WHITE HERON INVASION, 1957

By I. G. ANDREW

From April, 1957, unusually large numbers of White Herons (Egretta alba) were seen in scattered areas of New Zealand from Northland to Southland. It appears that an extensive invasion from Australia occurred. This report summarises the records in the Wildlife files. Several other Australian breeding species appeared at the same time, and these are also discussed here.

INTRODUCTION

H. G. Warburton (1957) has summarised the records of White Herons throughout New Zealand in 1951-1954. A notable feature of this report is the large number of reports (amounting to 82 birds) in May 1952, suggesting an "invasion" from somewhere. This number included a flock of about 18 at Rangaunu. Such flocking is not normal in New Zealand outside the breeding area, but has frequently been observed since at Rangaunu (1953, 1957, 1958, 1959, 1960), and was so much a feature of the 1957-58 invasion that the possibility of additional breeding colonies was entertained by residents in Northland, Hawke's Bay, Manawatu and Southland.

1957 INVASION

Records collected in 1957-58 and assembled by Mr. K. H. Miers, of the Wildlife Division, Department of Internal Affairs, suggest that the total number of White Herons in New Zealand in winter, 1957, was perhaps a little over 200. These appeared throughout the country, during April, at about the time when the White Herons from the Okarito heronry normally arrive at their winter grounds. However, not more than about 70 of these can have come from Okarito, since only 21 nests were constructed at the heronry in 1956-57, suggesting 42 adult birds, and 27 chicks were reared. This leaves about 150 birds which must have arrived from elsewhere. Presumably their origin is the same as that of the 1952 invasion of about 50 birds reported by Warburton (1957), and Australia seems to be the most likely source. There is as yet no evidence of any other breeding colony in New Zealand, and the various reports of young birds with their parents in areas apart from Okarito have proved to be Little Egrets (Egretta garzetta) associating with White Herons. A few Australian White Ibises and Glossy Ibises also appeared during 1957 and provide further evidence for the Australian origin of the invasion. Some of these have already been reported in Notornis. An influx of Royal Spoonbills in the north may have had the same origin.

Fairly detailed reports are available for certain areas at least during the early part of the invasion (April-May 1957), notably Auckland, Bay of Plenty, Ellesmere, Southland. Other areas, such as Parengarenga and Kaipara, in which sizeable flocks were present, have received very little attention, and no reports are available for fairly

large areas such as the Wairarapa.

It is evident that considerable movement of the flocks occurred, and in adjacent or nearby areas where records are few and far between it is sometimes difficult to know whether one flock or two is involved. For example, flocks of up to 20 were reported from Lakes Wahi,

Whangape and Waikare in the Waikato, but no systematic records were made, and the one flock may well have moved from one lake to another. In estimating totals, care has been taken to allow for movement of the flocks and to exclude any records of birds which may have been recorded elsewhere. Although dates of arrival of birds in a locality are frequently well documented, departure dates are rarely known. Consequently there is a great paucity of records during the summer of 1957-58. Only 22 young were reared at Okarito in 1957-58, and 32 adults were at the colony. However, many were reported still present in winter 1958 in areas which they had frequented in winter 1957, but from which no reports regarding presence or absence were received during the intervening summer.

The invasion began about 19th April, from which date a rapid increase occurred simultaneously throughout the country. The chief flocks in April 1957 were 18 at Rangaunu, 9 at Matata, 4 at Gisborne, 12 at Ellesmere, 27 at Tuakitoto, and 15 in Southland. Others in various scattered localities bring the April total to 116. Additional flocks first reported in May, but probably present from the start of the invasion, were 10+ on the Waikato lakes, 10 at Whakaki, 12 at Napier, 14 in Marlborough. Also in May the total numbers reported in the Auckland province (excluding Gisborne) reached about 80, while increases in Canterbury (chiefly at Ellesmere) were accompanied by decreases first in Southland and later in coastal Otago. This was probably due mainly to a general northward movement, although a number (including 5 in Southland) are known to have died.

Altogether about 200 White Herons were present from May to

Altogether about 200 White Herons were present from May to July 1957. Since 14 are known to have died in May, the toal number was probably nearer 220. For the rest of the winter, the birds did not move about much, and little change in numbers was recorded. From about October, 32 arrived at Okarito to breed, but the numbers

TABLE 1
Approximate number of White Herons in New Zealand, 1957-58, arranged by district for each month.

