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**BIRD AND MAMMAL OBSERVATIONS
ON ADAMS ISLAND AND
SOUTHERN AUCKLAND ISLAND
1989**

by

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ABSTRACT

Observations were made of birds and mammals on Adams Island and the southern end of the main Auckland Island between 2 November and 7 December 1989. Thirty-five bird species, fur seals and sealions were observed. Five Auckland Island rail were captured and many more heard on Adams Island. Counts of wandering and royal albatross, yellow-eyed penguins, Auckland Island teal and Auckland Island dotterel were undertaken on Adams Island.

Introduction

As part of the 1989 Department of Conservation expedition to the Auckland Islands the authors, Lou Sanson (Department of Conservation, Invercargill) and Andris Apse visited Adams Island, southern parts of the main Auckland Island and some small islands in Carnley Harbour between 2 November and 7 December 1989. Our main aims were to search for Auckland Island rail, and count yellow-eyed penguin, Auckland Island dotterel, and Auckland Island teal but we made many incidental observations of other species. This report summarises all our incidental mammal and bird observations, details the results of our albatross counts and describes briefly the results of our rail search, dotterel, penguin and teal counts which are reported in more detail elsewhere (Elliott 1991, Walker & Moore in press, Moore 1990, and Moore & Walker 1990).

Coverage

Figure 1 shows the places we visited and camped on Adams Island and the adjacent main island. Our main base was at Magnetic Bay.

Grid references

Grid references in this paper refer to the draft Auckland Islands map of the Infomap 260 series produced by the Department of Survey and Land Information.

