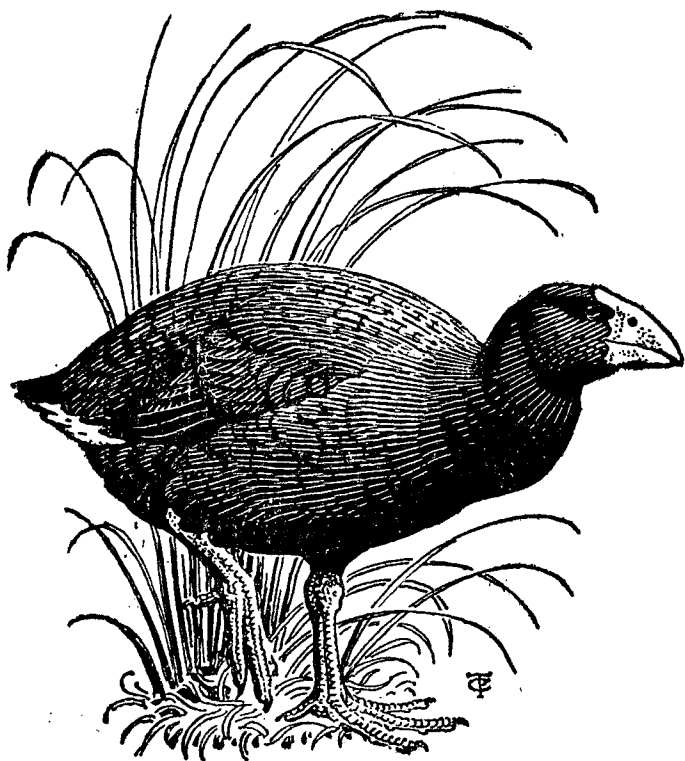


NOTORNIS



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NOTORNIS

In continuation of New Zealand Bird Notes

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NOTORNIS

VOLUME NINE, NUMBER FIVE

JUNE, NINETEEN SIXTY-ONE

FIELD STUDY COURSE AT FAREWELL SPIT

22-29/1/1961

By B. D. BELL, H. R. MCKENZIE & R. B. SIBSON

Ever since the visit to Farewell Spit on 16/10/46 by R. H. D. Stidolph, and his account of it (*"New Zealand Bird Notes," III, 64-67*), several members of the Ornithological Society have cherished an ambition to explore thoroughly this remote region. In 1960 B.D.B. offered to organise a course for January, 1961. The offer was accepted with enthusiasm and was strongly backed by the Wildlife Division of the Internal Affairs Dept., for whom B.D.B. is Chief Field Officer. The scheme became a joint effort, Wildlife supplying three of its field staff (all members of O.S.N.Z.), the use of a Landrover for beach work, a tent, camping gear, etc., while O.S.N.Z. supplied all other transport and facilities. Wildlife was anxious to gain information on the bird life of the Spit and was very generous in the share it took in the undertaking.

Having met at Nelson on the morning of Jan. 21, the party travelled north-west to the base of the Spit at Puponga. It consisted of Mesdames Patricia Fooks, Auck.; Margaret McGrath, Wgtn.; Hetty McKenzie, Clevedon; Miss Dorothy Grantham, Invercargill; Messrs. A. Blackburn (President), R. Blackburn, D. V. Merton (Wildlife), Gisborne; R. B. Sibson, R. H. Sibson, M. J. Hogg, Auck.; H. R. McKenzie, Clevedon; M. J. Imber, Hawera; I. G. Andrew, Palm. Nth.; F. C. Kinsky, R. R. Wiblin, Wgtn.; B. D. Bell (Wildlife), Blenheim; T. Hartley-Smith (Wildlife), Greymouth; E. K. S. Rowe, Rangiora; D. H. Brathwaite, Christchurch; nineteen in all. Mr. S. W. Freeman, who farms at the base of the Spit, had promised the use of his woolshed. The party arrived to find the woolshed thoroughly cleaned out and a new tank full of water on a trailer standing by. This was typical of the many kindnesses shown by the Freeman family. Kitchen and storeroom were set up at one end of the shed, with sleeping quarters in the compartments round the sides, leaving a large open space in the middle. Two tents were pitched in an ideal spot nearby, the occupants being greeted at once by a Yellow-breasted Tit. Throughout the course everyone, in camp and field, worked with a will and the harmonious spirit could hardly have been excelled.

Reports quoted by R. H. D. Stidolph, 1948, from Mr. James Drummond's "Nature Notes" in the "Auckland Weekly News," one by L. L. Redick, 1919, one by H. P. Washbourne at some earlier date, and the account by H. Guthrie-Smith, 1924, in his book, "Sorrows and Joys of a New Zealand Naturalist," indicate that great changes in the nature of the Spit have taken place. With such an exposed and unstable terrain this is to be expected and such changes will continue. At present there are roughly three zones, each running for most of the length of the Spit. The outer zone immediately above the firm sand of the ocean beach is composed of bare moving sandhills. The broad central zone is largely vast sandflats, some being of hundreds of acres, interspersed with both bare and growth-covered sandhills, while near

each end the more consolidated ground is thickly scrub-covered. Through gaps in the outer sandhills on either side the biggest tides reach the levels of the inner zone and it was a little surprising to find large pieces of driftwood carried into the very heart of the Spit. The inner zone, or south side, is mostly of consolidated dunes, covered with a mixed growth of lupin, pohuehue, toetoe, marramgrass, rush, cassinia, gorse, sand plants and some grasses and weeds. Some of the inner flats between these dunes and the broad inner sand flats are consolidated and have a sward of sheep-cropped maritime plants, especially *samolus* and *selliera*, dotted with rushes. From the inner high tide-mark extends southward a vast area of tideflat, first of *salicornia*, then of *zostera*, with large areas of bare sand, the main feeding ground of the waders and waterfowl. High spring tides, combined with heavy rain, had flooded large areas of the inner flats to a depth of a few inches. Most of this water disappeared in a few days. Nearer the base of the Spit there are small lakes and ponds which are virtually permanent, the largest of these, three miles up the Spit, providing quite a distinct habitat. Beyond the Lighthouse (16 miles from base) a sand area extends to what earlier naturalists have called "Shelly Banks," then far on under the sea into Cook Strait. The portion of the Spit that is above the ordinary tides is half to three-quarters of a mile wide, the greatest width being at the Lighthouse and at the base. It is grazed by cattle and sheep and a few odd deer. The grazing seems to be aiding consolidation and to be therefore beneficial, but if not wisely handled could easily cause damage.

The accounts of Stidolph of his trip in 1946 and of H. Guthrie-Smith, 1924, indicate the difficulty of birdwatching in this large area. It is still difficult to-day. The outer beach can be negotiated only with a four-wheel drive vehicle and only at low tide. The inner beach is negotiable only for about six miles, but at all times except high tide. Therefore on the census day the two young men who were dropped at the Lighthouse, at sixteen miles, had to cover the ground for two miles further on, wait until the high tide had driven the birds up, then work back three miles going back and forth across the Spit until they reached the area of the next party and walk on down to the six mile mark on the inner side to be picked up. Others had little less to accomplish. It is not armchair bird-watching. Great credit is due to the ladies and the several boys who kept pace with mature men in the long hours of hard marching for so many days. All three authors had made previous even if hurried investigations of the Spit, that of B. D. Bell being shortly before the course and more comprehensive. An essential factor was the tireless and skilful handling of the Land-rover by T. Hartley-Smith ("Goldie"), always cheerful and helpful in his sometimes exacting task.

The first two days were occupied in studying feeding grounds and flight-lines and finding out where the birds rested at high tide. Parties were taken up the outer beach up to ten miles and the inner beach to six miles. The less experienced observers were helped by the leaders to improve their techniques at counting and identifying. Large flocks had of course to be estimated. Thus where the number of a species is shown as 808, it could mean that two flocks were estimated at 400 each and a party of 8 was seen also.

The spring tides were lessening, so it was decided that the census,

the vital operation, should take place on the third day, 24/1/61. It had been found that the birds came up into the central sand flats anywhere from two miles above the base to the vicinity of the tip, so sixteen miles had to be covered. Also the decreasing tides allowed more birds every day to rest on the southern flats next to the inner side so that the long inner tideline had to be included. The census day fortunately was fairly cloudy, with a moderate breeze, so that conditions were good for counting and for travel on the sand. Teams were put off at their stations as follows:—

2 to 4 miles, D.H.B. and R.H.S.; 4 to 6, A.B. and P.F.; 6 to 8, K.R. and T.H.S.; 8 to 11, R.B.S. and D.G.; 11 to 13, M.J.H. alone; 13 to 15, M.J.I. and R.B.; 15 to 18, I.G.A. and D.V.M.; 10 to 17, inner beach, B.D.B. and R.R.W.; 6 to 10, inner beach, F.C.K. and M.McG.

The leader is mentioned first in each case. The McKenzies were based at the six mile point to assist generally. The upper teams were taken up the outer beach first and the lower ones up as far as the six mile point on the inner beach later. Each team waited for "zero hour," erected a big tripod of driftwood to show where its zone began and then worked homeward until reaching the tripod mark of the next team. The very satisfactory result is shown on the chart. In a few cases the figure shown is that of a day other than the census, when a larger count was obtained. For instance, 18 Long-billed Curlews were seen together on 22nd, but only 9 on 24th, the census day. The full details of the census and the notes of the other days have been charted in detail, copies to be kept by Wildlife and O.S.N.Z. for the use of any subsequent expeditions.

RARE BIRDS

While observations were being made on the numbers and behaviour of the more familiar shorebirds, some exciting rarities were identified and carefully studied by many members of the party. The first Mongolian Dotterel (*Charadrius mongolus*) to be recorded in New Zealand was found and reported by M. J. Hogg, a schoolboy of 16 years, who, on two subsequent days took groups to the sheltered flat at the 13 miles to the spot constantly favoured by this bird. A surprising episode was the sighting of a White-capped Noddy (*Anous minutus*) on the outer beach sitting among White-fronted Terns. The speeding truck was brought to a sudden halt and the occupants tumbled out in time to see the bird fly slowly past them out to sea. It was later found that Mr. Claude Wilkins of Collingwood Motors had seen it earlier in the day on the beach with a party of Oystercatchers. He has been driving a truck up the outer beach to the Lighthouse once a week and more frequently in the tourist season, for fifteen years, but had not seen such a bird before. The O.S.N.Z. party was therefore lucky indeed. Other rare birds were a Little Whimbrel (*Numenius minutus*) identified by B. D. Bell; a Pomarine Skua (*Stercorarius pomarinus*), studied by R. B. Sibson and others; a Grey Plover (*Pluvialis squatarola*), first found and identified by M. J. Imber and seen subsequently by various observers under most favourable conditions; a Black-tailed Godwit, race not determined, seen by F. C. Kinsky; and a Black Stilt (*Himantopus novaeseelandiae*), which frequented a lagoon towards the base of the Spit. Two Curlew Sandpipers, located only on 22nd January, seem to be the first recorded in the South Island since the collecting days of Edgar Stead.

SEA BIRDS

As soon as it was realised that great numbers of sea-birds, especially petrels, could often be seen off the north coast, a watch was kept as far as possible. Fluttering Shearwaters were sometimes present in thousands. Among other species which came sufficiently close to be accurately identified were Wandering Albatross, Sooty Shearwaters, Buller's Shearwaters (4), Fairy Prion (50+), Diving Petrel. Large dark Petrels which could not be certainly identified were probably Flesh-footed, Grey-faced or even Westland Black. Gannets regularly fished these waters, but numbers are hard to estimate from, e.g. 12 sightings in one day. One Little Blue Penguin was on the beach alive. A few Fluttering Shearwaters and Fairy Prions were found dead; also one Broad-billed Prion and one Diving Petrel.

WATERFOWL AND MARSH BIRDS

BLACK SHAG — The common big shag of the Spit. No Spotted or Pied Shags were observed.

WHITE-THROATED SHAG — Not common along the Spit but plentiful from Puponga to Collingwood. Up to 90 coming in at dusk to roost in tall kanuka beside pond on Freeman's farm. Among them were a few of the light-bellied phase.

WHITE-FACED HERON — Forages widely over the zostera flats, gathering into flocks on the inner side at high tide.

AUSTRALIAN BITTERN — Three on permanent lagoon at 3 miles. An odd pair or two could well breed.

BLACK SWAN — Scattered all over the vast inner tidelflats, these could not be counted. They could only be dealt with from the air. No new or old nests were found.

GREY DUCK AND MALLARD — Those seen up the Spit were Grey but the larger numbers near the base consisted of Grey, hybrids, and a rather small proportion of true Mallard.

AUSTRALIAN HARRIER — Always a few along the Spit. Odd pairs certainly breed.

WESTERN WEKA — One of the characteristic birds of the Spit. Numbers difficult to estimate; probably hundreds. A deserted cow-trampled nest had held four eggs.

