous biological surveys and field studies and has published in excess of 100 papers on various zoological topics. He has been a licensed bird bander since 1958, a keen wildlife photographer and a member of many scientific organisations.

In 1986 he received the Clive Lord Memorial Medal from the Royal Society of Tasmania and in 1987 was awarded the degree of Doctor of Science *Honoris Causa* by the University of Tasmania and the Australian Natural History Medallion by the Field Naturalist Club of Victoria.

Dr Green has been a member of the Australian Institute of Biology since 1989 and in 1990 was appointed a Member in the General Division of the Order of Australia for his contributions to environment and conservation studies.

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