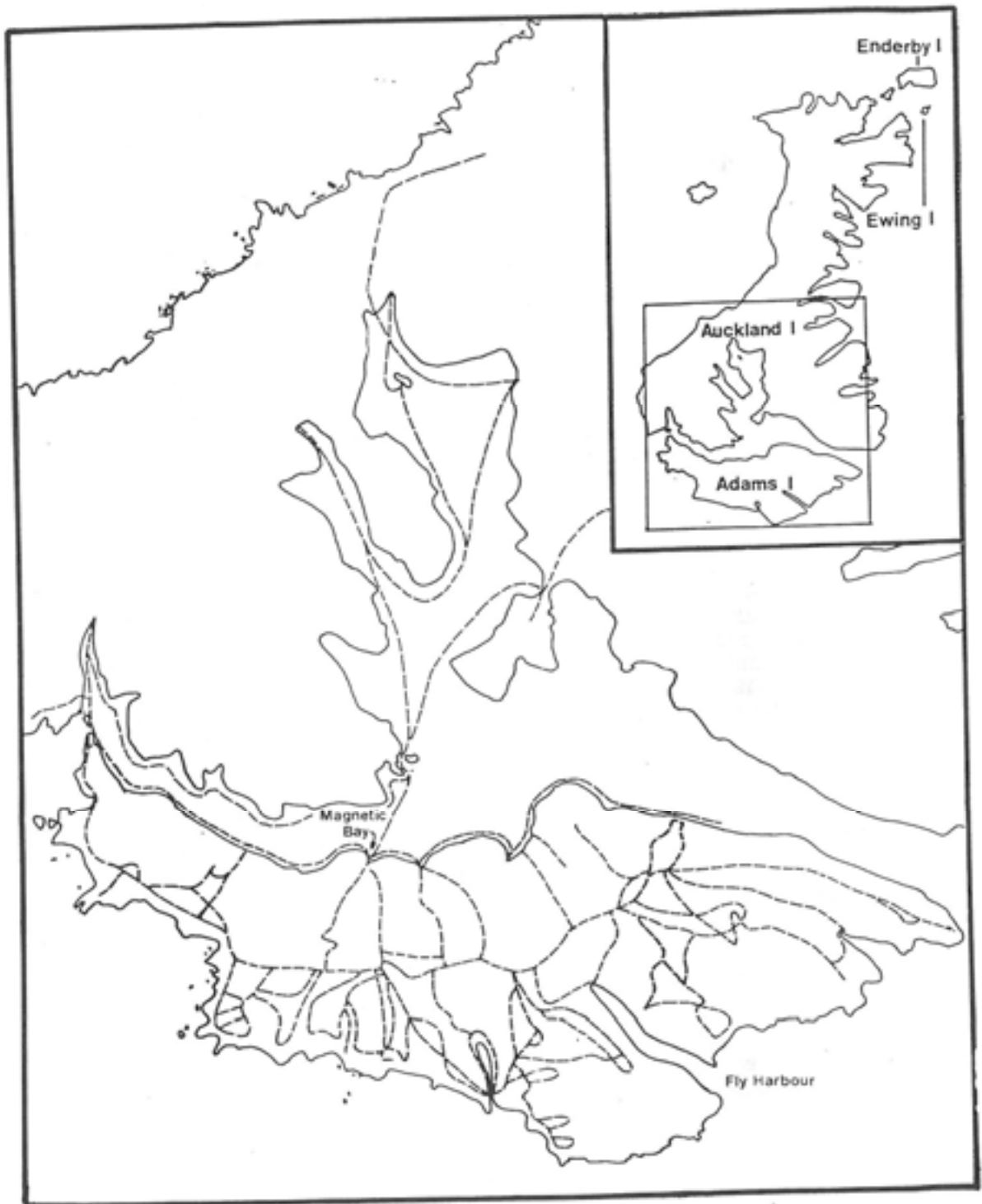


Figure 1: Coverage of Adams Island and southern parts of the main Auckland Island. The dashed line shows places we visited.

Wandering Albatross (*Diomedea exulans exulans*)

Nests containing chicks were found in groups and singly throughout the tall tussock grasslands at mid-altitude on Adams Island. The greatest concentrations were on south-facing slopes particularly between Astrolabe Point and Amhurst Rock, and Lake Turbott and Fly Harbour.

During November and December when we were on the island, adults were mainly at sea, only returning to land occasionally to feed their chicks. Most of the chicks had more "adult" feathers than down, and some were almost ready to fly when we left the island in the first week of December.

Though we attempted to count all the chicks on the island, our counts are not comparable with the estimate made by Robertson (1975 and pers. comm.) when adults were on nests. We counted 865 chicks (see Figure 2), but as some areas were poorly surveyed we estimate that there were between 900 and 1000 present on the island and perhaps many more. Robertson (1975) estimated that there were 7000 pairs of wandering albatross on the island - either there has been a dramatic decline of wandering albatross since 1972, a high chick mortality during the winter of 1989 or Robertson's (1975) estimate and/or our count is very inaccurate.

A more detailed count of the wandering albatross on Adams Island is needed to better assess the conservation status of the population and the species.

Southern Royal Albatross (*Diomedea epomophora epomophora*)

Royal albatross were seen in five locations, all east of Lake Turbott.

1. In the vicinity of grid reference 938744 (see Figure 2) on 25/11/89 about 15 adults were seen. Some birds on the ground were courtship displaying.
2. A pair was seen on 5/11/89 at grid reference 726743.
3. On 18/11/89 near Castle Point at grid reference 000750, two royal albatross adults were seen. One was flying and the other was on the ground amongst tussock and scrub. Wandering albatross were also present.
- 4.
5. On 18/11/89 on a ridge top at grid reference 985760 a pair of royal albatross was seen.
6. On 17/11/89 a breeding group was found amongst tussock and scrub at Gilroy Head in the vicinity of grid reference 020761 (see Figure 2). 13 adult royal albatross were counted and both adult and chick wandering albatrosses were also present.

Birds were mostly paired, sometimes on nests, but no eggs had been laid. Courtship displays were observed.

