

Brood No. 4 — 2 chicks 41 days. 1 chick not definite.

Brood No. 5 — 3 chicks 41 or 42 days.

This winter period is on the average 9 days longer than that given for the normal season by A. F. Stokes.

Another notable matter is that the 8 chicks of Broods 3, 4 and 5 were little more than three quarters of normal size when they flew, whereas the earlier ones were of full size.

*First eggs laid:*

Brood No. 1 — June 17 approx.

No. 6 — July 13.

No. 2 — June 23 approx.

No. 7 — July 29.

No. 3 — July 2.

No. 8 — July 31.

No. 4 — July 3

Nests No. 3 — July, date unknown

No. 5 — July 3.

No. 5 — July, date unknown

— (Miss) B. L. GOERTZ



*GENERAL SUMMARY*

There is proof of seventeen nests having contained eggs at various times between the middle of June and the last day of July. The nests were divided between two districts and were in five separate groups.

The only record of laying to hatching did not indicate a more lengthy period than the normal one for the spring.

The survival of newly hatched chicks through a long severe winter storm was most surprising.

The hatching to flying period was on the average nine days longer than normal. The small size at the first flying of the last eight birds, from three different broods, has not been previously experienced by the observers.

— H.R.McK.



## BIRDS OF CHATHAM ISLAND AND PITT ISLAND

*By C. J. LINDSAY, W. J. PHILLIPPS and W. A. WATTERS*

These notes were the result of a short stay at Chatham Islands by two of us (C.J.L. and W.J.P.) and a much longer stay (29th January to 26th May, 1957, by W.A.W.). Our general impression is that the bird population in the past twenty years has become depleted as farming has improved and cultivated areas increased to the detriment of bush clad areas

North of a line joining Waitangi and Owenga the areas of bush remaining are almost without exception in poor condition and without undergrowth. In one or two localities small areas have been fenced off from stock; the best example of this is on the property of Mr. A. Weisner, Kaingaroa, where an area of about 100 acres, partly bushed, partly in open grassy country, has been protected in this fashion.

Over the southern parts of both islands and especially on Pitt there are still areas of forest in good condition; nevertheless much of this bush is in danger of serious damage. Among the factors damaging to the bush are:— the presence in many localities of wild sheep, cattle and pigs; the killing of many trees, particularly the matipo, by wood-boring insects; the cutting of trees along the margin of the bush for firewood in some places; and the thinning of some of the coastal fringe of scrub and bush, particularly on the south of Pitt Island, by the heavy prevailing winds. This last-named factor must always have operated to some extent, but it seems that once areas of bush have been partly opened up by other causes (such as grazing), wind is an important factor in pushing back the boundaries of the bush.

It appears that over the past twenty years populations of Black Swan and Grey Duck have remained more or less constant, while Pukeko have increased in numbers. Domestic geese have emerged as a wild species. Introduced passerine birds were not common, the Starling being the only exception. It is natural that with newer and more efficient farming techniques the scattered forest areas will decrease, this apart altogether from the considerations already mentioned. Populations of birds dependent wholly or in part on forest areas are certain to decrease still further; but the recent preservation of bush areas to protect Mori tree carvings may assist in maintaining certain bird populations. Also it is to be hoped that a considerable area of bush on the southern block of the island, notably that around Pipitarawai hill, will be protected as a refuge for the Chatham Island Pigeon.

#### INDIGENOUS BIRDS

**BLUE PENGUIN.** Several live birds were recorded; one at Waihere Bay, Pitt Island (5/2/57) and others off Manakau Point. Corpses were seen, sometimes abundantly, on most beaches, and residents report that these penguins are well distributed and common.

**WANDERING ALBATROSS.** Many birds were seen following H.M.-N.Z.S. "Endeavour" on the first two days of the passage between Waitangi and Wellington (26 and 27/5/57).

**BLACK-BROWED MOLLYMAWK.** Several mollymawks were seen on 27/5/57 from the "Endeavour," probably of this species.

**BULLER'S MOLLYMAWK.** These birds were observed during crossings of Pitt Strait on 31/1/57, 7/2/57, 24/2/57, 4/3/57 and 30/3/57.