PUKEKO — A family party of five was seen near the 3 mile pond at dusk as they emerged from the sandhills to feed on the zostera flats. Odd pairs occur elsewhere in the wetter swamps.

SKUAS, GULLS, TERNS

POMARINE SKUA — One, evidently an immature bird of the pale phase, was identified by its larger size, conspicuous wing patches and pale rump. (v. Serventy & Whittell. Birds of Western Australia. 140).

ARCTIC SKUA — Not uncommon in Cook Strait. Odd birds were to be seen among the Shearwaters off the northern beach. Others rather surprisingly came in over the zostera flats, and sometimes settled. (cf. Fleming *Notornis VIII* 236).

BLACK-BACKED GULL — Scattered throughout, making an estimated population of c.200. A few pairs were still at nests in the sand-hills with big downy chicks at the running stage. At Shelly Banks c.25 adults and several well-grown young were the last of what appears to be the biggest breeding colony.

RED-BILLED GULL — Scattered throughout but no sign of breeding, though so reported by Redick in 1919 and found with nests and eggs at Shelly Banks by Stidolph on 16/10/46.

BLACK-BILLED GULL — Scattered in small parties, lingering especially about the shallow lagoons; but no evidence of breeding. In 1924 Guthrie-Smith found some thousands nesting on Bird Island near Collingwood and his photograph (Sorrows and Joys of a N.Z. Naturalist, p. 48) shows Black-billed Gulls among the White-fronted Terns.

BLACK-FRONTED TERN — A few were seen every day. They seemed to drift in from the south and to be passing along the Spit, though none was seen to fly out to sea. The nearest known breeding grounds are on the upper reaches of the Wairau above the Wash Bridge, some 80 miles to the south. Many of the Black-fronted Terns which winter on the west coast of Wellington could well reach their destination via Farewell Spit, which lies conveniently on one route. It would be interesting to know how many, if any, winter on the Spit.

CASPIAN TERN — Redick in 1919, Guthrie-Smith in 1924, Stidolph in 1946, found them nesting at Shelly Banks. When I.G.A. and D.V.M. visited this area only 22 birds and one late chick were present, and nesting was over. Otherwise Caspian Terns were thinly spread along both sides of the Spit, gathering into small groups to rest.

WHITE-FRONTED TERN — At intervals all the way up the outer beach there were usually small flocks of resting birds, but numbers varied from day to day, the biggest tally being 1085. Many were often fishing out to sea. It is difficult to know how much significance should be attached to these figures, viz. Jan. 22, 0-10 miles, 18, including one banded bird; Jan. 23, 0-10 miles, 14; Jan. 24, 0-18 miles, 602; Jan. 27, 0-13 miles, 1085. As there are substantial colonies in Westland, it is possible that some of these birds were moving north or preparing to cross the Tasman to Australia. The percentage of birds of this season was very small. I.G.A. and D.V.M. reported no White-fronted Terns at Shelly Banks where Redick in 1919 reported breeding, and Stidolph found 800 starting to nest in 1946, though Guthrie-Smith found none in 1924. However, these Terns are notoriously capricious and irregular in their breeding. Bird Island near Collingwood where Guthrie-Smith estimated a colony of 12,000-15,000 pairs has been eroded away.

WHITE-CAPPED NODDY — After a visit to the '13 mile' to study the Mongolian Dotterel on 27/1/61, a party was returning along the open beach by Landrover, when H.R.McK. noticed this smallish black tern sitting among White-fronted Terns and called "Goldie" to an abrupt halt. As everyone piled out the tern flew strongly up-wind past the rear of the truck and out to sea. The silvery whiteness of its forehead and forecrown contrasting with the general

COUNTS OF WADERS, GULLS & TERNS — FAREWELL SPIT, 22 - 28 January, 1961

Dates — January	22	23	24 — CENSUS										26	27	28	Biggest Daily Tally	
			R.H.S. D.H.B.	A.B. P.F.	K.R. T.H.S.	R.B.S. D.G.	M.J.H.	M.J.I. R.B.	E.G.A. D.V.M.	F.C.K. M.McG. Inner	B.D.B. R.R.W. Inner	Truck Party Outer					Totals
Miles (Sections of Spit)	5-10	0-10	2-4	4-6	6-8	8-11	11-13	13-15	15-18	6-10	10-17	0-16					
S.I. Pied Oystercatcher .	940	250+	160	157	235	70	300	75	1000	13	38		2048				2048
Northern Oystercatcher ..	1	1										1	1				1
Black Oystercatcher ..	20		23										23	42	27		42
Gray Plover	1									1			1	1			1
Pacific Golden Plover ..	10			9	10	3	1				7		30	30			30
Banded Dotterel	470	×100	15	285	140	140	240	200		28	40		1088	×100	×100		1088
Mongolian Dotterel ..							1						1	1	1		1
New Zealand Dotterel ..	5			4									4				5
Wrybill	10			10	6	4	8	1					29		1		29
Long-billed Curlew ..	18	4			8			1					9		4		18
Little Whimbrel											1		1				1
Asiatic Whimbrel	19	21				21							21	20+			21
Bar-tailed Godwit	9300		3000	780	3000	900	225	110	1400	4470	3835		17720				17720
Black-tailed Godwit (sp?)		1											—				1
Turnstone	405		12	200	36	160	80	80	25	21	132	62	808				808
Knot	15500		4500	1500	2500	1050	280	80	900	12300	4260		27370				27370
Sharp-tailed Sandpiper ..	2												—				2
Curlew Sandpiper	2												—		2	2	2
Red-necked Stint	8			9									9		3		9
Pied Stilt			13	5									18		12	11	18
Black Stilt													—		1	1	1
Pomarine Skua													—				1
Arctic Skua		4					1		3	1			5	1			5
Black-backed Gull							Thinly Scattered Throughout						c200			200	
Red-billed Gull	65			1	12	45	60	35	20	23		3	199				199
Black-billed Gull	51			3	12	40	30	2	7			7	101				101
Black-fronted Tern	4	2					1		3			1	5				5
Caspian Tern	85				9		8	1	22	34			86	5			86
White-fronted Tern	18	14	5				15	17	60			505	602	×100	1085		1085
White-capped Noddy ..													—		1		1

sootiness of its plumage make this a very striking bird. This tropical species which breeds as near to New Zealand as the Kermadecs and Norfolk Island has not previously been recorded from the South Island and indeed has only once been reported from the North Island (v. *Notornis* VI, 176), when on 10/10/53 a single gale-driven vagrant sought refuge in a tree at South Kaipara Heads.

WADERS

SOUTH ISLAND PIED OYSTERCATCHER — This was by far the most numerous of the indigenous waders, the number being over 2,000. There were further parties of c.1,200 at Pakawau and many in Westhaven Inlet which did not come to the Spit, though it is locally reported that they do so when tides are extremely high. These oystercatchers do not breed on the Spit. Guthrie-Smith said that at the time of his visit they had already nested. The number of unemployed birds which are always present may have led him to believe that they nested there, or he may have meant that they had nested elsewhere. In the height of the breeding season on 5/11/58 H.R.McK. counted 111 scattered along the ocean beach up to the Lighthouse, definitely not breeding. Recent research has shown that this bird does not breed until it is two or three years old and large flocks of immature non-breeders occur during the breeding season in suitable localities throughout New Zealand.

BLACK OYSTERCATCHER — A few pairs breed on the Spit, mostly at the western end. Among those breeding, which now had well-grown young, was one smudgy bird of the variety known as "*reischeki*." A similar bird was seen there by H.R.McK. on 5/11/58. Most of the 42 seen were at the base of the Spit and were probably from the rocky outside coast, where they frequently congregate on the reefs below Fossil Point.

GREY PLOVER — Between Jan. 22 and 26 this bird appeared to resort daily at full tide to the same stretch of shore on the edge of the zosteria flats. As it was not unduly shy or wary, excellent views were obtained by several members of the team. On one occasion when a Pacific Golden Plover was standing conveniently near, it was seen that the Grey Plover was not only a greyer bird but was also distinctly bigger and robuster looking. When it was forced to fly, the diagnostic black axillaries and white rump were easily and clearly visible.

This is only the third definite record of this cosmopolitan arctic breeding species in N.Z., the second having been made only a few days earlier at Grassmere (v. p. 172). According to Sharland the Grey Plover is a very rare visitor to Tasmania.

PACIFIC GOLDEN PLOVER — Found only in scattered small groups. The Spit does not seem to provide the type of habitat which these plovers like when they are in the bigger flocks which occur elsewhere in N.Z.

BANDED DOTTEREL — As these were scattered throughout in loose flocks, numbers were difficult to assess. No dense concentrations were found. It is likely that many were on passage. It would be interesting to know how many winter there. One pair on territory appeared to have hidden young. Some hundreds sometimes fed in the green paddocks of Freeman's farm.

- NEW ZEALAND DOTTEREL** — Farewell Spit appears to be a suitable breeding place. The occurrence of this rare dotterel here is of considerable interest, because none are known to breed between the province of Auckland and the region of Foveaux Strait. All seen were in pale plumage.
- MONGOLIAN DOTTEREL** — A single specimen of this new addition to the New Zealand list is described elsewhere. As this dotterel is well known in south-eastern Australia, its occurrence in N.Z. is not altogether surprising.
- WRYBILL** — A few Wrybills in juvenile or worn breeding dress were scattered about the shallow lagoons. Their presence in late January tends to confirm an earlier suspicion (*Notornis VIII*, 164 and 261), that Farewell Spit is a regular stopping place, at least for some Wrybills, on their annual migration to the North Island.
- LONG-BILLED CURLEW** — The flock of 18 was the biggest so far recorded in New Zealand. Such numbers on Farewell Spit may not be exceptional as 13 were seen there in 1958 on the outer beach by H.M.McK. and H.R.McK. and the bird is common in Tasmania.
- LITTLE WHIMBREL** — There are few records in N.Z. of this arctic wader which according to some authors is the Siberian race of the near-extinct Eskimo Curlew (*N. borealis*) of North America. Though regular migrants to Queensland in some numbers, Little Whimbrels are seldom reported in south-eastern Australia and the bird is so rare in N.Z. that the definite sighting of one as it rested alone on mud near *salicornia* is an event of some note. Amongst Pacific Golden Plover, a Little Whimbrel could easily be overlooked.
- ASIATIC WHIMBREL** — This flock of 21, by far the biggest so far recorded in New Zealand was seen on several days in the same locality as the tide came in. Whimbrels could be expected annually on the Spit. These were closely examined in case there was a dark-rumped American Whimbrel with them.
- EASTERN BAR-TAILED GODWIT** — It is considered that the count of 17,720 was well made, even though large flocks had to be estimated. There were about 200 more at Pakawau and some at Westhaven Inlet. The total, though large, is rather smaller than some members of the party had been led to expect.
- BLACK-TAILED GODWIT** — One seen by F.C.K. in flight but the sub-species could not be determined. So far all South Island records of Black-tailed Godwits have been of the dusky American bird (*haemastica*) but small parties of the Asiatic race (*melanuroides*) have been occurring near Auckland in recent years.
- TURNSTONE** — These seem to be visiting New Zealand in increasing numbers. Sizable flocks of Turnstones were to be seen fairly evenly distributed up the Spit, not only on most lagoons, even at low tide, but also on the open shore, especially where fresh seaweed had been cast by recent tides, and about low tide pools. A thin trickle of Turnstones flying into the sandhills was an early sign that the tide was beginning to cover the zostera flats. As they moved about a good deal and did not gather into compact flocks an accurate estimate of numbers was very difficult.

KNOT — The surprising number of 27,370 was carefully checked and is deemed, if anything, to be an under-estimate. This species has a habit of massing to form a grey carpet of birds. As a result counts are usually short of the actual number. Stidolph, near the tip of the Spit, saw Knots and Godwits in approximately equal numbers. He had no opportunity of examining the roosts further down, where there could easily have been a preponderance of Knots. It is somewhat of a coincidence that at the spot where Stidolph saw 750 each of Godwits and Knots, I.G.A. and D.V.M. saw 900 of each, though there were 500 further Godwits on Shelly Banks nearby. The Spit is a "Knot place." In some harbours there are some thousands of Godwits and no Knots. In others the flocks are mixed but there are none where there are Knots and no Godwits; which seems to indicate that Knots are more restricted by some as yet unknown ecological factors.

SIBERIAN PECTORAL SANDPIPER — Two seen on several days either at 6-mile lagoon or at 3-mile pond.

CURLEW SANDPIPER — Two were seen once only on 22/1/61 (R.B.S., F.C.K.) at 6-mile lagoon.

RED-NECKED STINT — Usually some, with a maximum of 9, several times at 6-mile lagoon.

PIED STILT — Farewell Spit is evidently not a suitable feeding ground for Stilts. A few, including two parents with three flying young, were usually present on 3-mile pond.

