NOTES ON SOME BIRDS OF THE WESTERN PAPAROAS. WESTLAND

By I. G. PENNIKET

For two years the writer has been continuously and exclusively engaged in trapping opossums in an area in the Western Paparoas bounded by the coast in the west, the top of the range in the east, the Seventeen Mile Bluff in the south, and Bullock Creek in the north. This has afforded unusually good opportunities for bird-watching, and it is felt that there can be comparatively few land-bird species present which have not been observed.

The district includes substantial areas of almost every conceivable type of terrain, including coast swamps and lagoons, farm land, inland swamps, scrub, shingle riverbeds, mountain rivers, low and high beech forests, sub-tropical

rain forest, high rata-kamahi forest and open tops.

The rat population is comparatively low, the stoat population high. Feral cats are present but very scarce. Some observations on predator density, and relationship to bird life, follow the list.

Sea and shore birds have in all except a few special cases been purposely omitted; so much time has been spent watching land-birds that the list is fairly exhaustive, and the absence of any species may be regarded as significant. This would not be the case with the sea-birds, as too little time has been spent in their haunts. Observations are in general confined to the area defined above, except where a particularly interesting species has been seen reasonably near, in which case the exact locality is given.

GREAT SPOTTED KIWI (A. haasti). Distributed evenly throughout the About thirty kiwis seen personally in this area have all been of this species. Not noticeably more nor less common on the high ridges than on river-flats.

WESTLAND BLACK PETREL (Procellaria westlandica). (winter). Some thousands. Currenly being investigated by Mr R. Jackson.

BLACK SHAG. Common.

PIED SHAG. A few.

WHITE-THROATED SHAG. Common. Occasional birds of the whitebreasted phase.

SPOTTED SHAG. Common. Breeding just outside the area: Twelve Mile Bluff, Perpendicular Point.

WHITE HERON. Always one or two about, except in the breeding season.

REEF HERON. Present in very small numbers.

WHITE-FACED HERON. Very common. Seen almost every day. Preferred habitat, wet fields, but also lagoons and the more open swamps. Usually in groups of three to five birds. Almost certainly breeding, but not proved. Universally known as the 'Blue Heron'. This bird is so common in much of Westland that there is a fair amount of agitation to have both it and the pukeko removed from the protected list.

BITTERN. Evenly but not plentifully distributed through the swamps.

BLACK SWAN. Occasionally a few birds. Not resident.

PARADISE DUCK. About ten birds more or less resident, plus visitors.

GREY DUCK. Common.

MALLARD. Very few.

- NEW ZEALAND SHOVELER. Good numbers breeding in spring and summer. Not seen at other times.
- BLUE DUCK. A few near the heads of the larger streams and rivers.
- AUSTRALASIAN HARRIER. Very common.
- NEW ZEALAND FALCON. Rare. Only four seen in two years, but at widely separated localities.
- WESTERN WEKA. Thinly but very evenly distributed throughout the river-flats and the bush, ranging up to at least 3,000 feet. Known to extend at least as far north as the Four Mile River. About one weka is seen to every two kiwis; remembering the confident ways of the diurnal weka, it is felt that it is much less abundant than the kiwi.
- Very common. A few birds live permanently in non-typical areas such as rather dry fields bordered by thick bush, without adjacent swamps.
- NEW ZEALAND PIGEON. Common.
- SOUTH ISLAND KAKA. Moderate numbers on high rata-kamahi ridges only. Birds here appear to be noticeably darker than those at Jacksons. KEA. Two caught in opossum traps at 2,000 feet elevation on a rather open
- beech ridge.
- SHINING CUCKOO. In spring and summer, common throughout up to 1,000 feet.
- LONG-TAILED CUCKOO. Common in spring and summer on high beech ridges, the same habitat as the brown creeper.
- MOREPORK. Often seen.
- NEW ZEALAND KINGFISHER. Common.
- SOUTH ISLAND RIFLEMAN. Found only on high ridges, and not to be seen every day even there. May be particularly subject to attack by stoats. SKYLARK. Common in the drier flat open areas.
- SOUTH ISLAND FANTAIL. Very common throughout up to about 3,000 feet. Black phase about 15 per cent.
- YELLOW-BREASTED TIT. Very common throughout, including semi-open farm land, and ranging up beyond 3,000 feet.
- SOUTH ISLAND ROBIN. Absent, except fair numbers in Bullock Creek, the western limit being a point about four miles in from the coast. The northern limit is not known, but they have not been seen on occasional trips up the Fox and the Four Mile, which are the next two main streams to the north. The bird is not known to old residents of the district.
- SOUTH ISLAND FERNBIRD. Does not appear to occur in the area proper, but is found sparingly in pakihi country just south of the Four Mile River.
- BROWN CREEPER. Sporadic on high beech ridges. Very common on one ridge. Ranging down as low as 400 feet in spring. Several nests, rather like those of the goldfinch, were found seven to twelve feet up in scrubby ratas and beeches. Another (occupied) was in a hole in the trunk of a very large live beech, about sixty feet from the ground. In spring, rival males fight savagely, and are often seen to whirl down to the ground with beaks interlocked, for all the world like a pair of cock sparrows.
- GREY WARBLER. Very common to 3,000 feet.