				1957 Jul.	Aug.	Dec.	1958 Sep.
	Apr.	May	Jun.				
Northland - Auckland -							
Waikato	30	59	55	55	55	45	35
Bay of Plenty - Rotorua -							
Taupo	14	20	20	20	20	13	17
Gisborne - Hawkes Bay	8	28	21	21	21		13
Taranaki - Wellington	4	6	1	10	10	3	_
Total North Island	56	113	97	106	106	61	65
Marlborough - Nelson -							
Westland	3	17	30	30	30	54+	_
Canterbury	13	29	46	34	31	23	28
South Canterbury -							
Otago - Southland	44	43	27	27	23	14	_
Total South Island	60	89	103	91	84	91+	28
Total New Zealand	116	202*	200	197	190	152+	93

^{*} May total probably nearer 220, as at least 14 died before June. † Includes 22 young reared 1957-58.

throughout the country declined very substantially. The decline continued through 1958, till only about 100 were present in September-October. This decline may be partly due to slackening of interest among observers, since very few dead birds were recorded after the first few months.

Table 1 shows the approximate totals per district over the first few months after the invasion and at two subsequent times. Very few reports were received from south of Rotorua after winter 1957, and therefore the table could not be completed. Flocks were still present at Rangaunu Bay in winter in 1959 and 1960.

DETAILS OF REPORTS

In the following list, the occurrences of White Herons during the invasion are briefly summarised according to geographical district. Full details of all records are in the Wildlife Branch files.

Names of observers who sent in reports are too numerous to mention, and it is hoped that those who contributed will accept this as a personal acknowledgment. Figures given in parentheses are the highest counts reported for the particular locality.

- FAR NORTH __ 18 at Rangaunu Bay on 20/4/57, increasing to 30 in Oct. '57; 9 in Dec '57, 15 in Jan '58, increasing to 33 in Sept-Oct '58. Other areas visited very rarely: Cape Reinga (3), Parengarenga (9), Houhora (1), Mangonui (2), Whangaroa (3), Rawene (2).
- NORTH AUCKLAND AUCKLAND __ Mostly at Kaipara (18) and Whau Estuary by the northern motorway (up to 9, but 8-6 present May '57 to winter '58). Others at Waipu (1), Waiwera (1), Muriwai (1), North Shore (3).
- SOUTH AUCKLAND WAIKATO ... Karaka (4-5 in winter '57), Waikato Est., (5 in winter '57), L. Waikare (up to 16 in May '57), L. Whangape (5 in winter '57, up to 12 in Mar '58), L. Wahi (present in summer '57-'58, up to 20 in May '58). Others at Meremere (3), L. Ngaroto (1), Thames (1).
- BAY OF PLENTY __ 1 at Matata on 24/4/57, increasing to 14 by 4/5/57, 10 in June-July, then 5 till Oct. __ in the reserve, and ranging to Rangitaiki Rivermouth. 12 first reported from Little Waihi Estuary (Maketu) on 12/9/57, then present throughout summer, with maximum of 20 on 28/3/58. Apparently most birds from Matata moved to Little Waihi. The numbers were maintained throughout the winter till 13/9/58, when 16 were still present at Little Waihi and one at Matata. Other areas less favoured were Welcome Bay, Tauranga (11 in Sept. '57), Whangamata (1), and Ohiwa Harb. (1).
- ROTORUA-TAUPO Usually 2 at L. Rotorua, Apri.-Dec. '57. Also recorded at Rotoehu (1), Rotoma (1), Rerewhakaitu (1), Whakamaru (1), Upper Rangitaiki R. (1), Turangi (1).
- GISBORNE HAWKES BAY __ 6 at Gisborne from 20/4/57, decreasing to 1 in December; 10 at Whakaki, May '57, decreasing to 4 in August; 12 at Napier, May '57, 1 shot, the other 11 possibly remaining somewhere in the district throughout the following summer and winter, as 13 were present in the Fernhill area in winter '58. Others at Te Puia Springs (1), Opoutama (1).