BLACK STILT — One constantly seen on 3-mile pond. It appeared robuster in body and shorter in leg than the Pied Stilts. It may have been resting on passage from one of the few known breeding-grounds far to the south.

PASSERINES

Passerines were noted only incidentally. The few native passerines seen actually on the Spit were Pipit, Gray Warbler and Silvereye; but introduced species were much more in evidence. Starlings were in flocks of some size and were estimated at 2000+. Skylarks and Hedgesparrows had not ceased singing and occurred widely in all suitable habitats. A few pairs of Yellowhammers obviously breed. Also listed were: Blackbird, Songthrush, Greenfinch, Goldfinch, Lesser Redpoll, Chaffinch and House Sparrow. On a future visit two teams could well be allocated on the census day to concentrate more fully on these birds, one for the more stable scrub-and-pond country of the first four miles, and one for the region around the lighthouse where human occupation and a variety of well grown introduced trees form a distinct habitat. If a bird-observatory on the lines of those which have been established around the coast of Britain, were to be contemplated for New Zealand, a very suitable site could be found in the vicinity of the Farewell Spit lighthouse.



After three strenuous days on the Spit the team was given a change and a treat in the form of a trip into the mountains behind the Cobb hydro-electric power station as far as the Cobb Lake. This was no rest for the drivers, Goldie in the Landrover and Ken Rowe in his station-wagon; nor perhaps was it all unmitigated delight for

those on the outer side of the narrow winding road as it snaked round the cliffs high above the river. In the bush, birds were plentiful, and among those seen were:— Rifleman, Pigeon, Tui, Bellbird, Tomtit, Yellow-crowned Parakeet, Lesser Redpoll and Weka. At the summit (3450ft.) the botanists were allowed time to indulge their hobby and worry over a difficult hebe, while the young geologists collected specimens of serpentine. At the Cobb Lake we were welcomed by Mr. Kelly of the Forest Service and his wife. We ate our lunch in their garden overlooking the long lake. Their hospitality was even more appreciated when, as we were about to leave, we were presented with a noble haunch of venison, which later under Mrs. McKenzie's culinary skill was to become, together with a gigantic purple onion from the Sopers' garden, a regal dish, the recollection of which still makes the participants smack their lips.

On the way home while we paused at the salt-marshes of the Aorere near Collingwood, three Fernbirds were watched at a distance of a few yards. Fernbirds were found again on January 27th in the pakihi country where the road ends near Bainham, a locality already known to B.D.B. and D.V.M., but an excess of sandflies was not conducive to patient observation. Part of another day was spent at Westhaven, where unfortunately the tide was out, at the Kaihoka lakes and the mouth of the Paturau River. It was an interesting trip into a rather remote corner, but ornithological results were disappointing.

It is hoped that the Farewell Spit project will be repeated in four years' time and that the experience gained on this first occasion will be helpful to future expeditions. The number of active participants should be not fewer than twenty-two; at least half of them to be of considerable experience. The time for such a course can be cut down very little, as allowance must be made for wet or windy days. Flying sand can make travel difficult and counting impossible. Little can be achieved without one or more four-wheel drive vehicles; but only long days of hard walking will produce the best results in what should always be an exciting area for the student of shore-birds.

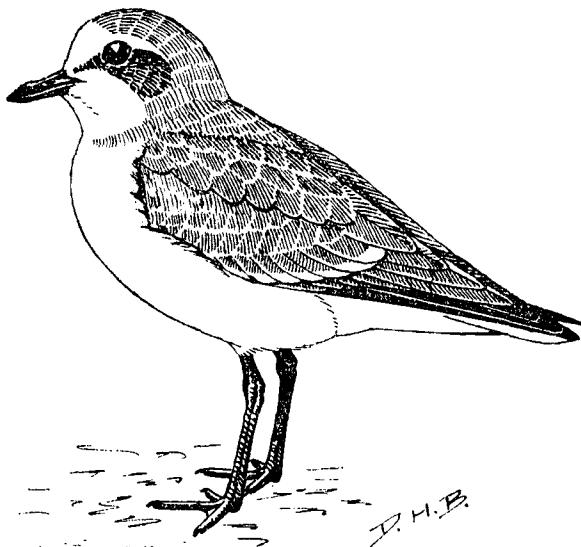
REPORTS ON TWO RARE WADERS

(a) MONGOLIAN DOTTEREL — In the early afternoon of 24/1/61, the day of the wader-census, I was crossing a green flat among the dunes about thirteen miles from the base of the Spit, when a small gray and white dotterel alighted only about ten yards away. The flat, which only the biggest tides could reach, was carpeted with *selliera* close cropped by wandering stock and dotted with clumps of yellow lupin, cassinia and coarse rush. Sprinkled over it feeding were 20-30 Banded Dotterels (*C. bicinctus*) in the various phases of plumage which are normally to be seen in January.

The dotterel which puzzled me was about the size of a male Banded Dotterel but its back and upperparts were of a uniform gray very faintly tinged with rufous. The underparts were pure white, except where a narrow strip of gray extended partially across the breast; above the gray throat was whitish; the forehead and a streak above the eye were pale; below the eye was a dark patch; the tail was ribbed with white on either side; the bill was black with a rather bulbous tip and longer and thicker than that of a Banded Dotterel; the legs were slate gray. It was seldom still, dashing here and there to feed

on small insects, stopping two or three times to pick at a dried cowpat. When it faced me I was immediately struck by its similarity to a small New Zealand Dotterel (*C. obscurus*). Fortunately I had recently become familiar with the Large Sand Dotterel (*C. leschenaulti*) in the Firth of Thames; and I felt pretty certain that the dotterel before me did not belong to that species. When it flew it was joined in the air by two Banded Dotterels. I thought it looked slightly longer in the wing and showed an indistinct pale wingbar. As it disappeared over the sandhills it clearly called 'trik.'

I had no companion on my 'beat' of the census. When at the end of the day I mentioned the suspected Mongolian Dotterel (*C. mongolus*) to other members of the course, it was decided to revisit the area, if possible, in the hope that the bird would still be there. Two days later conditions were good, except that the wind was blustery; and when six members converged quietly and hopefully on the *selliera* flat, the dotterel was soon located but not before we were almost on top of it, and its identity was confirmed after very close study. When Banded and Mongolian Dotterels are in winter plumage they are so alike that the two species have frequently been confused



Mongolian Dotterel based on sketches made in the field, 26/1/61 — winter plumage

in Australia; where the two occur together on the coast of New South Wales. Fortunately, two of the viewers, D. H. Brathwaite and R. B. Sibson had both watched Mongolian Dotterels in Australia. It was generally agreed that this was a grayer bird than usual Banded Dotterel in eclipse and conspicuously white-faced; but the points of difference in the field are so slender that a Mongolian Dotterel among Banded could very easily be overlooked. This bird tended to be solitary and returned to the identical corner of the flat when the Banded Dotterels

flew away. Its call as it rose in flight was written down as 'tik-it,' less incisive than the typical note of a Banded Dotterel and lacking its carrying quality. A single soft 'tik' was also heard. On 27/1/61 when the haunt of this Mongolian Dotterel was visited for the third time, the bird was still present, so that the names of A. Blackburn and H. R. McKenzie could be added to the list of those who had satisfactory views of this Asiatic straggler, the first of its kind to be recorded in New Zealand. I am indebted to D. H. Brathwaite and R. B. Sibson who put at my disposal the notes which they made on the spot.

M. J. HOGG

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(b) LITTLE WHIMBREL. — Among the many rare species recorded at Farewell Spit was a Little Whimbrel (*Numenius minutus*). This was seen by us on the day of the census, January 24th, on the inside of the Spit at about the 11 mile mark. The following summarises the notes taken at the time.

The bird was standing on a patch of sand amongst *Salicornia*. At first glance it was thought to be a Golden Plover. Then the appearance of the bird did not seem quite right as the neck and head were much finer and the neck longer. The bill also was longer and finer with a downwards curve at the end, colour black. The back coloration was a deep rich mottled black and golden similar to that of a Golden Plover but the mottling was heavier. The undersurface was a deep buff with very slight mottling if any. The colour of the legs could not be determined as they were hidden by the *Salicornia* but did not appear to be exceptionally long.

The bird was put to flight to see if there was any distinctive flight pattern but nothing stood out. Fortunately the bird called as it flew off. Our rendering of this was a sharp "weep . . . weep" in slow succession followed by a pause and then a repetition. The bird flew off down the inside of the Spit towards the lighthouse. A measurement was taken of the imprint of the mid-toe left in the sand and this was 34 mm.

R. WIBLIN & B. D. BELL

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WINTER OCCURRENCE OF JUVENILE GANNETS IN NEW ZEALAND WATERS

By P. A. S. STEIN

In their "Migration and Dispersal of New Zealand Gannets" (*Emu*, September, 1958) Wodzicki and Stein set out evidence to show that gannet chicks reared in New Zealand depart from their home rookery at the age of about 15½ weeks, leave the neighbourhood, and eventually make their way across the Tasman Sea to Australia. Although a number feed along the northern coasts for a few weeks, by late May or early June only an occasional straggler remains.

These young birds grow up in Australia. Their stay there varies from two to four seasons. During this time they change their brownish-

grey speckled feathers for the white plumage of the adults. They return to their home rookery at the age of four years and upwards. Occasionally, as shown by banding, a bird returns in its third year, but it does not breed. In general appearance these non-breeding sub-adults are indistinguishable from the breeding birds.

Any bird therefore in greyish-brown plumage found round the coast between late June and Christmas has not been to Australia and is a rarity whose presence should be reported.

On 23/8/60, Peter Skegg, Michael Hogg and Nick Ledgard walked for some miles along the west coast beaches near Muriwai, Auckland, with the idea of examining any birds washed ashore. They collected nearly a hundredweight, including a number rarely seen here. Among them was a juvenile Gannet.

Examination of its abraded tail-feathers showed that it had grown up in a very rocky colony, and had spent the full development time there. The neck and head feathers had not commenced their first change so that it was nearing six months in age. It had not been long dead, showed no external injury that could have caused death, but was very light as if from lack of food.

Counting back six months from August 23rd brought us to a hatching date about the end of February. Could this give us some clue as to the colony from which the chick had come?

In most seasons at Horuhoru fewer than ten eggs are laid in early August. Any chicks surviving from these half-dozen or so early hatchings are ready to depart for overseas in the first week in January. Only a few very early chicks have been seen departing before January 14th. On the other hand very few eggs are laid after mid-November. Two eggs hatched on January 8th and January 9th, 1950, and both chicks lived to depart late in April. These were the only January hatchings recorded until this year when a chick hatched on January 11th, 1961. Usually there are fewer than ten chicks left on the Island at the end of March; this year there were four, of which three were then ready to depart. The fourth would remain by itself until late April. Most chicks depart then between mid-January and the end of February. Twenty or thirty late chicks may depart in March but only an exceptionally late chick is still on Horuhoru in April.

Careful counts at Mahuki, fifty miles to the north, have shown that development there is about a week in advance of Horuhoru, while at the Coromandel group, fifteen miles to the east of Horuhoru, development is a fortnight later. Oaia on the west coast is three weeks behind Horuhoru, and at the Plateau (Cape Kidnappers) the difference is about five weeks. A chick departing in May would thus be a very late bird. If the bird found by the three boys had obeyed the rules that seem to govern the departure of other gannet chicks, it cannot have left its home rookery before June. It certainly cannot have come from a northern colony. Without knowing egg-hatching dates for the Nuggets and Little Solander it is useless to speculate further.

On August 28th, Peter Skegg and Michael Hogg made a second west coast traverse, this time in the vicinity of Whatipu. Again they collected a big assortment of dead birds; again they found among them the fresh corpse of a juvenile Gannet. This bird showed no

abrasion of tail-feathers: it must have spent its growing-up period on fairly soft ground. It was just a little younger than the Muriwai bird. This makes the task of reconciling its dates with those of known colonies still more difficult.

On October 7th a third item was added to the series. Mr. F. C. Kinsky was passing to the east of D'Urville Island in Cook Strait when he saw a mixed flock of birds working over a shoal of fish. Of 98 Gannets counted, at least 30 showed plumage phases which were different from the adult. A few of these were still very close to the speckled appearance seen at the age of six months.

Was the 1959-60 season such a late one that some gannet chicks failed to attempt the Tasman crossing, or is it possible that some of the southern Gannets do not go to Australia at all?

[Mr. P. A. S. Stein, whose address is 9 Cameron Street, Auckland, W.I., would be grateful if any winter sightings of Gannets in brown juvenile plumage, especially in the south, or the finding of such birds ashore, could be reported to him promptly.—Ed.]