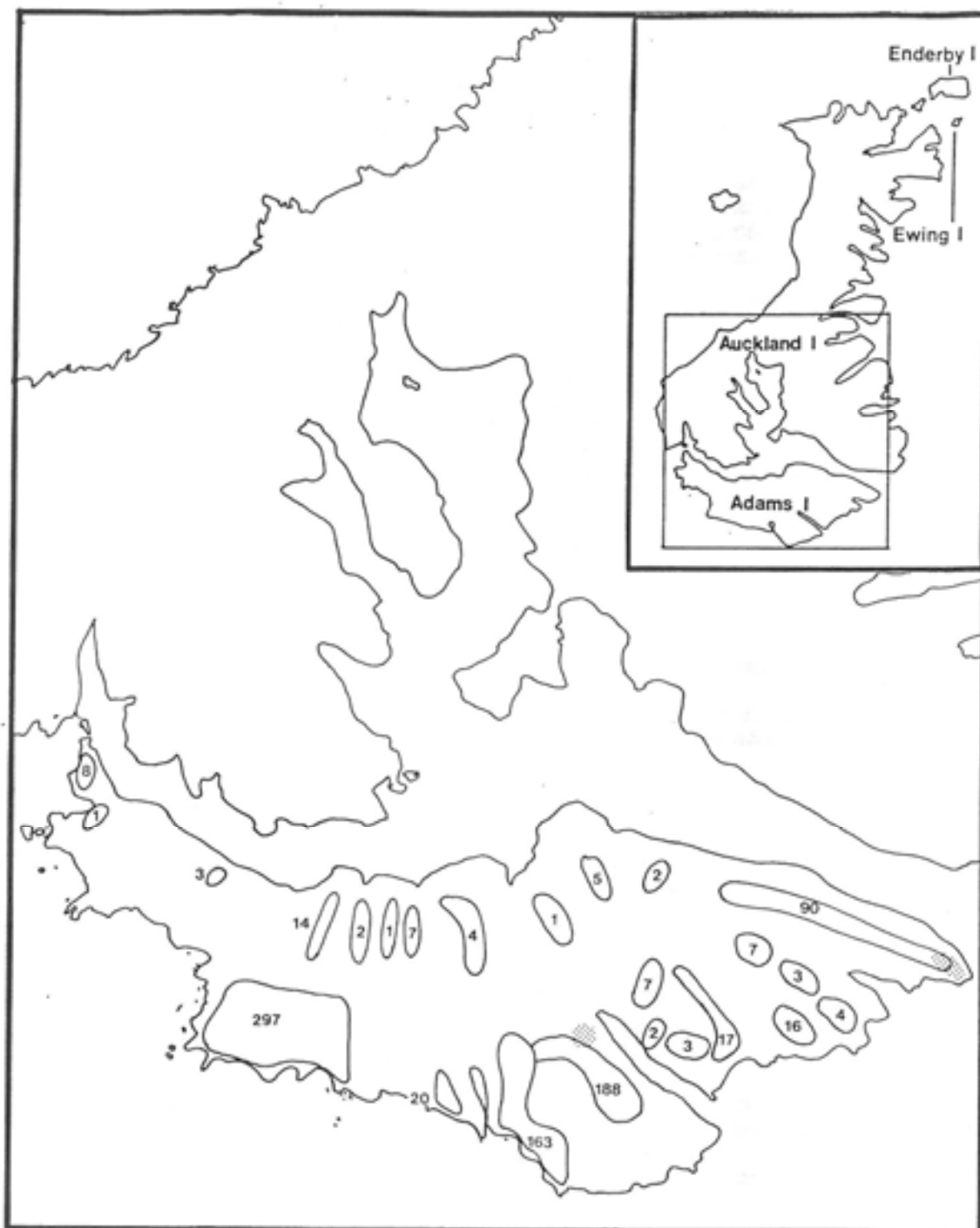


Figure 2: Numbers of Wandering Albatross chicks counted on Island. Shaded areas represent concentrations of Royal Albatross adults.

White-capped Mollymawk (*Diomedea cauta steadi*)

Two colonies were visited, one near Logan Point on Adams Island and the other near South West Cape of the main Auckland Island. These were the only colonies found.

Logan Point Colony, Adams Island, Grid Reference 826773

This colony was situated in steep south facing herbfields above cliffs. On 19/11/89 GPE and KJW counted 32 birds sitting on nests and estimated that there were about 50 nests. No eggs were present and there were several unused nests.

South West Cape, Auckland Island, Grid Reference 810813

This colony, which includes three groups, was counted by RB and LS on 8/11/89 who recorded over 500 birds. Courtship display and copulation was observed, but no eggs were seen on nests.

Light-Mantled Sooty Albatross (*Phoebastria palpebrata*)

We found nests and birds on nearly every suitable cliff. The biggest colony was found in rock and herbfield below cliffs south-east of Mount Dick (grid reference 893733), where we saw between 100 and 150 birds, though only 40-50 had nests. Birds were sitting on eggs (1 egg each) in November and early December.