- SONG THRUSH. Very common in low open or semi-open country. Does not penetrate heavy bush to any extent.
- BLACKBIRD. Very common in most terrains, including the heaviest bush at all altitudes, but not seen in pure beech country or on open tops.
- BRITISH HEDGE SPARROW. Very common at low altitudes except in heavy bush.
- NEW ZEALAND PIPIT. Common on all open reasonably dry country both above and below the bush.
- BELLBIRD. Common throughout except in pure beech country and on the open tops.
- TUI. Fairly common, but not necessarily to be seen every day. Outnumbered by the bellbird at least ten to one.
- WHITE-EYE. Very common throughout except on open tops.
- GREENFINCH. Evenly distributed through the low country, but not particularly common.

The next five species are dealt with together:

GOLDFINCH LESSER REDPOLL YELLOW HAMMER HOUSE SPARROW STARLING These five species are all common at low altitudes except in heavy bush. The normal range of the redpoll, however, includes the open tops, and odd individuals and flocks are occasionally seen in the tops of the trees in heavy bush at all altitudes.

The following species, while not proved to be present, deserve special mention for various reasons:

- LITTLE SPOTTED KIWI (A. oweni). It would normally be very difficult to say that a possible kiwi species was absent from a given district. But in view of the large number (thirty-odd) of other kiwis seen by the writer in the district, it is felt that the Little Spotted Kiwi, if present, would have been seen by now.
- NEW ZEALAND BANDED RAIL, MARSH CRAKE and SPOTLESS CRAKE. Much time has been spent looking for the three small rails, but without success. The swamps, lagoons and estuaries are continually under observation by flax-cutters and, in the season, by duck shooters. None of these has seen any small rails. Remembering the Banded Rail's habit of frequenting open estuaries, it is felt that the bird if present would have been observed. The other two, however, are so small and unobtrusive, and this area with its miles of flax and raupo swamps seems so eminently suited to them, that I feel they cannot properly yet be ruled out. Odd birds are recorded from time to time near Greymouth.
- KAKAPO. Local residents recall large numbers about thirty years ago. A careful though not very intensive search by the writer revealed no traces. There have been no recent reports.
- PARAKEET. A reliable local observer, formerly much in the bush, says they have always been present, but never in any numbers, and that he last saw some three years ago about five miles up the Pororari River. This is the one area in the district which the writer has not visited. Furthermore it is very close to where the robins are, and, in Westland, these two species do show a tendency to occur together.
- SOUTH ISLAND BUSH WREN. Presumed absent, in view of the very large amount of time spent by the writer in probable habitat.

ROCK WREN. Not seen, but in view of negligible amount of time spent by the writer in usual habitat, presumed likely to be present.

YELLOWHEAD. The Yellowhead normally shares the habitat of the Brown Creeper. The writer has seen about 1,000 creepers here and no yellowheads. It therefore does not persist in any numbers, if at all.

SMALL MAMMALS

A picture of the vermin position is obtained by comparing the numbers of rats and mustelids trapped with the number of opossums trapped, and reducing this to a per 1,000 opossum basis, but the results may be biased if some species trap more readily than others. The numbers of opossums trapped (shown in brackets in Table 1) are regarded as sufficiently large so that the figures can be taken as fairly accurate, especially as opossums are more or less evenly distributed throughout the area. Bullock Creek has been separated from the remainder. Figures are included for a piece of Waikato bush where a fellow trapper is operating using identical trapping techniques, but here the basis is taken as 2,000 opossums since opossums are just over twice as dense there (this has been carefully calculated). The mustelid species involved are, in the Waikato, about even numbers of stoats and polecats; in Bullock Creek all stoats; in Barrytown/Punakaiki all stoats except for one weasel (the skin of the latter was sent to the Animal Ecology Section of the Department of Scientific and Industrial Research, who confirmed the identification).