OBSERVATIONS ON ROCKWRENS NEAR THE HOMER TUNNEL

By *M. F. SOPER*

In November, 1960, I photographed Rockwrens at Homer Tunnel. In all, six pairs of birds were located and three nests. The habitat was scree, rockfalls, snowgrass, and low scrub. Of the nests, one was in a man-made rock wall in a general habitat of snow tussock and boulders; one was in an extensive bouldery rockfall virtually free of scrub; and one at the foot of a rock and scree slope over-grown with low dense scrub, the nest being situated under a big scrub-surrounded boulder. The remaining three pairs of birds were found respectively in a big rockfall; in a scrub-covered scree slope; and in an area of rock, veronica scrub, and snow tussock near an isolated patch of bush.

All six pairs of birds showed a marked difference in plumage. One, the presumed male, had a bright green back — more olive on the forehead; a pronounced creamy-white eyestripe above the eye, which, when viewed from the front projected outwards like eyebrows and ended in a little tuft; lower eyelid pale buff bordered below by a thin black line; a rich yellow patch on the flanks; the alula black and forming a most attractive dividing line between the yellow flank and the green back; the under-surface buffy; the legs flesh-coloured. All markings were neat, distinct, and clear-cut. (v. Plate XXXIV).

The female was generally an olive brown, "greenish"-brown above; eyestripe fawn; lower eyelid pale buff with the dark line below present but not noticeable; alula dark brown; flanks yellow; under-surface buffy-white a lighter patch on the secondary wing feathers forming a distinct V pattern when the wings were closed and the bird viewed from above. This pattern was not noticed in the male in the field though it can be seen in the photographs as a dark brownish patch. In general the colour areas merged into one another with none of the

clean-cut lines of the male. They also had that rather scruffy nest-worn look that one comes to recognise (v. Plates XXXIII and XXXV).

Only one nest was followed to any extent, a total of sixteen hours being spent at it over three days (November 19, 20 and 28). When first found the chicks were naked except for a few tufts of dark down. It was impossible to see into the nest properly without wrecking it, but there appeared to be two chicks only. (The other nest which could be reached also appeared to have only two chicks.)

The nest was built into a cavity between the rocks and was a substantial igloo-shaped structure comprising a long woven entrance-tunnel of snow tussock leading to a bulbous nest cavity of woven snow tussock packed with feathers. Both birds fed the young and at considerably longer intervals than I had expected. Instead of something like the 3-5 minute visits of Riflemen, I found half-, three-quarter, one hour visits: and once from 1 p.m. to 3.30 p.m. no visit was made for 2½ hours. Not all visits to the nest were with food. Sometimes after an absence of, say, an hour an adult would return, look into the nest, stay inside perhaps five minutes and then come out with a worn feather shaft. Food on these first few days was mostly a flat squat beetle that lives in the crevices in the rocks. These beetles were taken in whole and obviously broken up inside, as after a few minutes the bird would reappear with all the prickly bits — the legs, wing-cases, etc. No faecal sacs were brought out during these two days.

On four occasions the adults were seen to eat feathers. Also, soft downy feathers were taken into the nest about every third or fourth trip. After an interval in the nest the bird would come out with a dilapidated feather shaft. This occurred so frequently that it must be of some significance.

On my visit of 28th November — 8 days later — the chicks were quite downy, the down being of a creamy-buff colour. Feeding was still at long intervals, never less than half-hourly. No feathers were taken in all day and no feather shafts were brought out, though the birds would still sometimes visit the nest without food and after a few minutes reappear and fly off. Food comprised green caterpillars, moths, black hard-cased shiny grubs, small grasshoppers, and insects that on my photographs look like small wetas. The faecal sacs were carried away and eaten.

All birds bobbed up and down in typical Rockwren manner. Perhaps I should add that my experience of Rockwrens is not limited to these few birds. I have known Rockwrens for many years in widely separated parts of the South Island. They also had a bowing movement — in which they would lean forward with their legs set so far back on their body that they appeared to be about to topple forward off balance — and then, after a pause, straighten up to an almost vertical position. This is more a swing of the body on the "hips"; the "bob" is an up-and-down movement with the body kept more or less at the same angle to the ground.

Average flight distance was five or six yards, though they could travel a chain without apparent difficulty. In general, as they were continually on the search for insects, they did not fly further than from one rock to the next.

DISCUSSION:

The descriptions of the typical Rockwren (*Xenicus g. gilviventris*) and the Fiordland Rockwren (*Xenicus gilviventris rineyi*) in Oliver (1955 pp. 455-457) do not indicate any plumage differences between the sexes though Buller remarked on it in northern specimens (pers. comm. Mr. E. G. Turbott). The very marked difference observed at Homer is therefore either a true sex difference previously unrecorded for southern birds or the result of cross-breeding between subspecies on the edge of their respective areas of distribution.

It is my opinion that all the green birds were males and all the "brown" ones females. I do not think that this can be seriously questioned. If one has six pairs of Rockwrens all showing plumage differences it is logical to assume that all the green birds are of one sex and all the brown ones of the other and, since they are passerines, that the brighter bird is the male. This accords with the nest-worn look which one learns to recognise in nesting females, particularly cavity nesters, and which the brown birds showed; and falls in line with the plumage difference found in the related Rifleman (green male; patterned female). Were this breeding on the edge of subspecific distributions one would expect at least one pair to be both green, or both brown; or "reversed," i.e. green female, brown male, which, as argued above, is illogical. Taking this argument a stage further, it is also unlikely that all the females were *gilviventris* wrens and all the males *rineyi* wrens, so the problem is to which subspecies to ascribe the Homer Rockwrens. I compared my field observations and my colour photographs with three specimens belonging to the Canterbury Museum (a Nelson female; an Arthurs Pass female; and an Arthurs Pass juvenile male). The Homer females were very similar to the Nelson female; slightly richer in colour than the Arthurs Pass female; but not as green as the Arthurs Pass juvenile male. Homer males were very much brighter and greener and more distinctly marked than any of these specimens.

I also saw the paratype of *X. rineyi* kindly lent by Dr. Falla. Homer females were decidedly browner than this. Homer males were for all practical purposes the same (I thought, if anything, slightly brighter). Along with the *rineyi* paratype; to quote Dr. Falla: "I am sending a fragment of what I take to be the typical green phase in a male rockwren. The difference from typical *rineyi* is admittedly rather slight but in this specimen at least the green is not quite so bright and there is a strong predominance of brown in the crown and forehead which is not at all marked in the *rineyi* wren." The Homer males were greener than this fragment and did not have the brown head. Homer males had a very definitely olive-green head shading to brownish on the forehead only.

Thus there is at Homer a population of Rockwrens the males of which look like *rineyi* while the females look like *gilviventris*. If these wrens are to be called *rineyi* then we immediately come up against behaviour difficulties. The Homer wrens freely left the scrub; bobbed; and flew as well as any *gilviventris* wren — three things Riney was insistent the Fiordland wren did not do. However, these behaviour differences could well be seasonal rather than subspecific. Bobbing, for example, appeared to me to be a display against an intruder into its territory; or possibly a displacement activity — a cross between the desire to hold its ground and a desire to fly.

On the other hand if these wrens are to be called *gilviventris*, then we weaken the status of *rineyi* because *rineyi* can no longer be separated off on the basis of the male's plumage, but only on the difference of behaviour (if valid) and/or possible green female in a true *rineyi* (there being no type specimen for a *rineyi* female as yet).

The only conclusion possible therefore in the present state of our knowledge is that the subspecific state of the Homer wrens must be left open — though with a strong bias towards their being *rineyi* wrens. Dr. Falla sums up the position in his letter to me and I am grateful for his permission to quote —

“It does seem as if the plumage characters given for *rineyi* do not hold good as a distinguishing feature unless the female of this southern form is also green. This clearly does not apply to your Homer birds but there still remains a possibility that all the specimens with the bright green males should be called *rineyi*. Haast's type of *gilviventris* was from the Canterbury mountains and the description indicates a very dull green bird, a fact supported by the plumage of specimens taken more recently there or seen about. The fragment I sent you would represent an extreme of the brightest plumage found in *gilviventris*. I should say, therefore, that your birds are Fiordland Wrens and it is likely that Riney's colony further south was in fact no different.

“I entirely agree with you that no great weight can be placed on such a doubtful behaviour character as the so-called bobbing. It must arise from some kind of tenseness even when there is no cause for agitation.”

The eating of feathers by the adults was interesting, as also was the frequency with which they took soft downy feathers into the nest, reappearing a short while later with the shafts only. This was probably simply replacement of normal wear and tear, but I did wonder if the young were offered feathers as are young Grebes, because usually (as for example with Riflemen and Grey Warbler) feather replacement only occurs after rain (it had been fine at Homer for some days) and as a rule, unless the nest is very wet, the feathers are simply taken in and not exchanged for old shafts.

SUMMARY:

Distinct plumage differences between males and females of nesting Rockwrens is described.

A brief note is made of habitat and nesting behaviour including the fact that feathers are eaten.

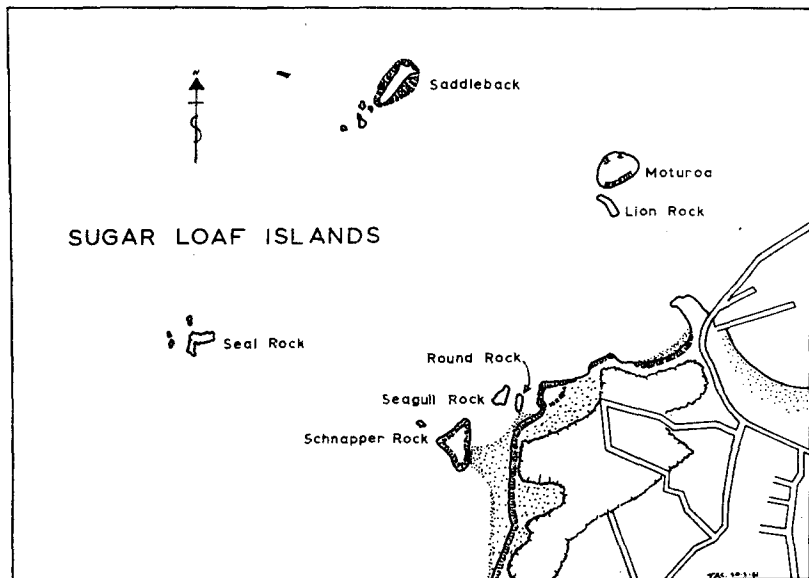
I wish to thank Mr. E. G. Turbott of the Canterbury Museum and Dr. R. A. Falla of the Dominion Museum for their help and their loan of specimens; and Dr. Falla for permission to quote from his letters.

NOTES ON SOME OFFSHORE ISLANDS

By D. V. MERTON

(a) SUGAR LOAF ISLANDS: NEW PLYMOUTH

During September, 1960, I visited the seven islets off Port New Plymouth, in the course of my official duties. The map was prepared by Thomas Caithness, whose help is gratefully acknowledged.



Mataora Island or Round Rock:

This island is separated from Paritutu Beach by a shallow channel which is dry at low tides. It is a little over an acre in area, rises 99ft. above sea level, and as its name suggests, is more or less hemispherical in shape. It is of volcanic origin, and is capped with light sandy soil. Coastal flax is the dominant plant species and forms a dense cover over much of this rock.

Landings were made on both the 9th and 12th, when upwards of twenty Red-billed Gulls (*L. scopulinus*) were showing interest in the rocky ledges of the north-west cliffs. A Blue Penguin corpse was also found.

