THE BIRDS OF THE NORTHERN MO KOHINAU GROUP

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SUMMARY

Seven islands and stacks were visited in the northern Mokohinau Group. During the past century, fifty bird species have been identified from these islands. Twenty-seven were located during this visit, including four species not previously recorded. The distribution and breeding ranges of several birds were extended to islands where they have not formerly been recorded.

INTRODUCTION

The northern Mokohinau Group consists of nineteen islands and stacks with a variety of habitats (see fig. 1, Wright 1980). The larger islands have been modified by man, but several pelagic species, mostly summer breeders, nest in some numbers.

Weather made it possible to visit only seven islands. They were Burgess, Maori Bay, Trig, Motupapa, Lizard, “Stack H” and “Stack D”. Half-day trips were made to all of the outlying islands, except Maori Bay, where two visits were conducted, and Burgess, where the camp was located.

Observations were made during the Auckland University Field Club scientific expedition to the Mokohinaus from May 21 to May 29, 1979. Species nomenclature follows Ornithological Society of New Zealand (1970). The distribution, abundance and breeding status of birds observed during this study are shown in Table 1.

DESCRIPTION OF THE ISLANDS VISITED

Burgess Island

At 52 hectares, Burgess Island, the largest in the northern Mokohinau Group, forms the lighthouse reserve. Most of the island is now grassland, but pohutukawas (Metrosideros excelsa) reach a height of 5 m at the SW end and on certain cliff faces. The northern part was, until recently, browsed by goats; while stock grazes the middle portion of the island. However, all livestock will be removed when the station is automated in 1980.

According to Gillham (1960), Burgess Island was burnt every 3 years to remove tussocky sedges. Kiore (Rattus exulans) were
abundant, but neither *R. norvegicus* or *R. rattus* has become established.

**Trig Island**

Referred to as West Island by some writers, Trig Island is 16 hectares, and has a long, indented coastline. It may have been inhabited by Maoris and like other islands in the group, it is probably still "muttonbirded" by descendants of the former owners. The remains of an old fence shows that stock was kept on the island. Wilson (1959) records one of the islands, probably this one, as having goats in 1945.

The vegetation is mostly flax (*Phormium tenax*), pohutukawa, ngaio (*Myoporum laetum*), taupata (*Coprosma repens*) and *Hymenanthera*. Like the larger islands in the Knights Group (comprising the western islands), it has probably been burnt annually by muttonbirders to remove undergrowth to make it easier to collect the young petrels. Gillham (1960) claims that this island was burnt by fishermen in 1932. *Kiore* are common.

**Maori Bay Island**

This island is 10 hectares and also has *kiore*. Like Trig Island, it was burnt in 1932, and before then, by the Maori who still "muttonbird" there. The vegetation consists largely of flax, several stands of pohutukawa, taupata, ngaio, *Scirpus nodosus* and bracken (*Pteridium aquilinum*).

**Motupapa Island**

A member of a small cluster of islets north of Maori Bay Island and covers 1.5 hectares. It has young pohutukawa forming a 5m canopy and large areas of flax, suggesting it has been burnt this century. *Kiore* are present.

"**Stack H**"

This 1.2 hectare island is more isolated than others that were examined and is free of *kiore* and signs of burning. The vegetation consists of splash-zone species, such as glass-wort (*Salicornia australis*), while pohutukawa and karō (*Pittosporum crassifolium*) are present on the higher regions.

"**Stack D**"

This 1 hectare islet, which is joined to Motupapa Island at low tide, has a large wave platform and a smaller flat area covered in flax and pohutukawa. *Kiore*, which could probably swim to this island (Whitaker 1974), are present.
Lizard Island
A small 0.8 hectare, flat island, with low vegetation consisting of a splash-zone of N.Z. ice-plant \textit{(Disphyma australe)} and glasswort, with taupata, ngaio and \textit{Hymenanthera} in the centre. Kiore apparently got ashore in 1977. However, poisoning in 1978 may have removed them (C.R. Veitch pers. comm.). There is no evidence of man-imposed modification.

LITERATURE SURVEY

Despite their isolation, the Mokohinaus have been the subject of a number of papers. Sandager (1890), a resident lighthouse keeper, recorded 38 species, many of which were rare visitors to the group.

Fleming (1946), Buddle (1947 b), Fleming and Wodzicki (1952), Gurr and Kinsky (1965) and Wodzicki and Robertson (1974) refer to the red-billed gull \textit{(Larus novaehollandiae)} and gannet \textit{(Sula bassana)} colonies which are present in the group, while Buller (1893 a, b), Buddle (1947 a), Roberts (1953), Emmens (1954), Wilson (1959), Turbott (1961) and Veitch (1973) mention some or many of the species in various detail.