Northern Giant Petrel (*Macronectes giganteus halli*)

A small breeding colony of giant petrel was found at Fairchild's Garden (grid reference 826808) on 7/12/89 and consisted of 8 adults and one chick on a nest. Rowley Taylor (pers. comm.) recorded about 50 birds here on 13/11/54, Brian Bell (pers. comm.) recorded 66 in January 1966, and Taylor (pers. comm.) recorded 13 chicks on 20/11/78.

Taylor (pers. comm.) also recorded 22 giant petrels including 14 chicks on nests just south of Chapman's Pinnacle on 13/11/54. These were no longer present when he revisited the site in 1978, nor were they present during our visit.

Adults were seen occasionally throughout Adams Island, but no other colonies were found.

White-headed Petrel (*Pterodroma lessoni*)

White-headed petrels were heard at all places visited at night along the north shore of Adams Island as well as above the scrub-line at Magnetic Bay. One bird was seen at Harris Bay on 3/12/89 and GE found a colony above bluffs in rata/*Dracophyllum* forest in Maclaren Bay on 5/12/89. Moss and other vegetation had been freshly grubbed in the vicinity of, and at the entrance of burrows, a sign not observed at sooty shearwater burrows.

White-headed petrels are very vocal from about one hour after dark and have a range of calls. Judging from the numbers of birds calling, the fact that they were heard at most

campsites, and the number of skeletons found, white-headed petrels are a common breeding petrel on Adams Island.

Antarctic Prion (*Pachyptila desolata*)

Prions (sp?) were commonly seen at night around Magnetic Bay and other parts of northern Adams coastline. Prion calls were sometimes heard from small burrows on coastal faces. Two birds were caught and identified as Antarctic Prions on 6/11/89 and 5/12/89 at Magnetic Bay.

White-chinned Petrel (*Procellaria aequinoctialis*)

Although not seen, white-chinned petrels were probably heard flying over on one occasion each at Harris Bay (3/12/89) and Magnetic Bay (5/12/89).

A burrow found near Logan Point fitted Falla *et al.*'s (1979) description of white-chinned petrel burrows.

Sooty Shearwater (*Puffinus griseus*)

Moderate numbers probably breed throughout Adams Island, with concentrations of burrows in the coastal rata forest.

Sooty shearwaters were heard or seen in burrows near the coast at Magnetic Bay, Survey Bay (three places), Fleming Bay, Harris Bay, Maclaren Bay, and Bollons Bay, and further inland at 350m a.s.l in the basin west of the head of Fly harbour.

A circling flock of sooty shearwaters was often seen from Magnetic Bay at dusk, and 100-200 were seen circling above the Lake Turbott outlet at 2300 hours on 5/11/89.

Grey-backed Storm Petrel (*Garrodia nereis*)

One grey-backed storm petrel was caught at Fleming Bay on the evening of 22/11/89 and the remains of a preyed upon bird were found about 800m inland behind Maclaren Bay. On 22/11/89 a storm petrel was disturbed from the coast near Grafton Point and was subsequently chased by a southern skua.

Black-bellied Storm Petrel (*Fregetta tropica*)

Two birds were identified and photographed roosting under rocks, and many others were heard calling on the rocky ridge west of Fly Harbour (grid reference 923750) at 600 m a.s.l. Birds were also heard at the head of "Fly Basin" (grid reference 929745) during several evenings spent there, and one was seen under rock bluffs on the evening of 29/11/89.

Diving Petrel (*Pelecanoides urinatrix*)

Diving petrels (presumably subantarctic diving petrels (*P. u. exsul*)) were heard after dark at Magnetic and Fleming Bays, but numbers seemed to be low. Many were heard among bluffs in a basin above Fly Harbour (grid reference 929745) and their burrows were found under scrub and tussock.

Yellow-eyed Penguin (*Megadyptes antipodes*)

A detailed account of our yellow-eyed penguin observations is given by Moore 1990.

Penguins were seen coming ashore at 17 places between Fleming and Harris Bays on the northern shore of Adams Island, and at the outlet to Lake Turbott, Fly Harbour and Bollons Bay on the south coast. Some were also seen at Tagua Bay on the main Auckland Island. 64 were counted coming ashore at 15 places on the northern shore and Moore (1990) estimated that between 30 and 40 pairs nested on Adams Island.