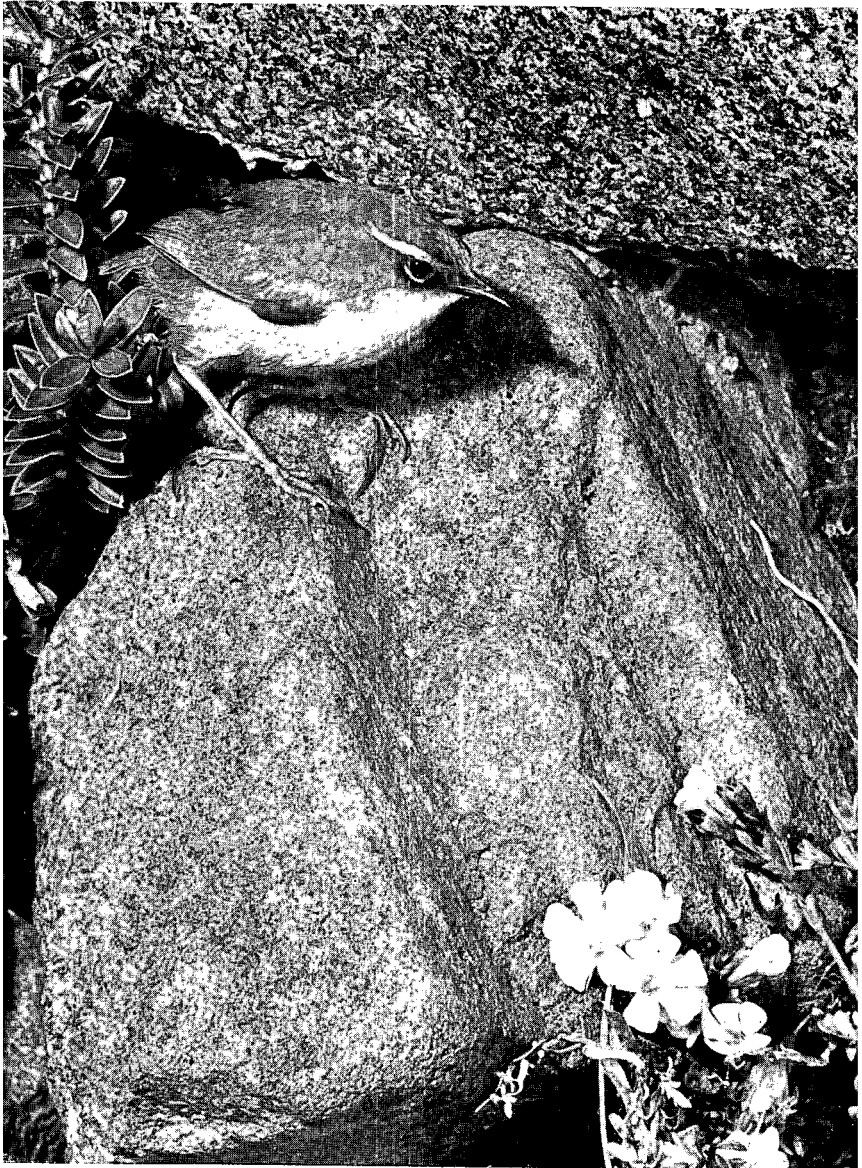
Pararaki Island or Seagull Rock:

Pararaki Island is 73ft. high and is two acres in area. It lies to seaward of Mataora Island, from which it is separated by a channel one chain wide. When a landing was made on the 9th, the original taupata covering was found to have been destroyed by an invasion of rabbits, but as these were no longer on the island, a variety of young plants, including taupata and boxthorn, were regenerating.



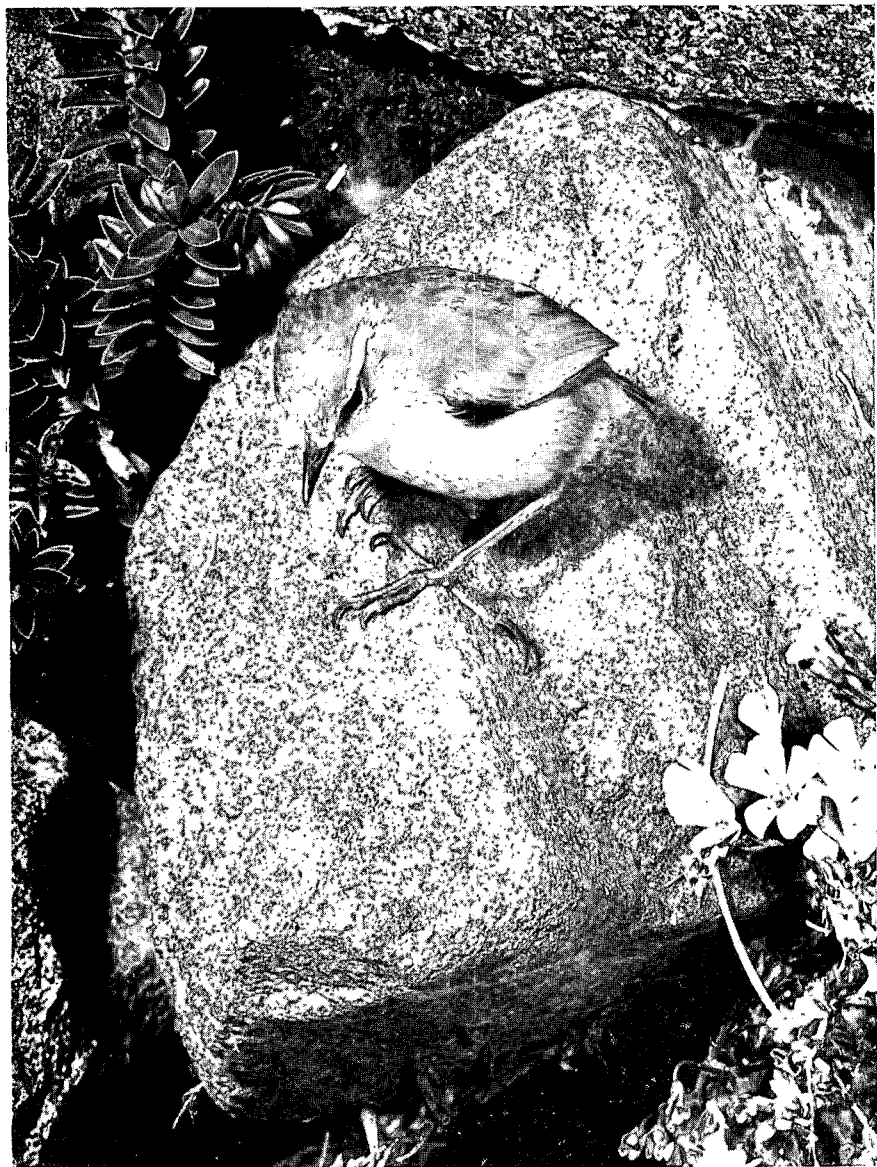
[M. F. Soper

XXXIII — Female Rock Wren (**Xenicus gilviventris**) returning to nest among boulders with a beakful of insects.



[M. F. Soper

XXXIV — Male Rock Wren, November, 1960, near the Homer Tunnel.
.. Males are greener than females and more distinctly marked.



[M. F. Soper

XXXV — Female Rock Wren approaching nest. Note the huge feet and the nest-worn look of the plumage.



[F. C. Kinsky

XXXVI — Red-tailed Tropic Bird which flew on board the 'Willem Ruys' on 18/4/61 in the Tasman Sea somewhere west of New Plymouth. The elongated red tail-feathers were only just starting to grow.

Upwards of 500 Red-billed Gulls were preparing to nest on a ridge, and adjacent area of rock, at the north-eastern corner. Nesting material was being carried by some birds, while others brooded nest foundations. Starlings (*S. vulgaris*), too, were nesting on this island.

Motuotamatea Island or Schnapper Rock:

A visit to this island was made on the 19th. Schnapper Rock is three acres in area, rises 98ft. above sea level and at low tides is separated from the Paritutu Beach by a waist-deep stretch of water. The island is gently rounded and has large areas of mesembryanthemum and introduced grasses, but taupata is the dominant shrub, and forms a dense low canopy over the remainder of the rock.

On a rock face at the western end of the island 200+ White-fronted Terns (*S. striata*) were preparing to nest. A group of 20 Red-billed Gulls was resting nearby, as were scattered Black-backed Gulls (*L. dominicanus*). Five Black Shags were perched on a rock off the eastern end of the island. A few Starlings were seen to roost in the taupata at nights.

Seal Rocks:

These proved to be a low, wave-swept group of six rocks, the largest being only 30ft. above sea level. Of the group, this rock alone was high enough to be dry at all times, and was visited on the 17th. The only vegetation found here was a solitary, weather-worn taupata bush.

The remains of many old gull nests were seen, and from the behaviour of about 200 Red-billed Gulls and 60 White-fronted Terns, they intended to nest on this rock again. Six Black Shags were roosting on one of the smaller rocks along with 100+ Red-billed Gulls, 20+ White-fronted Terns, and 9 Black-backed Gulls. An occupied Starling nest was found near the highest point.

Lion Rocks:

Also on the 17th the three small rocks off Moturoa Island were visited. Of these, only one was high enough (40ft. a.s.l.), to support vegetation. Taupata, as before, was the dominant species, and formed a dense low cap, over the summit.

This larger rock was about to become a nesting place for upwards of 200 Red-billed Gulls, and 50+ White-fronted Terns. The gulls were building on top of the low taupata, while the terns occupied a lower, sloping rock face. A few immature Black-backed Gulls and 17 Black Shags were roosting on this rock.

Although no seals were encountered on nearby Moturoa Island, 30 were seen on these three rocks.

Motumahunga or Saddleback Island:

The night of the 17th was spent ashore on this island. Saddleback Island is three acres in area, and was well named, for it has two summits, which are connected by a high saddle. All sides are steep, but a spur at the south end gives relatively easy access to the 175ft. summit. Vegetation was dominantly taupata, which began near sea level as a low scrub, but grew taller nearer the summit, so as to form a canopy up to 10ft. high.

Soon after dark, at 7.5 p.m., Diving Petrels (*P. urinatrix*) began coming ashore, and the breeding population of these birds must be several thousands. All suitable soil on the upper part of the island was honey-combed with burrows, containing single eggs and brooding birds. Nesting amongst the Diving Petrels in the vicinity of the south summit were perhaps 100 White-faced Storm Petrels (*P. marina*). These were in the early stages of burrowing. This island is well known as a Starling roost, and many thousands of these birds were present during the night. Other species seen included one Blackbird (*T. merula*), one Shining Cuckoo (*C. lucidus*), five Reef Herons (*E. sacra*), Blue Penguins (breeding), 300+ Red-billed Gulls, which were evidently going to nest on the northern cliffs, plus a few odd Black-backed Gulls. A newly completed but empty nest of the latter was found on the northern summit.

200+ seals occupied the lower sea cliffs.

Moturoa Island:

The night of the 18th was spent ashore on this island, which was found to be a steep volcanic cone with many bluffs. Moturoa has an area of four acres and rises 268ft. a.s.l.

Taupata formed a low dense canopy over much of the island, but in a few places it was high enough to walk under. A variety of other native plants was also represented.

Diving Petrels were using this island as a nesting ground, too, and all available soil was being utilised by many hundreds of these birds. The first arrival landed at 6.50 p.m. and as on Saddleback Island, all burrows examined contained an egg, and an incubating bird.

Several thousand Starlings roosted on the island over night. Twelve large Black Shags were seen perching in tall taupata, high on the western face, where an old shag nest was found. A colony of 1000+ Red-billed Gulls were preparing to nest on the western sea cliffs, while 60+ White-fronted Terns showed concern when a nearby rock face was approached. Red-billed Gulls evidently nest near the summit, too, as do scattered Black-backed Gulls. 200+ of the latter were preparing to nest on the southern cliffs. Other species recorded, were Reef Heron 3, Harrier Hawk 1, Blackbird and Dunnock.

(b) BARE ISLAND, HAWKES BAY

On 11 and 12/11/60 I visited Motukura, or Bare Island, off Waimarama Beach, Southern Hawke's Bay. Bare Island lies more or less parallel to the coast, one mile off-shore, and is approximately half a mile long by a-quarter of a mile wide. It is composed of soft crumbly papa with occasional out-crops of sand-stone, which contain a wealth of fossilised shells. The entire western side is sheer and eroding, from the 304ft. summit to sea level. The more gently sloping eastern face is densely overgrown with coastal flax and, to a lesser extent, other hardy native plants.

Under a small patch of low spreading taupata on the south ridge were about a hundred occupied burrows of the Sooty Shearwater (*P. griseus*). These proved to be the only petrels nesting on the island, possibly because soil soft enough for burrowing was at a premium. Egg laying had not yet begun.

Sign of *Rattus norvegicus* was found and on the night of 11th November three specimens were trapped. The island was over-run by these pests, which evidently swam ashore when a launch was wrecked on the western coast about 25 years ago.

Blue Penguins (*E. minor*) were nesting in large numbers in all parts of the island, and several hundred were ashore on the night of my visit. Nests contained eggs or young of varying ages.

Nine shag nests were found in low taupata on the south ridge. One contained two newly hatched chicks and a chipped egg, while the remaining nests were unoccupied, but thirteen adult Black Shags (*P. carbo*) were nearby.

About 500 Black-backed Gull nests were scattered over the lower slopes of the island, a few containing newly hatched chicks, while others had between one and three eggs in them. Two Harriers (*C. approximans*) were seen, and a nest with three eggs found in high flax.

Starlings were found nesting on holes on the sheer western cliffs, while a small number roosted at night in the tall taupata and flax near the summit. Blackbirds were heard and an old nest found. One Dunnock (*P. modularis*) was also heard singing.

It was rather disappointing to find so few petrels nesting on the only island between Portland Island, off Mahia Peninsula, and Cook Strait, but nevertheless Bare Island is obviously well used by other sea-birds for nesting, and is of particular value as a penguin breeding ground.



SHORT NOTES

RED-NECKED STINT IN BREEDING PLUMAGE AT THE RANGITIKEI ESTUARY DURING THE SUMMER OF 1959-60

Red-necked Stints (*Calidris ruficollis*) were first recorded at the Rangitikei Estuary during the summer of 1958-9 by I. G. Andrew (*Notornis* VIII, 193), but during the succeeding summer they were recorded in greater numbers. On 6/12/59 four, or a possible seven, were counted there and on 1/1/60 seven were located.