TABLE 1

	Kats	Mustelids	Opossums
Waikato	320	5	2,100 (4,500)
Barrytown/Punakaiki	45	14	1,000 (9,000)
Bullock Creek	5	4	1,000 (2,000)

The table cannot fairly be used to establish (for example) an absolute rat-opossum ratio for any district, since any two species will vary in susceptibility for the same trapping technique. What is claimed, however, is that it can be stated that rats are seven times as plentiful in this part of the Waikato as they are in Barrytown/Punakaiki, and about sixty times as plentiful as in Bullock Creek. Mustelids are about on a par in Bullock Creek and the Waikato area studied, but three times as dense in Barrytown/Punakaiki.

The ratio of bird-life densities in the three areas is estimated at Bullock Creek five (very plentiful), Barrytown/Punakaiki three (plentiful) and Waikato one (moderate). Furthermore, Bullock Creek retains the robin. It would be dangerous to embark on a comparison of the Waikato situation with either of the other areas – environmentally they are too dissimilar, and the evidence available is too meagre. But the two Westland areas are very similar, except that the Bullock Creek bush is less lush, and less productive of fleshy fruits. This may account for the comparative scarcity of rats.

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Remembering that rats no doubt usually form an important item of mustelid diet, it remains to account for the comparatively high mustelid population in this part of Westland. The extreme abundance of the introduced whistling frog may have something to do with it—as also with the abundance of harriers.

In conjunction with the bird observations the table rather suggests:

 Robins and stoats can co-exist. Rats may be the more serious menace to the robin, and indeed to many birds, by competing for food.

2. The large spotted kiwi and the stoat can co-exist.

3. The weka and the stoat can co-exist, but the weka does not seem to have much of a margin. Wekas, it should be mentioned, while still not exactly common, seem to be about three times as numerous in Bullock Creek as elsewhere. But this again may be because of less competition for food with the rat.

- 4. A high stoat population does not necessarily mean a low bird population. 5. The stoat may well be more of an asset as a rat destroyer than a liability as a bird destroyer.
- 6. The time for an exhaustive study of the diet of rats and mustelids in the New Zealand bush is long overdue.

STOATS and WESTLAND PETRELS

A rather higher than normal density of stoats was noticed in the areas where the Westland Petrel nests. It will be interesting to attempt to ascertain whether the bird has diminished in numbers in recent years, and whether or not it does so in the future. Also, this is one case where the rat-stoat-bird relationship is not complicated by competition for food between the rat and the bird.

SHORT NOTES

TERRITORY THREAT DISPLAY OF THE BLACK OYSTERCATCHER

(Haematopus unicolor unicolor)

On 5/1/55, while I was watching a pair of black oystercatchers and their chick on the southern end of Butterfield's Beach, Halfmoon Bay, Stewart Island, another black oystercatcher landed in their territory. The resulting

threat display was very interesting, especially as the birds ceased calling and flying around me, although I was only a few feet from the chick, and they had already lost one of their brood to a dog the day before.

Number one of the pair ran to number two with head held noticeably high and with the beak roughly parallel to the ground. Number two adopted a position in which the bill almost touched the ground and the shoulders of the wings were hunched well above the back. As soon as number one was beside number two, it adopted number two's attitude; then, following a slight pause, they both started to run, side by side, in step, and in this strange position — bills almost touching the ground, and with the shoulders hunched, while all the time uttering shrill cries. After several 'flat-out' chases around the beach in this position, during which the pair were only a few yards behind the intruder, the lone bird was at last driven from the beach. The chased bird did not take up any strange attitude like the pair, nor did it make any attempt to stay on the beach or utter any cry when being chased away. The pair, having satisfied themselves that the bird would not return, resumed aggressive behaviour towards me, the chick having remained frozen during the interlude.

It would be interesting to know which sex ran to the other at the beginning, as there was no hesitation as to what positions to adopt. The display took place just after a cool shower and there was a cool, moderate breeze with

a weak sun and dull clouds.

Iames Watt