Auckland Island Shag (*Leucocarbo campbelli colensoi*)

Auckland Island shags were common in Carnley Harbour where they were seen swimming alone or in flocks of up to 30. Small groups (7-12 birds) were seen roosting on rocky points near Magnetic and Maclaren Bays. A large roost of 38 birds was located beneath the dry cliff to the east of Lake Turbott, and south of Chapman Pinnacle shags were seen nesting on a dry overhanging cliff face.

Mallards were seen in a few locations on the main Auckland Island (Western and Musgrave Harbours) but at only one location on Adams Island where three were seen at the outlet of Lake Turbott on 12/11/89.

Auckland Island Teal (*Anas aucklandica aucklandica*)

A detailed account of our teal observations is given by Moore and Walker 1990.

We observed a total of 78 teal on Adams Island. Most were seen on the sea on the northern coast of the island, but birds were also seen on streams at Maclaren, Bollons and Magnetic Bays and near the mouth of Lake Turbott. Moore and Walker (1990) estimated that there were at least 160 teal on Adams Island.

New Zealand Falcon (*Falco novaeseelandiae*)

Falcon were seen regularly throughout the island particularly on the north side (facing Carnley Harbour). Five nests were found (Table 1), and another pair of birds was seen that did not seem to have a nest. We therefore know that there were at least 12 falcons on Adams Island and we estimate that there were about 15.

Table 1
Falcon nests on Adams Island

Date found	No. eggs	Grid ref.	Site
5/11/89	3	901777	Coastal rata forest
5/11/89	3	922778	Coastal rata forest
15/11/89	3	859742	Rock ledge beneath slope of dense <i>Chionochloa antarctica</i> tussock
23/11/89	3	922773	Small pocket of rata surrounded by clearings and <i>Dracophyllum</i> forest
23/11/89	2	930744	Rock overhang surrounded by scrub and tussock

Feeding observations

- 9/11/89 One falcon flushed three snipe and then "dive-bombed" one of them (the fattest one!).
- 24/11/89 GE and KW saw a falcon take a snipe which they had flushed.
- 24/11/89 GE and KW saw a falcon chase dotterels above open fellfield.
- 4/12/89 A falcon swooped low over a rail we just released in the air (to see if it could fly).

Other observations

- 9/11/89 A falcon swooped on a skua near point west of Fleming Bay.
- 28/11/89 A skua/falcon skirmish was observed in the basin west of the head of Fly Harbour. First the falcon attacked the skua in flight, then the roles reversed. After 4 minutes both birds flew away.
- 22/11/89 The falcons at a nest in Fleming Bay were photographed and tape recorded. Both birds were surprisingly docile, only the male bird (which was sitting) actually attacked. It returned to the nest after about 5 minutes even when the observer (RB) was close.

Auckland Island Rail (*Rallus pectoralis muelleri*)

Details of our rail observations are given in detail in Elliott *et al.* (1991).

We caught 5 rails at 3 places and heard them at 20 other places on Adams Island. Rails readily responded to tape recordings of their calls on Adams Island. Using such tapes we were, however, unable to find rails on any islands in Carnley Harbour or on the main Auckland Island: we believe there are no rails on these islands. On Adams Island, rails

occupied a range of vegetation types, all of which offered dense cover near ground level. There are probably several hundred rails on Adams Island.

We found two rail nests, one in use and one old one. The active nest contained two eggs that were being incubated when we found it in mid November.

Auckland Island Banded Dotterel (*Charadrius bicinctus exilis*)

Details of our observations are given in detail in Walker *et al.* (in press).

We counted 273 dotterel on Adams Island, mostly on the fellfields along the main ridge of the island. Birds were generally in pairs or small groups of four to ten, but one group of 20 was seen. A pair of were seen twice on the beach at Magnetic Bay after dark, and one of these birds was caught in a trap set for rails. No other dotterel were seen on the coast of Adams Island.

We found 11 nests on Adams Island which contained 1 to 4 eggs. The nests were all in the exposed fellfields on the top of the island, but were in the lee of stones or short rushes.

Auckland Island Snipe (*Coenocorypha aucklandica aucklandica*)

Snipe were commonly flushed from tussock and tussock shrubland throughout Adams Island. They were also present, though less often seen, in forest, shrubland, and herbfield from sea level to the tops.

Snipe with chicks were seen on four occasions.