SPECIES LIST

Little blue penguin, \textit{Eudyptula minor}.
At night, several were heard calling from possible nest sites on Burgess Island. They probably breed on many of the larger islands in the group.
Grey-faced petrel, \textit{Pterodroma macroptera}.
A significant concentration of burrows occurred on all islands visited except Lizard Island and “Stack H”. No eggs had been laid, but adults were returning at night to clean burrows and partake in courtship activities. A single bird was found in an empty burrow during daylight on Motupapa Island and a corpse located on a beach at Maori Bay Island.
Cook’s petrel, \textit{*Pterodroma cooki}.
The only record for the group is by Sandager (1890). This species is fairly common in the surrounding waters during the summer months (T.G. Lovegrove pers. comm.).
Fairy prion, \textit{*Pachyptila turtur}.
Sandager (1890) records a single specimen of \textit{Prion banksii} (=\textit{Pachyptila desolata}), the Antarctic prion. However, it may have been misidentified. Fairy prion is more likely to turn up in this area as there is a breeding colony on the nearby Poor Knights Islands.
Black petrel, \textit{*Procellaria parkinsoni}.
Recorded by Sandager (1890). Some are occasionally seen at sea near the islands (T.G. Lovegrove pers. comm.).
Flesh-footed shearwater, *Puffinus carneipes.*
A dead specimen was found at the Landing Bay on Burgess Island. Although it has not been reported on these islands before, it is abundant offshore during summer.

Buller's shearwater, *Puffinus bulleri.*
Recorded by Sandager (1890), who handled specimens before the species was named by Salvin in 1888. Large flocks are common offshore during summer.

Sooty shearwater, *Puffinus griseus.*
Recorded breeding on “Stack D” and Maori Bay Island by Veitch (1973), but this visit did not coincide with its summer breeding season.

Fluttering shearwater, *Puffinus gavia.*
Recorded breeding in low numbers on Trig. Maori Bay, “Stack H”, Lizard and Motupapa Islands by Veitch (1973). This bird is a summer breeder and was not seen during this visit.

Allied shearwater, *Puffinus assimilis.*
Empty burrows were found on “Stack H” and Lizard Island. On the latter, adults were in their burrows during the day. Veitch (1973) also reported this species on “Stack D”.

White-faced storm petrel, *Pelagodroma marina.*
A harrier-eater body was found on “Stack H”, from which the species has not previously been recorded. Much of Lizard Island was honey-combed with storm petrel burrows and an occasional corpse was found under the low vegetation.

Black-bellied storm petrel, *Fregetta tropica.*
Recorded by Sandager (1890).

Diving petrel, *Pelecanoides urinatrix.*
Veitch (1973) recorded this species on all islands visited. This is interesting, as the islands on which it was rare also have kiore and the two are rarely associated together. Unoccupied burrows, most probably belonging to diving petrels, were located on “Stack H”.

Australian gannet, *Sula bassana.*
Fleming and Wodzicki (1952) mention gannetries on Groper Rock and the Cathedral Rocks. Neither island was visited. This species was relatively common in the surrounding waters.

Pied shag, *Phalacrocorax varius.*
Two seen off Lizard Island and around the Knights Group. They appeared to fly to Fanal Island to roost at night.

Little shag, *Phalacrocorax melanoleucos.*
One bird seen regularly around the Knights Group. This is a new record for the Mokohinaus.

Reef Heron, *Egretta sacra.*
Both Sandager (1890) and Veitch (1973) record this bird as a rare vagrant to the group. None were seen on this visit.

Harrier, *Circus approximans.*
Several harriers were regularly seen. Kiore appeared to form a major portion of their diet at this time of the year, judging by the eaten corpses found. Sandager (1890) had counted up to 30 individuals inhabiting the group.

Brown quail, *Synoicus ypsiophorus*.

Sandager (1890) states that occasional individuals visited the islands.

Golden plover, *Pluvialis dominica*.

Sandager (1890) reported that several birds visited the group every year during September.

Wry bill, *Anarhynchus frontalis*.

Sandager (1890) records several pairs as visiting the islands for a short period one October.

Bar-tailed godwit, *Limosa lapponica*.

Another migrant species reported by Sandager (1890). He stated that individuals would briefly stop during October each year for several days.

Wandering tattler, *Tringa incana*.


Arctic skua, *Stercorarius parasiticus*.

Occasional birds visit the group (Roberts 1953, McCallum 1979). The lack of a suitable host species in sufficient numbers (e.g. white-fronted terns) may explain this skua's scarcity.

Black-backed gull, *Larus dominicanus*.

Several pairs inhabit the islands and probably nest during the summer.

Red-billed gull, *Larus novaehollandia*.

Only a few stay around the Mokohinaus after the breeding season. In summer, the colony has been estimated at over 5,000 pairs (Gurr and Kinsky 1965). This figure contrasts with Sandager's (1890) observations of only one small colony on an outlying rock.

White-fronted tern, *Sterna striata*.

Breeds in low numbers during the summer. (Veitch 1973).

Rock pigeon, *Columba livia*.

The only record is by Veitch (1973) who reported one on Burgess Island.

Kaka, *Nestor meridionalis*.

Sandager (1890), Roberts (1953) and Emmens (1954) list this species as an infrequent visitor to the Mokohinau Group. One appeared on Burgess Island during this visit and stayed for two days.

Red-crowned parakeet, *Cyanoramphus novaezelandiae*.