**GIANT PETREL.** Solitary birds were commonly observed from the cliffs in many parts of both islands. Small numbers were also seen during launch crossings of Pitt Strait.

**CAPE PIGEON.** Large numbers of Cape Pigeons followed the "Endeavour" on the first two days (26 and 27/5/57) of the trip from Waitangi to Wellington.

**BROAD-BILLED PRION.** On 30/3/57 many light-coloured petrels, probably of this species, were seen flying in the Pitt Strait area between Owenga and Pitt Island. One freshly killed bird was recorded on Mangere Island (30/3/57), and another at Whenuatura, Pitt Island.

**SOOTY SHEARWATER.** Many birds were seen, often in large flocks, during crossings of Pitt Strait. Nesting birds were recorded on the

steep north eastern side of Mangere Island on 30/3/57. R. A. Hunt stated that years ago there were numerous mutton-birds breeding on all high points of the Chathams, in particular on Maunganui Hill and also at Teraki Bay on the point. A few yet lay eggs on cliffs at Mairangi and on odd places all around the cliffs on the south side of the island. South East Island is now the main breeding ground as well as Little Mangere. Neilson Brothers have been leasing S.E. Island and Large Mangere. South East Island is now a reserve and the sheep there were due to be removed during 1957. They collect muttonbirds annually and give some to friends, but organised muttonbirding has ceased. T. Hough reported 500 muttonbirds taken each year at Matarakau Point in 1890, while now barely twelve breed there.

**WHITE-FACED STORM PETREL.** Two of this species seen in Pitt Strait; evidence of destruction by cats, Whenuataru, Pitt Island.

[**AUSTRALIAN PELICAN?** In the year 1936 a large white web-footed bird flew low over Pitt Island. It was very tired and was being pursued by several gulls. It landed on a small lagoon. This was watched by Mr. R. A. Hunt and Mr. Bob Tiwai, who were crutching sheep near at hand. It flew away next day, spiralling upwards as it ascended; but returned several times and then disappeared. It was larger than a Black Swan.]

**BLACK SHAG.** These were often observed in flocks of up to 25 or 30 birds on Te Whanga Lagoon, and, in small numbers, on many of the small lakes in the northern part of the island. None was recorded on Pitt Island.

**CHATHAM ISLAND SHAG.** Both Chatham and Pitt Island Shags were recorded in small numbers many times along much of the coast of both islands, and in Pitt Strait. Colonies of the Chatham Island Shag were noted at Rabbit Island, off Pitt Island (about 15); on cliffs between Manakau Point and Cape Fournier; Okawa Point (about 30); and Matarakau Point (60). On a few occasions small numbers were seen resting with Black Shags on rocks in Te Whanga Lagoon.

**PITT ISLAND SHAG.** Colonies were recorded on Pitt Island on the north side of Kahuitara Point; Rabbit Island (15-20); and Glory Bay. On the main island they were seen at Cape Pattison (50); Okawa Point (12) and Kaingaroa Bay (about 12). A few birds were always to be seen near the wharf at Waitangi.

**WHITE HERON.** This is a rare visitor to the Chathams. Mr. T. H. Lanauze reported seeing a specimen on Te Whanga in 1922. Three birds were reported by Mr. Ivan Doak of Waitangi; one being shot at Te Awainanga May-June, 1956, one shot Lake Huro and one seen June, 1951.

**GREY DUCK.** Although obviously much reduced from earlier years, this duck is well distributed, though often only in small numbers, on all suitable water on the main island. There is probably not a large population on Te Whanga lagoon. During the shooting season there is evidently a marked dispersal to lagoons and lakes in the outlying parts of the main island, though these can probably support only a limited number of birds. Large flocks were

recorded a few times, e.g., up to 300 on Lake Huro, 7/3/57. About 20 birds were recorded on Pitt Island, on the small lake at the mouth of Tupungi Creek.