- | | |
|----------|--|
| 4/11/89 | An adult with one chick in tussock and herbfield. |
| 11/11/89 | An adult with one chick in herbfield at Magnetic Bay. The chick had some down and many "adult" feathers. Its bill was short and black. |
| 16/11/89 | An adult with one chick on fellfield on main ridge. |
| 4/12/89 | An adult with one chick in tussock. The chick was caught and measured (see Table 2). |

Colouring

Some snipe had a russet or fawny colouration on various parts of their body, typically on the rump or back.

Morphometrics

9 snipe were caught, weighed and measured (see Table 2).

Table 2
Morphometrics of Auckland Island snipe.

Bill		Tarsus	Mid			Mt&C	Wing	Tail	Weight
Length	Depth		Toe	Claw					
55.8	9.1	22.3	28.6	5.3	34.2	106	41	85	
55.0	-	23.0	-	-	35.6	109	44	89	
60.3	-	24.6	-	-	37.3	106	-	89	
55.5	9.7	23.5	30.2	6.7	36.9	103	37	91	
62.7	9.8	24.5	30.3	6.1	36.4	111	43	98	
64.1	12.0	26.4	32.0	5.7	37.7	110	42	122	
62.9	10.0	24.9	31.1	5.4	36.5	107	47	95	
60.2	9.5	23.6	28.6	6.4	35.0	107	42	91	
26.2	6.3	20.4	27.3	3.8	31.1	-	-	39*	

* - chick

Calling

Snipe were not heard calling during daylight (except occasionally at dusk), but they were very vocal at night in some places, notably the near our campsites at grid references 959774 and 923750. There was little variation in calls between birds. Birds appeared to call for about 10 seconds, usually every 20 -30 minutes. Although the calls were very similar to those of Snares Island snipe, they frequently call during the day at the Snares.

The calls of Auckland Island snipe are distinct from those of the Auckland Island rail, the only species whose calls are likely to be mistaken for those of snipe. Rail calls most often consist of a series of loud single notes, whereas those of snipe consist of repeated phrases of several notes.

Behaviour

Snipe were very secretive and unless flushed from tussock or herbfield they were rarely seen. When flushed they usually flew just above the vegetation for a short distance (though some flew up to 100m), landed and disappeared into cover. Once when we caught a chick, however, the accompanying adult did not attempt to flee until we let the chick go. Two adults surprised in high altitude fellfields also seemed reluctant to fly - perhaps they did not wish to risk being blown out to sea.

Snipe were twice seen being attacked by falcons, and one of the attacks was successful. The wary behaviour of snipe on Adams Island and the fact that they did not call during the day may be a response to the presence of falcons. On the Snares where snipe are conspicuous and call both day and night, there are no falcons.

Southern Skua (*Stercorarius skua lonnbergi*)

Skuas were fairly common in open country from sea level to the tops. Nests containing 1 or 2 eggs were found near the coast or on the open tops (see Table 3). Birds were usually seen alone or in pairs but small groups were present at Bollons Harbour (7 on 18/11/89) and the outlet of Lake Turbott (5 on 12/11/89).

Table 3
The dates, locations, number of eggs and sites of skua nests.

Date	Grid ref.	No. eggs	Site
9/11/89	855750	2	coastal cliffs
9/11/89	892781	1	coast
17/11/89	995772	1	ridge amongst tussock
17/11/89	018762	2	ridge amongst scrub and tussock

Skuas were seen feeding on a prion carcass and several sooty shearwater carcasses were found by a skua nest near Magnetic Bay. The skuas that nested near Magnetic Bay seemed to eat one sooty shearwater each night as a fresh carcass appeared each morning. A skua was seen chasing a grey-backed storm petrel near Grafton Point, and one was seen "checking out" a light-mantled sooty albatross near Lake Turbott. We found remains of sooty shearwaters, prions, and white-headed petrels that appeared to have been eaten by skuas.

Skuas on Adams Island were considerably less aggressive than those on the Snares and Campbell Island. Even nesting birds could be approached without them attacking.

On 28/11/89 a skua and a falcon were involved in aerial combat (see falcon section).

Southern Black-backed Gull (*Larus dominicanus*)

Black-backed gulls were moderately common at Carnley Harbour, nesting at many sites along the rocky coast on the northern shore of Island. During November and December we found them sitting on nests, mostly containing 2 or 3 eggs (Table 4). Thirty-one were seen roosting on Monumental Island.