On this occasion, much to my surprise, one of the Stints was distinctly reddish on the neck. On each side of the foreneck there was an area of deep rufous with a narrow area down the middle of the foreneck, the throat and sides of the upper foreneck and cheeks pale rufous. The chin and base of the forehead were whitish; the crown and hind neck grey-brown streaked darker. I visited the estuary again on 3/1/60 with I. G. Andrew and we confirmed my previous observations.

From information subsequently received from Mr. H. R. McKenzie this type of plumage pattern was evidently that of a bird moulting from breeding to non-breeding plumage.

The estuary was next visited on 9/1/60, by which time the number of stints had increased to eleven. The aberrant bird had changed little apart from an apparent paling of the deep rufous areas. It was also noticed on this occasion that the upper back was mottled pale rufous and grey-brown.

On 24/1/60 the foreneck was a uniform pale rufous, with rufous mottling still present on the upper back. The throat was paler and was seen to be flecked whitish when the bird preened itself. By 14/2/60 the colouring on the foreneck had receded to an area of pale rufous on each side of the upper foreneck. The forehead was whitish, and a narrow area down the centre of the foreneck was off-white. An area on each side of the lower foreneck was greyish streaked darker, the remainder of the underparts being white as normal. All rufous had disappeared from the upperparts which were now greyish-brown streaked black on crown and back. I. G. Andrew informed me that there was little change in this pattern on 26/2/60.

After this visit there was the possibility of some confusion with other Stints assuming breeding plumage, but the next visit on 20/3/60 revealed only one of the nine Stints located with a touch of colouring. This was believed to be the aberrant bird as the upper part of its head and its hind neck were pale grey streaked black, the grey being much paler than had been seen in any of the other Stints previously. There was a very small area of rufous buff on the sides of the upper foreneck and grey streaked darker on the sides of the lower foreneck, the remainder of the underparts, forehead and face being white.

The last visit made on 5/4/60 revealed three of the ten remaining Stints assuming breeding plumage, whilst the bird presumed to be the aberrant one had no more colouring than a small buffish area below the cheeks.

This is a somewhat similar case to that of the Asiatic Black-tailed Godwit (*Limosa melanuroides*) observed in the Firth of Thames from 1952-6 by Sibson and others (*Notornis* VI, 241-2), but the Stint had begun to moult before the beginning of January, whereas the Godwit did not moult until the end of February or March.

The "Encyclopaedia of British Birds" states that the autumn moult may be abnormally delayed when a bird has not mated. This could have been the case with the Stint, whereas the breeding mechanism of the Godwit had undoubtedly been completely reversed.

It will be interesting to see, however, if a Red-necked Stint in out-of-season plumage is observed in New Zealand next summer, as this could well be the same bird as was seen at the Rangitikei Estuary.

M. J. IMBER

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FEMALE BLUE DUCK APPARENTLY PAIRED WITH PARADISE DRAKE

On 19/1/61 while climbing in the upper Hunter region (headwaters of Lake Hawea) a female Blue Duck (*Hymenolaimus malacorhynchus*) was seen apparently mated with a male Paradise (*Casarca variiegata*). The characteristic whistling of the Blue Duck was heard first, on a small flat close to the mountain stream about 35 miles from the head of Lake Hawea. It was approached to within about 25 yards, viewed through glasses, and followed along the river bank for a few yards. No answering calls were heard and, on looking about for its mate, we were surprised to find the male Paradise hiding behind some rocks. He made no audible reply to the whistles. No other ducks were seen in this part of the valley.

P. CHILD

GREENFINCHES EATING COTONEASTER BERRIES

The Greenfinch (*Chloris chloris*) is an uncommon visitor to my Titirangi garden, but on 5th-7th April, 1960, three birds, adult male and female, and an immature female, were observed eating cotoneaster berries. They visited the bush each day about 8.30-9 a.m., and stayed on it for up to fifteen minutes. Though the berries were apparently equally attractive for some time before and after the dates mentioned, no other birds were seen to eat them, nor did the Greenfinches return.

A. T. EDGAR

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AN EXTINCT SEA EAGLE IN THE CHATHAM ISLANDS

According to records going back as far as 1866, there is good evidence from a number of localities in New Zealand that a species of Sea Eagle has been seen from time to time. From the descriptions given by observers, and from a specimen in the Dominion Museum said to have been taken in New Zealand, Oliver listed the White-bellied Sea Eagle (*Haliaeetus leucogaster*) as an occasional straggler to New Zealand (1). Mrs. Perrine Moncrieff has now amassed considerable evidence that eagles of this sort may have occurred from time to time in certain regions of the South Island, and I am indebted to her for the use of her notes (2).

The usual range of *Haliaeetus leucogaster* is "Coasts of India, Ceylon, Burma and the Malay Peninsula and through the entire Malay Archipelago to Australia, Tasmania and western Polynesia." (3).

My work on the subfossil birds of New Zealand and the Chatham Islands at the British Museum (Natural History) has revealed a number of novel features, one of which is the indication of small populations of birds such as falcons, owls, Kaka and Kakapo, not recorded as living birds or preserved in Moriori tradition.

The latest novelty to be found consists of the bones of a large raptorial bird which I have identified as belonging to a robust species of *Haliaeetus*. From Oliver's conclusions on straggling sea-eagles in the New Zealand region, it seemed likely that these bones would belong to *H. leucogaster*, the species occurring closest to the Chatham Islands.

However, following a detailed examination of a large series of *Haliaeetus* skeletons kindly made available to me in the Bird Room of the British Museum (N.H.) by Mr. J. D. Macdonald, and in the University of Cambridge Museum of Zoology by Dr. K. A. Joysey, I find that the Chathams eagle is quite distinct in features of the tarsometatarsus and pelvis from the White-bellied Sea Eagle, and, indeed, from all the southern forms of this genus excepting *H. vociferoides* of Madagascar and possibly Mauritius — another interesting parallel between the fossil birds of the Malagachian-Mascarene region and the Chathams (4). The species which the Chathams bird most closely resembles are *H. leucocephalus*, the Bald Eagle of North America, and *H. albicilla*, the White-tailed Sea Eagle of Northern Europe and Asia.

The tarsometatarsus is usually a good criterion for distinguishing osteologically between eagles but the two northern species are not quickly separated in this way. The Chatham Island bones are, in the series I have before me, quite constant in their differences from these two species and they appear to represent a hitherto unknown member of the genus.

This new form of Sea Eagle was collected on the Chatham Islands in beach deposits of Quaternary age by H. O. Forbes in February, 1892, and it is quite unlike either the White-bellied Sea Eagle (*H. leucogaster*) ranging into Australia and western Polynesia or the Wedge-tailed Eagle (*Uroaetus audax*) of Australia, and is very different, in size at least, from the other New Zealand Extinct Eagle (*Harpagornis moorei*), a bird as big as the gigantic fossil *Teratornis* of California.

LITERATURE CITED

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2. MONCREIFF, P., 1953-1961 — "The Mysterious Bird of Prey," Manuscript Reports.
3. PETERS, J. L., 1931 — "Check-list of Birds of the World," Vol. 1.
4. MILNE EDWARDS, A., 1896 — Ann. Sci. Nat. (Zool.), (8) 2.

ELLIOT W. DAWSON



GREY PLOVER AT LAKE GRASSMERE

On 20/1/61 I travelled to Blenheim with Messrs. E. K. S. Rowe and F. C. Kinsky, en route to the Farewell Spit Field-study Course. We stopped at Lake Grassmere, in order to visit the colonies of terns and gulls which breed there. As we drove along one of the embankments, several Godwits and some smaller waders flew away from a low island about 60-80 yards from us. On our way back we stopped at the same spot to see if they had returned. There was no sign of the Godwits, but we could see several smaller waders feeding, of which all except one proved to be Turnstones. The other bird was of a kind which none of us had ever seen.

In colour it was a nondescript grey, too long in the leg to be a Knot and in build not unlike a Golden Plover. This, together with the stoutness of the short bill, led me to suspect that it might be a Grey Plover (*Pluvialis squatarola*), so I warned my companions to watch for the black axillaries if the bird flew. A few minutes later it took off, flying towards our right and displaying clearly to all three of us the black axillaries, which were even more conspicuous than I had expected them to be. Although the bird seemed to lack the speckled appearance shown in various field-guides, and looked greyer on the breast, the missing of such minor details of plumage could be attributed to the poor light. The heavy bill and the black axillaries left no doubt in my mind as to the identification.

This is the second acceptable record of the Grey Plover in New Zealand and the first for the South Island.

D. H. BRATHWAITE



GREY-BACKED STORM PETREL AT MILFORD SOUND

On 17/2/61, during one of the breaks at Milford Sound between work in the Tutoko Valley on Kakapo investigation, a small sea-bird was brought to me for identification. This bird had flown against the lighted window of the radio hut near the Milford Hotel. The bird was a Grey-backed Storm Petrel (*Garrodia nereis*) and as it was uninjured it was released down the Sound the following day.

The general plumage was sooty black with a large extent of grey down the back. The lower breast and abdomen were white. The bill and legs including the feet were black. It was considerably smaller than the more widely known White-faced Storm Petrel (*Pelagodroma marina*).

BRIAN D. BELL

A NOTE ON THE EARLY SPECIMENS OF THE TAKAHE

The first specimen of *Notornis hochstetteri* obtained at Dusky Sound in 1849, is described as caught by dogs, kept alive on a sealer for some days, then killed and eaten by the crew. The skin later obtained by Dr. Mantell's son was exhibited at the Zoological Society, London. I have examined this specimen, now in the British Museum, and feel certain that it had fairly expert handling when first obtained, by someone competent as a bird skinner; also some preservative better than salt (used for sealskins) or just drying, almost certainly was used. If this specimen was killed by sealers and later eaten it is certain that any remains of skin, legs and beak would have been in a condition of very poor preservation, quite useless for a mounted specimen. In view of the present condition of this specimen, it seems certain that it was obtained by a competent collector and preserver of bird specimens.

The second specimen is recorded as obtained by a Maori at Deas Cove, Thomson Sound, in 1851. This specimen, now in the Dominion Museum, must have also received expert attention on the spot soon after it was killed.

The third specimen taken in 1879 near the south end of Lake Te Anau, is recorded as being carefully skinned and preserved by a station manager. This may be so, but in my experience the average farmer of to-day would be quite at a loss if faced with the problem of skinning and preserving a bird.

The fourth specimen obtained in 1898 received expert attention. No one tried to skin it, but it was carried by rowing boat twenty-five miles to the south end of Lake Te Anau, and then by coach and rail to Dunedin, where it fortunately arrived in a state to enable Mr. Jennings, taxidermist at the Otago Museum, to make a fine job of preserving and mounting it.

The account of the preservation of the 1898 specimen is undoubtedly true, but I feel certain that a serious doubt exists as to the exact facts about the circumstances of collection of the first three specimens.

C. J. LINDSAY

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ARCTIC TERNS NEAR MANUKAU HEADS

Four Arctic Terns (*Sterna paradisica*) were seen perched on the rail of the jetty at Little Huia, about $3\frac{1}{2}$ miles east of Whatipu on the northern shore of Manukau Harbour, on the afternoon of 22/3/61 about $1\frac{1}{2}$ hours before full tide. The birds allowed a fairly close approach and were observed for some time through 10 x 50 binoculars. They eventually flew across the harbour, low over the water with rather slow regular wing beats.

The general impression was of long bodied terns, smaller than *S. striata* and with shorter legs and smaller bill. They appeared to be adults in winter plumage, and closely resembled the illustration of adult female winter, plate 129, The Handbook of British Birds, Vol. V. The forehead and fore-crown were white, back of crown and nape black (one bird appeared to have some very fine whitish markings on the black part of the crown); upper plumage below the neck grey, folded primaries darker grey, and a suggestion of white tips on the secondaries; rump and tail, seen when the birds flew, were white, the tail deeply forked but the streamers not greatly elongated; whole underparts white. All had black bills; legs and feet blackish, one bird with a tinge of deep crimson on the tarsus.

A. T. EDGAR

TWENTY-FIRST ANNUAL REPORT FOR YEAR 1960 - 61

OFFICE BEARERS FOR THE YEAR

President: Mr. A. BLACKBURN

N.I.V.P.: Dr. R. A. FALLA *S.I.V.P.:* Mrs. L. E. WALKER

Secretary: Mr. G. R. WILLIAMS *Treasurer:* Mr. H. R. McKENZIE

Editor: Mr. R. B. SIBSON *Asst. Editor:* Mr. A. BLACKBURN

Members of Council: Mr. E. G. TURBOTT, Mr. J. C. DAVENPORT
Mr. F. C. KINSKY

The Constitution requires three members of Council retire at this Annual General Meeting. This year they are: Dr. R. A. Falla, Mr. R. B. Sibson and Mr. E. G. Turbott. All are eligible for re-election. Nominations were called for to fill the resultant vacancies, but only one was received — that of Mr. E. G. Turbott for the position of Member of Council, and I have pleasure in declaring him elected. Later, this meeting will be asked for nominations for the positions of N.I.V.P. and Editor and if more than one nomination is received for either post, an election will be held by ballot. Mr. F. C. Kinsky was appointed by Council to fill the place among the office bearers made vacant by the election of Mr. Blackburn to the Presidency. He will be due to retire at next year's Annual General Meeting, as by Constitution, he serves only for the remainder of the term of the Council member he replaces.