**HARRIER.** Harriers are evenly distributed, and were recorded at most localities visited on both islands.

**WEKA.** (*G. a. hectori*). Weka re-introduced from Canterbury by Jim Fougere were recorded abundantly in most parts of the main island, and particularly in the central and northern areas. Some were seen in the dense, tangled bush around Pipitarawai hill, in the southern block of the island; a few birds have even found their way to the southern shore down the very steep bushclad slope immediately south of Oropuke hill, and may be seen searching for food along the rock platform at the base of the precipitous cliffs. T. H. Lanauze tells us that many islanders go "wekaing" in May or June and take one hundred at a time in good condition—many are very fat. Waitangi West is a favourite place. They are all over the island. Weka pick at dead stock; eat maggots; pick out young plants in the garden; kill chickens and young ducks. Weka have also developed a habit of poking their long bills into hen and duck eggs and running off with them.

**PUKEKO.** Pukeko were recorded in many localities on the main island, and their harsh cries were often heard from suitable swampy areas, e.g., along the east side of Te Whanga lagoon. On Pitt Island the lower part of the Tupungi Creek valley supports a small colony; in this area the birds may be seen grazing over the hillsides well away from the stream. Mr. G. Preece reports a Pukeko on the Star Keys about 1951. T. H. Lanauze estimates the number around Lake Huro at 100.

**OYSTERCATCHER** (*H. chathamensis*). These birds were recorded at the following localities: mouth of Tupungi Creek, Pitt Island; Moutapu Point, Pitt Island; Glory Bay, Pitt Island; Mangere Island; and on the main island from Wharekauri; Cape Pattison; and on the south coast near The Pinnacles. Only a single pair of birds was normally present at each locality. Locally the oystercatcher is known as red-bill.

**BANDED DOTTEREL.** These were seen in suitable places on the main island, although they were not recorded as a characteristic bird of the open swampy "clears," as was reported by Fleming (1937). In nearly every case where noticed, they were present on grassy or swampy flats close to the sea or beside Te Whanga lagoon. On 10/4/57 many birds were observed flocking on the grassy flats along the north-east shore of Te Whanga lagoon, near Te Hapupu.

**BAR-TAILED GODWIT.** Godwits were seen at two localities on the north and east shores of Te Whanga lagoon; 5 birds near the outlet of the lagoon (Te Awapatiki) on 21/2/57; on 12/4/57, 37 birds were feeding with two Knots along the north shore of the lagoon. Much of the swampy or grassy flats forming the north and east shore of the lagoon appears to be very suitable ground for wading birds such as the godwit, and it is almost certain that

continued search during the spring and summer would provide many further records of this and other waders.

**TURNSTONE.** Turnstones were recorded three times; this is apparently the first record of this species from the Chathams. On 20-22/3/57, 55 were observed feeding along the beach immediately north of Waitangi West Station. Later, on 4/4/57, about 150 were seen feeding with Black-backed Gulls in shallow water on the north-east shore of Te Whanga lagoon, near Te Hapupu. On the following day two small flocks (12 and 8) of Turnstones were seen on the beach (Hanson Bay) immediately west of Okawa Point. (This record was made solely by W.A.W.).

**KNOT.** Two birds were seen feeding with a small flock of Bar-tailed Godwits on the north shore of Te Whanga lagoon, on 12/4/57.

**SOUTHERN SKUA.** Specimen seen ashore at Tupungi Lake, Pitt Island, 1/2/57.

**BLACK-BACKED GULL.** Observed along all parts of the coast-line; it seems to thrive best near settlement.

**RED-BILLED GULL.** Evenly distributed around the coast.

**WHITE-FRONTED TERN.** This tern was recorded around the coasts of both islands, and was more abundant around the rugged south-east shore of the main island. A flock of 20 to 25 was seen on the north end of Pitt Island.

**CHATHAM ISLAND PIGEON.** During a four-month stay in the islands one of us (W.A.W.) saw this bird on one occasion only, namely on 22/5/57, when several were seen in the thick bush around Pipitarawai hill. They were recorded, however, by other members of the party on the south-east side of Pitt Island. To judge from reports, this pigeon is still found in suitable forested parts of the southern block of the main island (i.e., south of a line joining Waitangi and Owenga) and on the southern half of Pitt Island, 3/2/57 C.J.L. saw five specimens. There is little doubt that they have almost completely disappeared from the central and northern parts of the main island. Most of the bush in these parts is in poor condition, but it is probable that occasionally a few birds may visit isolated patches of bush or the station plantations along the north coast. The areas of bush just south of the outlet of the lagoon, where Fleming recorded the pigeon in 1937, are now in very poor condition and almost completely devoid of undergrowth.