Table 4

The location, site and number of eggs in black-backed gull nests on Adams Island.

Grid ref.	Site	Number of eggs
881781	rock promontory	3
881781	coast	3
883782	coast	2
884782	coast	0
857784	coast	2

Red-billed Gull (*Larus novaehollandiae scopulinus*)

Red-billed gulls were moderately common around the coast. A group of 14 was seen roosting with shags at grid reference 882782 on 5/11/89.

White-fronted Tern (*Sterna striata*)

A few terns were often seen and heard flying and feeding at Carnley Harbour. All were identified as white-fronted terns. No nests were found on Adams Island.

Parakeets (*Cyanoramphus* species)

Parakeets were found throughout Adams Island, but were most commonly seen in coastal rata forest. They were occasionally seen in tussock and herbfield, but were not abundant there.

Taxonomy

Seventeen parakeets were identified to species. Three were red-crowned parakeets and 14 were judged to be hybrids; that is they had mostly crowned plumage, but there was a small band of yellow feathers behind their red crowns. No yellow-crowned parakeets were identified. Furthermore, on many of the parakeets not positively identified, some red was seen on their crowns, i.e. they were either red-crowned or "hybrids", but not yellow-crowned. The calls and size of all parakeets seen was consistent with them being either hybrids or red-crowned.

It is interesting to note that all the parakeets we saw on Enderby and Ewing Islands, which we visited for only a day each, were also either red-crowned or apparently hybrid.

Our impression is that either:

1. a few yellow feathers in the crown is a feature of the red crowned parakeets of the Auckland Islands, as it is on parakeets in the Kermadecs (Rowley Taylor pers. comm.), or

2. the Adams Island parakeet population is a hybrid swarm comprised of birds with mostly red-crowned characteristics but a few yellow-crowned genes. Apparently "pure-bred" birds of both red and yellow-crowned parakeets have been reported from other parts of the Auckland Islands but no yellow-crowned birds have been reported from Adams. The same explanation could perhaps apply for parakeets on the Kermadecs where no yellow-crowned parakeets have ever been reported.

Taylor (1975) noted hybrid parakeets on modified islands in the Auckland Islands, and suggested that such hybridization occurs commonly only on modified islands. The possible presence of hybrids on unmodified Adams, would seem to confound this view, but there are two explanations consistent with Taylor's hypothesis:

1. Though Adams Island is unmodified, its vegetation is more similar to that of modified islands than unmodified ones at higher latitudes. That is, there is very little forest, much scrub, tussock and bare ground and the ecological mechanisms that usually separate the two parakeet species may not function.
2. Alternatively since Adams Island has very little forest it is best suited to red-crowned parakeets which are birds of the scrub and forest edge. Yellow-crowned parakeets arriving from more forested parts of the Auckland Islands find little suitable habitat, and the few birds that do colonise are genetically swamped by much larger numbers of crowned parakeets with which they hybridise.

A genetic study of the parakeets of Adams Island could tell us much about speciation in the genus.

Feeding Observations

- 4/11/89 Three parakeets apparently looking for seeds or invertebrates in dry creek bed. Moving gravel with feet and bill.
- 4/12/89 Three parakeets seen feeding on honeydew on *Dracophyllum longifolium* in coastal forest.

Behavioural Observations

A breeding display was observed between a pair of "hybrid" parakeets in coastal rata forest at Magnetic Bay. The male approached the hen, which was sitting on a bough in a rata tree, and bowed and turned repeatedly. The bows were repeated at five second intervals and the male turned through as much as 180°.

Auckland Islands Pipit (*Anthus novaeseelandiae aucklandicus*)

Pipits were common throughout open areas above bushline and were occasionally seen along the coast of Adams Island. A pipit nest containing one chick was found amongst tussock on 19/11/89.

Hedge sparrow (*Prunella modularis*)

Only one hedge sparrow was detected on Adams Island in herbfield below cliffs west of Mt Dick. A hedge sparrow was heard on Monumental Island and on the main Auckland Island they were common.