Society and Council business during the year has been concerned with advancing the plans for the publishing of the Field Guide to New Zealand birds, with making changes in the subscription rates for membership of the Society, with the Wader Course at Farewell Spit last January, with the Society's banding policies, a visit to New Zealand by the R.A.O.U. in 1962 for one of their well-known "camp-outs," changes in the publication dates of "Notornis," and so on. All these subjects will be dealt with during the course of this meeting and will be open for discussion.

We come of age this year and with this occasion our membership stands at about 800 and we are financially sound.

The Wader Course at Farewell Spit was a great success and we are grateful to all those who helped make it so, especially Mr. B. D. Bell and the Wildlife Branch of the Department of Internal Affairs.

The Society thanks the Librarian, Miss E. Evans, for another year of most valuable service, and Miss M. McIntyre for her help in the running of the library.

G. R. WILLIAMS, Hon. Secretary

BALANCE SHEET AS AT 31st MARCH, 1961

Last Year	Current Liabilities	Last Year	Current Assets	BALANCE SHEET	
139	Sundry Creditors	98 14 3	164	Bank of New Zealand	134 5 9
66	Subscriptions in Advance	93 14 1	419	Post Office Savings Bank	431 4 5
27	Provision for Index to Notornis	20 0 0	46	Sundry Debtors	19 16 0
				Subscriptions in arrears	
232		212 8 4	12	estimated to realise	4 0 0
	Reserve Account —		641		589 6 2
	Life Subscription and			Stocks on Hand —	
400	Endowment A/c	405 0 0	44	Printing & Stationery	26 0 0
5	Add additions 1960/61	34 0 0	-	Banding Scheme	99 18 0
		439 0 0	372	"Notornis" Back Numbers and	
405				sundry publications	327 16 0
	General Reserve —		416		453 14 0
803	Balance 1/4/60	861 4 7	9	Addressograph at cost	
	Add Library valuation	300 0 0		less depreciation	7 10 2
	" Transfer from Card	300 0 0		Library — Purchases to date	47 6 10
	Committee	300 0 0	32	Add valuation of previously	
		1461 4 7		acquired	300 0 0
	Less excess of Expenditure				347 6 10
+58	over Income	14 15 9		Investment Fund —	
		1446 8 10	400	Auckland Elect. Power Brd. Stock	700 0 0
861					700 0 0
1498		£2097 17 2	1498		£2097 17 2

INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31/3/61

Last Year	Expenditure	Last Year	Income
401	Printing "Notornis"	386	2 7
58	Postages	60	2 2
53	Printing & Stationery	76	5 10
6	Banding: Banding scheme	52	9 5
	Banding reports	27	12 1
	Free issue to operators	23	5 6
		103	7 0
35	General Expenses	15	11 11
	Back Numbers "Notornis" —		
52	804 expected to be unsaleable	50	5 0
8	Depreciation	1	6 6
58	Excess of Income over Expenditure	—	— —
671		£693	1 0
		671	529
			Subscriptions
			536
			18 1
			Add Arrears expected to produce
			12
			4 0 0
		541	540 18 1
		26	Donations, General
			29 15 1
		32	Field Week-end:— Whakatane
			19 8 3
			Surplus back numbers "Notornis," etc., profit on sale
		34	
			38 17 3
		38	Interest
			49 6 7
			Excess of Expenditure over Income
			14 15 9
		671	£693 1 0

NOTORNIS

We report to the members of the Ornithological Society of New Zealand Incorporated that we have examined the books, account and vouchers of the Society for the year ended 31st March, 1961, and certify that the above balance sheet is properly drawn up to show the true financial position of the Society at that date. We have accepted the values placed by your Treasurer on "stocks on hand."

10th May, 1961

CHAMBERS, WORTH & CHAMBERS, Auditors

CARD COMMITTEE

PROFIT AND LOSS ACCOUNT FOR YEAR ENDED 31st MARCH, 1961

Last Year			
	After deducting the cost of the products sold from the sales we are left with a		
401	Gross Profit of	364 17 8	
	From this we deduct the following expenses —		
160	Advertising	162 5 0	
5	Depreciation	10 0 0	
6	General Expenses	1 0 0	
20	Donation	20 0 0	
17	Postages	19 18 2	
25	Sundry Services	21 0 0	
17	Stationery	11 9 9	
249		245 12 11	
152	Leaving us a profit on sales of cards of	119 4 9	
12	To this we added: Interest Received	15 19 1	
3	Donations	1 18 7	
166	So that the Net Profit for the year is	£137 2 5	

BALANCE SHEET AS AT 31st MARCH, 1961

Our Assets consist of:			
40	Printing Blocks	35 0 0	
635	Cash at A. & N.Z. Bank	568 19 7	
117	Stocks	75 0 0	
792	and Total:	678 19 7	
43	From this we deduct what we owe others	92 15 5	
749	Leaving us with	£586 4 2	
This balance is made up as follows:			
	Profits to 31st March, 1960	749 1 9	
	Profit for year ended 31st March, 1961	137 2 5	
	Less the cost of Local Bodies Stock which has been handed to the Society	300 0 0	
		£586 4 2	

TREASURER'S REPORT, 1960 - 61

The membership of the Society is now 792, being Hon. Life 1, Life 66, Endowment 357, Ordinary 331 and Junior 37. Of this total 9 are resigning as at 31/3/61. 21 defaulters written off in the current year would have made the total 813 had they been carried forward as previously. The real gain in membership is therefore 20, the same as last year.

Subscription rates for 1961-62 will be 10/- Junior, £1 Ordinary and £20 Life over thirty years. A proposal is coming forward to the effect that there be an Endowment rate of £1/10/-.

Financially the Society is getting into a sound position and it is expected that its several branches of activity can now be proceeded with confidently. This should be possible for many years at the £1 rate of subscription.

The printing of "Notornis" has cost a little more but we have had good value. The printers give excellent service on good terms. The cost would be much greater only for the photographs supplied free; this year by Dr. M. F. Soper, Dr. K. E. Westerskov, Messrs. G. J. H. Moon, F. C. Kinsky, D. A. Urquhart, H. J. Harrington, A. J. Heine, F. O'Leary and P. Morrison. Cordial thanks are tendered these gentlemen for their gifts of such excellent work.

The Banding Scheme has been further developed, largely owing to a generous grant of £100 by the Wildlife Branch of the Internal Affairs Department. The continued co-operation of the Department is greatly appreciated.

The Executive has been heartened again this year by the receipt of handsome donations and other assistance. Much service of a more or less intangible nature, not to be valued in money, has been freely given. It must be recognised that the Society owes much of its stature to those who travel long distances to business meetings, to entertain members, to receive visitors and to further our schemes.

The Christmas Card Scheme has been continued by Mr. B. S. Chambers and his helpers and will be reported by him.

Our thanks are again proffered to Messrs. Chambers, Worth and Chambers for auditing the books free of charge. It is realised that this is done at a very busy time of year.

H. R. McKENZIE, Honorary Treasurer



LIBRARY ANNUAL REPORT, 1960 - 61

During the year 53 separates have been added to the Library, and the 35 periodicals received on exchange have continued to come regularly. Some progress has been made with the binding of periodicals.

39 items have been borrowed by members. Circulation of journals has continued, and three circuits are in operation.

With the greatly increased work in the Museum library, which has to be done without any extra assistance, it has been impossible to devote as much time as is desirable to the Ornithological Society's library. I am therefore, very grateful to Miss M. McIntyre for the many hours she has given to working in the library.

A list of the library's holdings of books, pamphlets, separates and periodicals has been prepared. The list of books, pamphlets and periodicals is appearing in *Notornis*, while the list of separates will appear in the following number. The library now contains nearly 700 items (exclusive of individual periodical parts).

ENID A. EVANS, Hon. Librarian

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NEST RECORDS SCHEME

Annual Report for Year Ending 31st March, 1961

The collection now stands at more than 2,500 cards representing 97 species. The year saw the Black Petrel, the Crested Grebe, White-faced Storm Petrel and the Wrybill added to the list. The time has come to redesign the layout of the nest record card as its printing blocks have become worn, and to look at the possibility of printing a second card for colonial nesting gulls and terns. During the summer Dr. K. Westerskov of Lower Hutt demonstrated various New Zealand zoology problems at a field naturalists' zoology course run at Ohakune by the Council of Adult Education of the Victoria University of Wellington.

Following correlation of the Society's nest record data with the relevant literature records the Organiser rendered to Council details of improved understanding of New Zealand's overall clutch size limits, also of its overall nesting seasons' limits based on egg dates. These details still remain, however, very inadequate for kiwis, grebes, crakes and psittacids in particular, while definition of provincial nesting seasons' limits and provincial clutch size limits respectively for all species must await more nest data accumulation.

Further nest data is also required for getting better understanding of the factors affecting nesting times, species nest-site selection in relation to vegetation or other profiles, incubation periods, brood size variability, and fledging success.

This year's contributions follow as under:

Over 50 — Dr. M. F. Soper, Messrs. D. V. Merton, B. D. Heather.

Over 25 — Messrs. D. Brathwaite, D. C. Dawson, A. Wright.

Also Miss M. R. Trower, Mesdames C. Cox, M. McGrath, Messrs. E. Dear, H. L. Secker, E. W. Crack, B. D. Bell, N. Ewing, B. Enting, H. R. McKenzie, W. Bird, J. R. Jackson, P. Jackson, M. G. Jackson.

Total accessions now are:

Stewart Island Kiwi (1) Great Spotted Kiwi (1) Yellow-eyed Penguin (6) Little Blue Penguin (20) White-flipped Penguin (7)

Fiordland Crested Penguin (1) Crested Grebe (1) Little Grebe (1)
 Fairy Prion (14) Sooty Shearwater (1) Fluttering Shearwater (7)
 Fleshy-footed Shearwater (1) Allied Shearwater (1) Black Petrel (1)
 Grey-faced Petrel (9) White-faced Storm Petrel (2) Diving Petrel (26)
 Gannet (4) Black Shag (14) Pied Shag (9) Little Black Shag (1)
 Little Pied Shag (5) King Shag (6) Spotted Shag (3) Reef Heron (17)
 White-faced Heron (5) Bittern (2) Canada Goose (14) Mute Swan (3)
 Black Swan (15) Paradise Duck (4) Grey Teal (9) Brown Duck (2)
 Grey Duck (16) Mallard (29) Shoveler (7) Black Teal (6)
 Harrier (41) Bushhawk (3) Pheasant (6) Californian Quail (5)
 North Island Weka (3) Pukeko (49) Coot (2) Black Oyster-
 catcher (18) Variable Oystercatcher (5) Pied Oystercatcher (43)
 Spur-winged Plover (12) Banded Dotterel (79) N.Z. Dotterel (19)
 Wrybill (2) Pied Stilt (79) Black Stilt (1) Black-backed Gull (96)
 Red-billed Gull (21) Black-billed Gull (22) Black-fronted Tern (17)
 Caspian Tern (7) Fairy Tern (2) White-fronted Tern (40) Bush
 Pigeon (3) Rock Dove (48) Kaka (2) Kea (22) Red-fronted
 Parrakeet (2) Shining Cuckoo (2) Morepork (2) Little Owl (8)
 Kingfisher (16) Rifleman (22) Rock Wren (3) Skylark (61)
 Fantail (45) Pied Tit (9) Yellow-breasted Tit (11) Northern
 Robin (10) Southern Robin (11) Brown Creeper (1) White-
 head (4) Yellowhead (9) Grey Warbler (34) Song Thrush (394)
 Blackbird (321) Hedge-sparrow (60) Pipit (16) Bellbird (8)
 Tui (5) White-eye (48) Greenfinch (46) Goldfinch (157) Lesser
 Redpoll (27) Chaffinch (50) Yellowhammer (19) Housesparrow (103)
 Starling (79) Mynah (8) White-backed Magpie (8).

H. L. SECKER, Organiser

————★————

DUNEDIN — MAY 12 - 14, 1961

Those who attended the A.G.M. and week-end events were well entertained. On two evenings showings of colour-slides by two very skilful photographers, Dr. M. F. Soper and Mr. G. Chance, revealed much of the beauty of such rare birds as Great Crested Grebe, Yellow-eyed Penguin, Rock Wren, Bush Hawk, Yellowhead; and members were very grateful at having the opportunity of seeing such fine studies in bird portraiture.