**RED-FRONTED PARAKEET.** Parrakeets were heard and seen several times on the southern part of Pitt Island, and in the thick bush on the southern block of the main island. It is probable that the parrakeet is still well distributed and not uncommon over much of the south half of Pitt Island and in several forested localities in the south block of Chatham Island. Parrakeets were heard in thin coastal bush on the north-east side of Mangere Island, on 30/3/57. On 11/3/57, Mrs. D. W. R. Heatley recorded two at the Residency, Waitangi, and later Mr. Hawkey, head of a visiting survey party, reported at least a dozen in the bush along the south coast.

**FANTAIL.** The fantail was seen very commonly, in all areas of bush visited on both islands, and in addition was nearly always found around plantations of introduced trees.

**CHATHAM ISLAND TIT.** Tits were recorded on the main island, and were frequently seen and heard over the south part of Pitt Island, and on Mangere Island.

**CHATHAM ISLAND FERNBIRD.** This species has been considered extinct for over 50 years. Mrs. G. Preece, of Pitt Island, reports seeing this bird on the south of Pitt Island about 1950-51.

**CHATHAM ISLAND WARBLER.** The warbler was recorded only occasionally. It was not definitely seen over the north half of Chatham Island. Single records were made of birds in small areas of bush along the south-west side of Te Whanga lagoon and on the south-east corner of Lake Huro. Fair numbers were seen in the thick forest around Pipitarawai hill, and along the rugged south-west coastal part of the main island. Warblers were commonly seen over the southern half of Pitt Island.

**PIPIT.** On the main island pipits are undoubtedly the most common of the indigenous birds, and they were constantly to be seen in all areas of open country and along roads and tracks. They are also present on Pitt Island, but were recorded there much less frequently than on the main island.

**CHATHAM ISLAND BELLBIRD.** One of our party was informed that a bellbird was seen near North Head, Pitt Island, three years previously. The informant, who is familiar with bellbirds in New Zealand, is completely reliable, and there would appear to be no sound reason for disregarding this report. This record must necessarily be treated with great caution in view of the fact that the bird was last reported about 1906. Much of the bush on the southern third of Pitt Island is still in good condition, and densely clothes numerous small gullies which are difficult of access and may still shelter small numbers of this species. Mrs. G. Preece, of Pitt Island, reports seeing and hearing a bellbird on the southern part of the Island about 1952.

**TUI.** Tui were heard on the southern half of Pitt Island, and at a number of places on the southern block of Chatham Island, namely Pipitarawai hill; Tuku Stream; east of The Horns. No Tui were recorded from the central and northern blocks of the main island.

**WAXEYE.** Waxeyes were commonly observed throughout both islands.



#### INTRODUCED BIRDS

**BLACK SWAN (126).** Four or five Black Swans were brought to Chatham Island by Mr. Walter Hood, Owenga. This was in 1890. Numbers increased greatly until now there are many thousands. On Chatham Island in the year 1915, much rain fell and there was considerable flooding. Also for some reason the outlet of the lake was not open. Black Swan could not reach to the bottom of the lake to get food; so they invaded every small lagoon,

creek and stream on the island, eating large quantities of watercress, etc. Thousands invaded Pitt Island. Many died or were killed; but their numbers seem to have been restored. During this period Te One suffered from large numbers of swans fouling paddocks and farms. A second occurrence of this was in 1924 when again there was too much water in the lake. The eggs are largely used for food by the inhabitants. When the eggs are taken, the general belief is that the swans shift their location and lay elsewhere. During 1957 (February) swans were said to be in better condition than in most years. Mr. A. H. K. Ousey, Manager of Wharekauri Station, stated that in a good laying season 30 to 40 thousand swan eggs are taken for food. In the past he has kept records and found this to be a correct estimate. Among the inhabitants there is an unwritten law that swans are never shot in the laying season.

**PLEASANT.** Walter Hood, Owenga, was the first to introduce pleasants. He built a special house and bred young ones, and later released the lot, but in a year or two they disappeared. Pleasants were also introduced by Mrs. Cranstone from an Acclimatization Society on the mainland about 1927. Some four or five were to be seen on Pitt Island; but did not appear to survive long.