AucklandI Tit (*Petroica macrocephala marrineri*)

Tits were relatively common and widely distributed on Adams Island, though they were not seen in the immediate vicinity of Magnetic Bay and were conspicuously absent from some other areas of coastal forest. Several were seen in areas with no woody vegetation, notably, tall herbfield on the southern coast, short herbfield at high altitudes, and saltmeadow near the coast.

Song thrush (*Turdus philomelos*)

Song thrushes were present on Adams Island but were much less conspicuous than blackbirds. They were occasionally heard singing during November and December.

Blackbird (*Turdus merula*)

Blackbirds were common throughout forest and shrubland on Adams Island and were heard singing while we were on the island in November and December.

Silvereye (*Zosterops lateralis*)

Only one silvereye was detected on Adams Island in the basin above Fly harbour. On Auckland Island silvereyes were common.

Bellbird (*Anthornis melanura*)

Bellbirds were common and widespread in coastal forest and shrubland. Dawn choruses involving many hundreds of bellbirds were a prominent feature of coastal forest on Adams Island. Six nests were found, of which five were within 0.5m of the ground.

Bellbirds were conspicuously less abundant on the main Auckland Island and this is perhaps attributable to predation of nests by cats and pigs. In contrast, some passerine birds like silvereyes, tits and hedge sparrows were more abundant on the main Auckland Island and we speculate that their reduced abundance on Adams Island may be partly attributable to harassment from the very abundant bellbirds.

Tui (*Prosthemadera novaeseelandiae*)

Tui were not seen on Adams Island but two were seen flying between Masked Island and Anjou Point, Auckland Island on 30/11/89.

Goldfinch (*Carduelis carduelis*)

Only one goldfinch was seen on Adams Island at Magnetic Bay. It was being chased by a bellbird.

Starling (*Sturnus vulgaris*)

No starlings were seen on Adams Island but 4 were seen on Monumental Island.

Sea lion (*Phocarctos hookeri*)

A young bull was present in each bay along the north coast of Adams Island but very few cows were seen (two were hauled-out between Survey and Fall Bays on 4/12/89). Old bulls were occasionally seen.

The biggest concentration of sealions was on Monumental Island, but we did not land there. Only one was seen ashore on Figure of Eight Island when we visited on 30/11/89, but later in the season large numbers congregate there (Best 1975). Sign of sealions was found on Masked Island but none were seen ashore.

Forty-two sealions were found at the mouth of Lake Turbott on 12/11/89. Four males had harems of females; there were 10 bachelor males, and 28 females.

10 male were found at Bollons Bay on 18/11/89 and 3 males at the head of Fly Harbour on 26/11/89.

Fur seal (*Arctocephalus forsteri*)

Only 2 fur seals (both full-sized adult males) were seen on Adams Island. One was at Bollons Bay on 18/11/89 and one was seen on two occasions between Survey and Harris Bays on 3&4/12/89.

Bibliography

Best, H.A. Report on the natural history and behaviour of Hookers sealion at Enderby Island, Auckland Islands, Pages 159-170 in Yaldwyn, J.C. (editor). Preliminary Report of the Auckland Islands Expedition 1972-1973. Reserves Series 1975/3. Department of Lands and Survey, Wellington.

Elliott, G.; Walker, K.; Buckingham, R. 1991. The Auckland Island Rail. Notornis.

Falla, R.A.; Sibson, R.B.; Turbott, E.G. 1979. The New Guide to the Birds of New Zealand. Collins, Auckland and London.

Moore, P. 1990. Population survey of yellow-eyed penguins on the Auckland Islands, Nov - Dec 1989. Science and Research Internal Report No. 73. Department of Conservation, Wellington.

Moore, P.; Walker, K. 1990. Auckland Island teal on Ewing and Adams Island, Auckland Islands, November 1989. Science and Research Internal Report No. 82. Department of Conservation, Wellington.

Robertson, C.J.R. 1975. Report on the distribution, status and breeding biology of the royal albatross, wandering albatross and white-capped mollymawk on the Auckland Islands. Pages 143-151 in Yaldwyn, J.C. (editor). Preliminary Report of the Auckland Islands Expedition 1972-1973. Reserves Series 1975/3. Department of Lands and Survey, Wellington.

Taylor, R.H. 1975. Some ideas on speciation in New Zealand parakeets. *Notornis* 22: 110 - 121.

Walker, K.; Moore, P. in press. Numbers of Auckland Island Banded Dotterel. *Notornis*.