The two excursions closely followed the successful pattern set in May, 1955. On the Saturday morning a confident busload, defying the overcast skies and bitter weather, set off down the western side of the harbour, noting en route an instructive variety of shags. On the mole White-fronted Terns numbered 300-400 as in 1955. Several Black-fronted Terns were passing to and fro and the opportunity was taken to note how conspicuous their white rumps are against the general duskiness of their plumage. Some of these Black-fronted Terns were seen actually to rest on the gently heaving sea beyond the lines of surf. Off the mole a Gannet appeared and one Mollymawk came close enough to be diagnosed as Buller's. Flights of Spotted Shags would leave the cliffs and Stewart Island Shags in their bronze and pied forms were often in view. Meanwhile a watchful eye was kept on the lamb-sized young Royal Albatrosses on Taiaroa Head; and at

least three were seen to be fed, after adults had suddenly appeared gliding round the cliffs.

Lunch was taken in the bus or in the shelter of the sandhills out of the cutting wind. Meanwhile an incoming tide had been covering the Aramoana saltings, mustering the Godwits (c. 70), Banded Dotterels (c. 80), S.I. Pied Oystercatchers (c. 600) and a few Stilts. It was during a post-prandial stroll that the really surprising 'find' of the day was made. F.C.K. was the first to notice a smallish long-billed wader as it flew along the tideline and obligingly settled on a handy reef to which dry-shod access was still possible. In a short while several members were studying at quite close range their first Tattler. It was white underneath except for some very faint barring on the chest; and after it was heard to call several times, there seemed to be little doubt that it was of the Siberian race (*brevipes*). I.G.A., who made a close study of a Siberian Tattler at Waikanae over the summer of 1960-61, pursued this unusual vagrant with his tripod-mounted monocular for half a mile through the shivering shallows, a doughty paddle on such a day. Otago Harbour can thus claim to be the southernmost locality which a Tattler has been found to reach. On this high note we returned to the bus, where some hardy beachcombers had a pile of corpses for critical examination. Several young Sooty Shearwaters were very thin. Later we were to learn that Muttonbirds were coming ashore in thousands around the coast, weak and starving.

Next day several car-loads of visitors left hopefully in the rain for Taiaroa Head; but though the clouds lifted we were denied a closer look at the Royal Albatrosses. In the afternoon Wickcliffe Bay was our destination and here were found under the coastal scrub the Yellow-eyed Penguins which some of us were so keen to see. Song-thrushes were in good voice and on all sides Hedge Sparrows called from the scrub. In Papanui Inlet a Caspian Tern was greeted by the northerners as a lost familiar friend.

The thanks of the visitors are warmly offered to Mr. and Mrs. Walker and Brian Ellis, who organised such a successful week-end.

— R.B.S.



BEACH PATROL SCHEME

Interim Report for Year 1960

Work is still in progress on the detailed tabulation and analysis of the patrols made during 1960, but it is hoped to have the full report ready for publication in the near future. During the year all the Society's records of "storm-killed" birds (those published in "Notornis" as well as those entered on beach patrol cards) were collated. The records cover a period of twenty years and involve 6,959 specimens, mostly petrels. A summary of this material is being prepared for publication.

During 1960 a total of 228 completed beach patrol cards were received from 18 members; these cards record details of 1,091 specimens (44 species), i.e. nearly one sixth of the total number of specimens recorded during the previous twenty years. The geographic distribution

of the patrols may be summarised as follows: Auckland West Coast (15 patrols), Taranaki Coast (19), Wellington West Coast (114), Wellington South Coast (32), Marlborough Coast (16) and Otago Coast (16); the remaining 16 patrols were from scattered localities, mostly on the East Coast of the North Island. There is still a regrettable absence of reports from the Western and Southern Coasts of the South Island.

The patrols are representative of all months of the year; less than 50 birds were recorded each month from January to June, but numbers then increased to 66 in July and 459 in August and then declined to about 100 per month for the rest of the year. The high August figure is due mainly to some very productive patrols carried out at that time on the Auckland West Coast; then increased counts in August were much less marked in the Wellington Area.

The most numerous species (total for year in brackets) were: *Pachyptila turtur* (303), *Puffinus gavia subsp.* (160), *Puffinus griseus* (122), *Larus dominicanus* (94), *Pachyptila belcheri* (74) and *Eudyptula minor* (59). Among rarer species were *Phoebastria palpebrata* (2), *Halobaena caerulea* (2), *Procellaria cinerea* (1), *Procellaria westlandica* (1) and *Sterna fuscata* (6). The Sooty Terns (*S. fuscata*) are of particular interest because there were only six previous records of this tropical species in New Zealand. The 1960 specimens were found in July (1) and August (5) at Muriwai, Bethels (3) Foxton and Waitarere (Levin).

The organiser wishes to thank all those who have assisted in collecting such a fine set of records (collectively, members have tramped 225 miles on the beaches of the Wellington West Coast alone). Special thanks are due to Mr. B. W. Boesen, who has spent many hours in registering the cards as they come in, and in tabulating the records that the Society has collected over a period of twenty years.

Lower Hutt
5/5/61

P. C. BULL, Organiser



PERIODICALS IN LIBRARY

Of those marked * only those numbers of ornithological interest are received. Where individual numbers are monographs, they are usually catalogued individually, and will appear in the list under authors, while the serial title will be listed here. Square brackets indicate that holdings are incomplete.

*American Museum Novitates (American Museum of Natural History).

*American Museum of Natural History. Bulletin.

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York. v. [48] 49-54, [51] 52-57, 62- (1946-

Auk (American Ornithologists' Union) Cambridge, Mass. v. 66- (1949-
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- Bird Study (British Trust for Ornithology) Oxford. v.1- (1954-)
- Bokmakiere (South African Ornithological Society and the Witwatersrand Bird Club) v. [8]- (1956-)
- Bologna. Universita. Laboratorio de Zoologia Applicata alla Caccia. Ricerche di Zoologia Applicata alla Caccia. 13-14, 20 (1939-48)
- British Birds. London. v 43- (1950-)
- British Trust for Ornithology. Annual Report. No. 20 (1953), 21 (1954), 23 (1956), 26 (1959)
- Chicago Natural History Museum. Annual Report. 1948-
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- *Cleveland Museum of Natural History. Scientific Publications.
- Condor; a Magazine of Western Ornithology. (Cooper Ornithological Club of California) Santa Clara. v. 44- (1942-)
- Country-side (British Empire Naturalist's Association) London. v. [15-16]- (1950-)
- Dansk Ornithologisk Forenings Tidsskrift, Kobenhavn. v. 39- (1945-)
- Elepaio: Journal of the Honolulu Audubon Society for the Better Protection of Wildlife in Hawaii. v. 1-17 (1939-57)
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- *Harvard University. Museum of Comparative Zoology. Bulletin.
- Hong Kong Bird Report. 1958-
- Ibis (British Ornithologists' Union) London. v. 91- (1949-)
- Journal fur Ornithologie (Deutsche Ornithologische Gesellschaft) Berlin. v. 93- (1951-)
- Larus: Casopsis Ornitholoskog Zavoda u Zagrebu. 2- (1948-)
- *N.Z. Dept. of Internal Affairs. Wildlife Publications.
- Norfolk Bird Report (Norfolk Naturalists' Trust and Norfolk & Norwich Naturalists' Society) Norwich. 1953-
- Notornis: Bulletin of the Ornithological Society of New Zealand. 1- (1943-)
- Ornis Fennica. Helsinki. v. 34- (1957-)
- Ornithologische Beobachter (Schweizerische Gesellschaft fur Vogelkunde und Vogelschutz) Bern. v. 50- (1953-)
- Ornithologische Mitteilungen (Bund fur Vogelschutz) Gottingen. v. 4- (1952-)
- Ostrich (South African Ornithological Society) v. 27- (1956-)
- Papers on Game Research (Riistatieteellisia Julkaisuja) Helsinki. [1-9]- (1948-)
- Polska Akademia Nauk. Instytut Zoologiczny. Acta Ornithologica. v. 2- (1936-)
- Postilla (Peabody Museum of Natural History) New Haven, Conn. 1- (1950-)
- Ring. Wroclaw, Poland. 1- (1954-)
- Sarawak Museum Journal. 8- (1957-)
- South Australian Ornithologist (South Australian Ornithological Association), Adelaide. v. 16-22 (1942-57)
- Sterna: Opuscula, Series Zoologica (Stavanger Museum, Norway) 1- (1951-)

- Tori (Ornithological Society of Japan), Tokyo. v. [12]- (1947-
 *U.S. Dept. of Agriculture. A few publications only.
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 Wilson Bulletin (Wilson Ornithological Club) Baltimore, Md. 56- (1944-

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LETTER

As I am at present writing a paper on the food and distribution of the Tuatara, I was interested in the note 'Fairy Prion chick attacked by Tuatara' (*Notornis* IX 133).

However, the footnote will stand amendment, for in 1885 Andreas Reischek and Professor Thomas recorded this bird-eating habit of Tuataras on Karewa Island in the Bay of Plenty (T. & P. N.Z.I. XVIII 109, 1885).

— E. S. GOURLAY

D.S.I.R. Nelson.

3/5/61

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The Thirteenth International Ornithological Congress will convene at Cornell University, Ithaca, New York, from June 17 to 24, 1962.

The official announcement and application for membership in the Congress are now ready for distribution. Interested persons who have not already done so should send their names and addresses to the Secretary General *as soon as possible*.

A small fund has been obtained to provide partial support for the travel of a few persons coming from outside North America. Application forms will be sent to persons requesting them. (Citizens of the United States and Canada are not eligible.)

All applications for membership, travel grants and places on the programme should be returned to the Secretary General *before December 1, 1961*.

Charles G. Sibley, Secretary General
 Fernow Hall, Cornell University
 Ithaca, New York, U.S.A.

NOTICES

DONATIONS to 31/3/61

Cash, General: King's College Bird Club £2/5/-; Bartle, J. A., Dawson, E. W., McDougall, Miss B. £2; Beatson, R. G. S., Broun, W. J., Melhuish, Mrs. J. H., St. Paul, E., Sutherland, W. S., £1; Robinson, Ian S., 15/-; Dorizac, P., Fagan, J. A., McGinty, P., MacKenzie, N. B., Nuttall, A., Rutherford, V. M., St. George, V. D., Syme, Mrs. G., 10/-; Sundries under 10/-, total £1/11/7.

Illustrations: Sladden, B., £1; Shanks, Miss R., 10/-.

Banding Scheme: Internal Affairs Dept., £100; Kinsky, F. C., 10/-.

Life Subscriptions Increase: St. Paul, R., £14 (Increase from £6/6/- to £20/6/-).

Whakatane Field Week-end: Bain, J. W., McGrath, D., Way, W. H., £2/15/-.

Back Numbers of "N.Z. Bird Notes" and "Notornis" Donated: (Two years) Atkinson, H., 5; Auckland Zoological Society, 22; Boulton, A. A., 61 (complete set); Bull, G. F., 34; Doig, Mrs. J., 27; Edgar, Miss R., 22; Fox, K., 8; Francis, K. E., 6; Hanna, M. C., 15; McKenzie, G. K., 26; Roberts, T. M., 8; Tunks, Miss E., 39; Watson, A. H. (Estate), 16; Donor Unknown, 24; Sundries, 8.

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SPECIAL APPEAL

BACK NUMBER VOL. 9, No. 1

The June, 1960, issue of "Notornis" is in very short supply. Will members who do not keep their back numbers please send this copy to:—

Mrs. Hetty McKenzie,
Journal Despatch Officer,
P.O. Box 45,
Clevedon.

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NEW MEMBERS up to 15/5/61

The Librarian, Academy of Natural Sciences of Philadelphia
Aicken, Mrs. H., Ellangowan Road, Torbay
Braid, A. M., c/o Mr. Peter King, Franz Josef Glacier
Bernice P. Bishop Museum, Honolulu
Coles, Miss J., St. Helens Hospital, Pitt Street, Auckland
Connell, R. B., 303 Rosebank Road, Avondale
Cradwick, Mrs. W. G., 78 Fox Street, Hamilton
Dawson, David G., 100 Marshland Road, Christchurch
Fitzgerald, Mrs. Beaumont, 6 Tolcarne Avenue, Maori Hill, Dunedin
Freer, Michael, 43 Carlton Gore Road, Auckland
Gallop, C. P., c/o Baring Head L.H., R.D., Wainui-o-mata
Limberg, Hans, Verlag, Aachen, Germany
Mander, R., Stephens Island, P.B., Picton
Orum, Miss I. M., Ness Valley Road, Clevedon
Orum, Miss L. V., Ness Valley Road, Clevedon
Partridge, Tony, 18 Scott Road, Glen Eden
Warburton, R. J., Franz Josef Glacier