- TARANAKI-WELLINGTON Only odd birds except for a flock of 9 which appeared at L. Horowhenua in July '57, 3 of which were still present in December. Others at Awakino (1), Tongaporutu (3), New Plymouth-L. Rotokare (1), Opunake (1), Hawera-Naumai Park (1), Wanganui (1), Palmerston North (1), Foxton (3), Pauatahanui (1).
- MARLBOROUGH __ 14 reported through winter '57 at Vernon Lagoons, but number "nearer 30 for whole district" according to Wildlife Officers.
- NELSON _ Odd reports _ Richmond (1 in May '57), Westhaven (2 on 11/3/58).
- WESTLAND __ Okarito heronry __ 32 adults with 22 young in summer '57-'58 only. Odd reports elsewhere in April-May '57 __ Westport (1), Ahaura (1), Greymouth (2), Hokitika (1), Harihari (1).
- CANTERBURY Centred around L. Ellesmere. 1 at L. Forsyth on 22/4/57, 12 at Selwyn R. from 23/4/57, 10 at Motukarara on 4/5/57, thereafter through winter, 2 separate flocks at Kaituna and about Selwyn R. (at the eastern and western ends of the lake respectively). Maximum count of 34 at Kaituna in Late June, probably included influx from the south. On 23/9/57 there were 9 at Rennies Bay (western end of lake) and 9 at Kaituna. The Kaituna birds subsequently disappeared, and may have joined those at Rennies Bay, which increased to 23 on 1/12/57, and remained till Oct. '58, when 28 were reported by a fisherman. Other reports from Aylesbury (1), Ashburton (1).
- SOUTH CANTERBURY Present through winter 1957 at Milford, Temuka, Opihi and Washdyke Lagoons, and up to Pleasant Point. Total not ascertained, but usually 3 or 4 seen. One report stated at least 12 through the winter, including up to 5-6 which were noticeably smaller, with darker bills. Another flock of nine stayed through the same winter at Lake Wainono, Waimate.
- EASTERN OTAGO Recorded at Oamaru (2), Waikouaiti (4), East Taieri (2), L. Waihola (12), L. Waipori (5), Tokomairiro R. (6), L. Tuakitoto (27), and single birds in a number of adjoining areas of coast. 12-13 White Herons were present in the district in March-April, 1958.
- WESTERN and INLAND OTAGO SOUTHLAND __ Mostly reported during the early winter 1957 in ones and twos; Martin's Bay (1), Milford Sound (1), Cadrona River, Wanaka (1), Earnscleugh (1), L. Wakatipu (1), south of Kingston (4), Mararoa Station (1), Monowai (2), Dipton (2), Waikaka Valley (2).
- COASTAL SOUTHLAND Widespread reports during initial stages of invasion from Otautau to Haldane, but probably not more than 15-20 birds in the whole of Southland. First coastal records from Lower Mataura (1 on 18/4/57, 6 four days later) and Oreti Estuary (3 on 20/4/57). Reports came from estuaries, coastal and inland lagoons, paddocks, and backwaters of the Aparima, Oreti and Mataura Rivers, Most reports were of single birds, but up to 6 were seen together in the Fortrose area in April-May '57, and about the Oreti Estuary in Oct. Dec. '57.

OTHER SPECIES

Two species of ibis and the Little Egret were often present in company with the White Herons in the 1957-58 invasion, and presumably came with the White Herons. Royal Spoonbills also sometimes accompanied the flocks.

- LITTLE EGRET (Egretta garzetta) _ This species will form the subject of a separate note. Reports received during 1957-58 appear to refer to at least 12 birds, and certainly 10. The distribution pattern is similar to that of the White Heron, and the two species often associated together. Groups were sometimes mistaken by observers as "family parties," the smaller species being treated as a young White Heron.
- WHITE IBIS (Threshiornis aethiopica) _ The invasion of this species, coinciding with the White Heron invasion, has been reported by Falla (1958). A few additional records have appeared in Notornis, and the Wildlife files contain a few further previously unpublished reports. All these records are listed here. One bird arrived at Doubtful Sound on 12/4/57, and at least one other was recorded from Southland in May (Falla, 1958). One at Kawhia and one at Kaipara in May-June (Notornis 8: 56), four at Rangitikei River mouth in early June (Falla, 1958), and two at the Temuka lagoons from May to December bring the total to 10. Five reported to K. H. Miers on 20/1/58 as present for at least 5 months on "old McPherson's farm" at Okuru are probably additional. Other 1957 records are one at L. Ngaroto, Te Awamutu in Nov.-Dec. (Notornis 8: 201 (1960)) and one at L. Owhareiti, Pakaraka, Northland (Notornis 9: 73 (1960)); and in winter 1958, two at Arahura (Notornis 8: 201 (1960)) and one at Invercargill (Notornis 8: 90 (1959)).
- GLOSSY IBIS (Plegadis falcinellus) _ The scattered reports of this species are less well documented than the other species. Falla (1958) mentions two at L. Wairarapa on 26/6/57. One was present at Matata Lagoon, Bay of Plenty, from 14/8/57, probably till 28/3/58, although it was not seen during the intervening period from December to early March. Probably the same bird was seen on 3/5/58 at Little Waihi Estuary. One was present at Te Hapua, Parengarenga on 15/12/57.
- ROYAL SPOONBILL (Platalea leucorodia) An influx of this species in the Auckland province also occurred in 1957, suggesting new arrivals from Australia. This was not followed by a subsequent decline in the overall population in New Zealand, probably largely owing to further breeding success at Okarito in addition to low mortality. A separate note on this species will appear.

ACKNOWLEDGMENTS

The material for this report was largely assembled by Mr. K. H. Miers, who also read the script. Thanks are due to him, to all others who assisted in compilation of the records, to all those who sent in reports, and to Officers of the Wildlife Division for making available their files.

REFERENCES

Falla, R. A., 1958: Some records of Australian birds in New Zealand, 1957. Notornis, 8: 29-32. Warburton, H. G., 1957: The White Heron (Egretta alba) in New Zealand. Notornis 7: 98-101.