**CALIFORNIAN QUAIL.** Small flocks of less than a dozen birds in each, were seen at Glory Bay, Pitt Island, on 28/2/57, and near the wireless station at Waitangi, on 21/5/57. Californian Quail were first introduced by Frederick Hunt. Their numbers are said to be now reduced by the weka.

**SKYLARK.** Recorded on both islands; birds were often surprised in the grassy verges at the sides of roads on Chatham Island. The Skylark is much less abundant than the pipit. Skylarks were in Pitt Island before 1893. In this year Capt. Rommell reported a Skylark's landing on his vessel and remaining there until it flew ashore at the Chathams.

**THRUSH.** The Songthrush appears to be not uncommon at Wharekauri; but scarce in most other places. It is reputed to sing very late, sometimes after dark in midsummer. Two were seen on Pitt Island, 3/2/57.

**BLACKBIRD.** Solitary birds, or pairs, were heard and seen in most parts of both islands. They were most commonly recorded in areas of open country still having small remaining patches of bush, e.g., the Te Roto district of Chatham Island.

**HEDGE SPARROW.** This bird was apparently rare. One record was made on Pitt Island, 3/2/57, and one near Te One on 11th February.

**GOLDFINCH.** Small flocks of goldfinches were recorded a number of times at various points on Chatham Island. According to R. A. Hunt, Goldfinches came to the Chathams on the S.S. OHAU in the year 1894. These birds had flown out to sea to escape bush fires in the North Island. They were reputed to be very tired, and came in a mass on to the boat. When the boat reached the Chathams many flew ashore; others were too weak and died. Later on they arrived at Pitt Island.

- LESSER REDPOLL. Redpolls were seen in small flocks at a number of places on Chatham Island, e.g. above the Te Awatapu slip, on the south coast; and in open country between Tuku Stream and The Horns, at the south-west part of the island.
- CHAFFINCH. The Chaffinch was recorded on 4/5/57, when a solitary bird was seen flying at the mouth of Takatika Creek, on the north coast of Chatham Island. Another was seen on Pitt Island at the north end near the Hunt homestead 2/2/57.
- YELLOWHAMMER. A single bird was seen at Waipaua, Pitt Island, on 1/3/57. None was seen on Chatham Island.
- HOUSE SPARROW. Small numbers seen around homesteads and at Waitangi. Sparrows were first introduced to Pitt Island by Frederick Hunt. Walter Hood introduced these sparrows to the main island, intending to introduce Skylarks!
- STARLING. This is the most common land bird. It is widely distributed in both islands. Flocks of 500 were often seen. On Mr. A. Weisner's station, Kaingaroa, in an introduced Pinus plantation, up to 4,000 roosting birds were recorded on 8/4/57.
- GEESE. On Lake Marakapia on the west coast of the main island a flock of twenty to thirty geese (*Anser anser*) exist in a wild state. Residents state that the birds are increasing.



## THE SUPPOSED OCCURRENCE OF KAKAPO, KAKA AND KEA IN THE CHATHAM ISLANDS

By ELLIOT W. DAWSON

In the course of the preparation of a work on the extinct birds of the Chatham Islands, comments have been noted on the former existence there of Kakapo, Kaka, and Kea, and the purpose of the present account is to offer a review of some of these reports. The osteological aspect of identification, variation, and distribution of Kaka and Kea amongst bird remains from Quaternary deposits at the Chathams will be considered on another occasion.

### THE KAKAPO (*Strigops habroptilus*)

Some years ago attention was drawn to the identification, among bird bones in collections of the Dominion Museum, Wellington, of a tibiotarsus of a Kakapo, reputed to have been collected in the Chatham Islands (Dawson, 1952: 259), and now forming part of the Travers collection. At the time no further comment was offered on the finding of such a relic of the flightless ground-parrot which might be considered evidence of its former existence on this isolated group of islands, some 500 miles to the east of New Zealand.

G. R. Williams (1956: 39), in his excellent and timely review of the past and present status of the Kakapo, has made a brief investigation into the evidence for the former existence of this bird at the Chathams, and from this he concluded: "In my opinion judgment