Recorded on five islands during this visit. The reports for Lizard Island and "Stack H" are new records.

Shining cuckoo, *Chalcites lucidus*.

The only record is by Sandager (1890). The scarcity of host species,
such as grey warblers, may discourage this cuckoo from staying.

Long-tailed cuckoo, *Eudynamis taitensis*.

The present light-house keeper, R. Walters, has seen this bird on Burgess Island, while Sandager (1890) states that two over-wintered in 1886.

Morepork, *Ninox novaeseelandiae*.

Two seen in pohutukawa bush on Burgess Island. This species is a rare vagrant to the Mokohinau Group.

Kingfisher, *Halcyon sancta*.

Several pairs inhabited the group. They were noted on all islands except “Stack H” and Lizard Island.

Skylark, *Alauda arvensis*.

One seen on Burgess Island.

Welcome swallow, *Hirundo tahitica*.

At least three individuals were present. This is a new record for the Mokohinau Group.

Pipit, *Anthus novaeseelandiae*.

Sandager (1890) states that this bird was common and bred on all islands, while Veitch (1973) reported it as rare on Burgess Island. None were seen during this visit.

Hedge sparrow, *Prunella modularis*.

The only report is by Veitch (1973) who noted several on Maori Bay and Trig Islands.

Grey warbler, *Gerygone igata*.

One seen on Trig Island. This is a new record for the group.

Fantail, *Rhipidura fuliginosa*.

Present on Motupapa, Maori Bay and Trig Islands.

Song thrush, *Turdus philomelos*.

One seen on Burgess Island. Not previously recorded from the Mokohinau Group, although it occurs on several islands within a 30 km radius.

Blackbird, *Turdus merula*.

Found on “Stack H”, Burgess, Lizard and Maori Bay Islands.

Silvereye, *Zosterops lateralis*.

Small flocks were located on Motupapa and Lizard Islands, while larger groups, up to ten birds, were noted on Maori Bay, Trig and Burgess Islands.

Bellbird, *Anthornis melanura*.

Emmens (1954) and Sandager (1890) list this species as a visitor to the group.

Tui, *Prosthemadera novaeseelandiae*.

Buddle (1947 a), Emmens (1954) and Sandager (1890) record this species as a visitor, which may arrive when the flax is in flower.

Yellow hammer, *Emberiza citrinella*.

Sandager (1890) records this species as an occasional visitor.
Goldfinch, *Carduelis carduelis*.
A flock of twenty birds were seen on one occasion on Burgess Island.

House sparrow, *Passer domesticus*.
Found on Burgess and Lizard Islands. Veitch (1973) also recorded small numbers on Maori Bay and Trig Islands.

Starling, *Sturnus vulgaris*.
Birds were located on “Stack D”, Motupapa, Burgess and Lizard Islands.

Myna, *Acridotheres tristis*.
A flock of twelve birds frequented Burgess Island and ranged to nearby Lizard Island. Kiore were observed feeding on a fresh, dead specimen on Burgess Island.

* denotes species which have only been recorded striking the lantern last century.

**DISCUSSION**

The annotated species list for the northern Mokohinau Group is broad and interesting for a number of reasons:
- its suitability as a breeding ground for seabirds.
- its position as a first landfall for some arctic migrants.
- its proximity to large and well-forested islands, such as Great Barrier, Hen and Little Barrier.
- accurate observations by competent naturalists over the years, especially those made by Sandager in the 1880s.

The beams of the lighthouse claimed many victims soon after the lantern was installed, including five species not recorded on the islands since. Birds may still strike the light, but are disposed of and rarely identified. During the last century, there appears to have been an impressive increase in the Mokohinau gull colony. Sandager (1890) states that they only bred on an offshore rock, but by 1933, over 5 000 pairs bred on Burgess Island. (Gurr and Kinsky 1965). The low number of passerines, especially native species which breed on the islands may be due to lack of habitat. Much of the vegetation consists of flax, providing only a limited seasonal food source and marginal habitat for many birds. Buddle (1947) refers to the possible visit of an Australian raven (*Corvus* sp.) to the Mokohinau Group, but this has been placed in the Annotated Checklist (1970) suspense list pending further evidence.

**Predation**

All the islands visited, except “Stack H”, were inhabited by kiore. Predation on small petrels by this rat has been discussed by Thoresen (1967) and Imber (1975). The smaller pelagic species, especially diving
Table 1. The distribution, abundance and breeding status of birds on islands visited in the Mokohinau Group, 21 to 27 May 1979. □ ■ - abundant. ○ ● - frequent. ▼ ▼ - rare + - vagrant/storm-wrecked. Closed symbol - proved breeding (this visit). Open symbol - not found breeding, but may possibly do so.

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petrels, white-faced storm petrels and allied shearwaters breed successfully only on rat-free islands. “Stack H” has populations of these three species, while Lizard Island, formerly rat-free, had viable colonies of allied shearwaters and white-faced storm petrels. Kiore got ashore on Lizard Island in 1977. It would be interesting to compare the populations of the small petrels on this island with that before the rat invasion.

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