

BIRDS OF THE GOULAND DOWNS, N.W. NELSON

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In October, 1958, and June, 1959, Wildlife Branch parties spent a total of about fourteen days on the Goulund Downs with two main aims: to search for Kakapo and to make a general survey of the Wildlife in the area, which is a refuge. The Downs, which lie about 25 miles S.W. of Collingwood at an altitude of 2000-3000 feet, are crossed by the well-known Heaphy Track. The refuge (which is also a scenic reserve) covers an area of rather more than 16,000 acres of swamp, tussock grassland and forest.

To quote Cotton (1915): "The surface of the 'downs' plateau is a plain of erosion . . . with here and there small mesas of covering strata . . . The limestone mesas are riddled with caves . . . [and] as they are forested they show out conspicuously in contrast with the rest of the plateau, which is bare of vegetation with the exception of rushes and a few tussocks of coarse grass struggling for existence in a 'sour' and slimy soil." So eminent a geologist may be pardoned for dismissing summarily a flora which we found to be rather richer than this brief description indicates.

Cotton continues: "The surface of the 'downs' descends towards the middle of the northern boundary in a series of broad irregular steps, each differing from its neighbours by a few tens of feet . . ." A number of gorges cross the plateau, which is about 12 square miles in area, and carry streams flowing in a general south to north direction to drain mainly into Big River. The south and west of the Downs are bounded by the forests of the valleys making up the Heaphy River system, and the eastern and northern boundaries are formed by ranges of over 4000 feet which are forested on their lower slopes. Access to the area is by way of a track which gradually climbs the west side of the Aorere Valley and enters the Downs proper through Perry's Pass, which is just south of Mt. Perry at a height of about 2900 feet.

Vegetation: Despite the forest of the mesas and gorge sides, the dominant plant of the Downs proper is *Danthonia rigida*, the red tussock. In wet places grass is replaced by sphagnum moss, bog pine, nigmy pine, rushes or, on better drained areas, stunted flax. There is a variety of shrubs, manuka being the most common and varying in height from saplings in thickets on the edges of the "bush islands" to prostrate plants a few inches high on wind-swept ground. The forest of the mesas is predominantly silver beech with a scattering of mountain cedar, broadleaf, pokaka and totara. Beneath the main canopy the most prominent shrub or small tree is a large-leaved *Dracophyllum*, and accompanying it is an occasional wineberry, five-finger, mountain toatoa, lancewood and *Coprosma foetidissima*. There is a variety of smaller shrubs but lianes and ferns are not abundant. On the well drained slopes of the steep rocky ravines or along the banks of streams the forest is dominated by mountain beech and the large-leaved *Dracophyllum*.

The gully bottoms and lower slopes of the mountain ranges are clothed in red beech, rata and kamahi. At the tree-line the subalpine scrub of *Dracophyllum* and *Coprosma* species with, especially, *Olearia colensoi*, frequently forms an almost impenetrable band. Above this, the red tussock is again dominant.

Introduced plants are scarce: There are a few scattered clumps of gorse — kept in check to some extent by deer — a few grasses, some clover near the hut and a single *Pinus radiata* which we felled.

Rainfall on the Goulard Downs probably exceeds 150 inches a year.

The Birds: As the Downs are situated almost at the northern extremity of the South Island their avifauna is naturally of some interest insofar as the distributions of some species or subspecies restricted to the South Island are concerned. In addition, we are fortunate that the observations of our party can be compared with those of R. E. Clouston who was caretaker of the Sanctuary between 1915 and 1932. Though he did not live on the Downs themselves but at Bainham in the Aorere Valley, he made very frequent visits to the refuge and reported on the numbers and species of the birds he saw there and in the surrounding district. However, it is obvious from Clouston's notes that he was unfamiliar with species as common as the Scaup and the Pipit and that he knew little about rarer species such as Grey Teal or Brown Duck. Many of his references to Kakapo cannot be regarded as reliable (he, on one occasion, refers to their "shrill nocturnal whistle" — which is quite at variance with all other reliable observers' descriptions of their call), and one cannot help doubting his estimates of their numbers. However, his comments on the commoner native birds of forest and tussock seem consistent and reliable and enable a comparison to be made between the observations of our expedition and the conditions existing between 1915 and 1932. (Clouston's reports are filed in the records of the Department of Internal Affairs.)

Comments On Each Species

Great Spotted Kiwi. Wherever our party went in the sanctuary signs of kiwi were found — footprints, feathers, and probe marks of the bill. At dusk and after dark, males and females could be heard calling from all directions. Three Great Spotted Kiwis were seen but with sign it was usually impossible to decide which species was concerned; though we saw no *A. oweni* they could well be present. Whatever the species, kiwis are certainly numerous. Throughout his time Clouston reported them abundant and he caught or saw both *A. haasti* and *A. oweni*. According to him, pairing began about July and eggs were found in August. This implies the appearance of young in November and December. Oliver (1955) records eggs and young being found in the Heaphy Range nearby in December and January.

Bittern. Reported on one occasion by Clouston, not seen by us.

Grey Teal. In his report for February, 1917, Clouston recorded "two strange ducks resembling Grey Ducks but smaller in size and not so shy." Though he tentatively suggests they were Brown Ducks, his description is more like that of Grey Teal. We saw none.

Grey Duck. Occasional, according to Clouston. Our party did not see any.

Blue Duck. We saw a few pairs of these on streams near the hut and there is no reason to believe they did not occur elsewhere. The species was common in Clouston's time and broods were seen August to December. After the major earthquake in 1929 the species became less common, in Clouston's opinion, because of the continually-silt-carrying water which interfered with their feeding.

Scaup. Seen by Clouston outside the refuge in Boulder Lake on the east side of the Aorere. His description suggests he was unfamiliar with the species for it runs: "This water was simply alive with a black duck resembling a teal." Not seen by us in the refuge.

Harrier. Rarely mentioned by Clouston. They were not seen by us.

Falcon. Apparently not common in Clouston's time. He mentions shooting about four. They were not seen by our party.

Western Weka. Seen or heard by our party from the lowest parts of the Downs to the sub-alpine scrub and beyond, i.e., from about 2000-4000 feet. Clouston, too, generally found the species abundant and widespread, and he remarks on some changes in abundance — there was apparently a scarcity about 1918-19, followed by an increase during the mid-twenties and another shortage about 1930.

In February, 1931, he reports that a pair of Wekas near his house raised 3 broods in one season and laid for a fourth time. Presumably he was able to identify the parents. Young birds usually appeared from August to September. Clouston remarks on the polymorphism which the species is known to display and suggests that a difference in clutch size may be associated with it — 3 eggs with the light birds; about 8 with the dark. (Report for December, 1916.)

"*Land Rails.*" Reported for April, 1916. ? Banded rail. We saw no rails.

Kereru. We saw a few in the forest which fringes the Downs. Clouston talks of them as common or abundant but his comments apparently apply more to the Aorere Valley. On the Downs themselves one would not expect the species to be abundant.

Kakapo. Though one of the main aims of the October party was to search for Kakapo and two trained bird-finding dogs were taken along to aid in the search, no definite evidence was found of the presence of the species in any of the areas we examined. Nor did we hear any calls that could be regarded as those of Kakapo. Of course, in fourteen days, only a small part of the 16,000 acres of the Downs could be covered and the areas searched could, by chance, have been only those seldom, if ever, occupied by the birds. Furthermore, our dogs could be regarded — rightly — as inexperienced in searching for Kakapo. On the other hand, if the species is still anything like as common as Clouston once claimed it to be, we should have found some indication of its presence. Two of our party had had experience of finding Kakapo and their sign in the Tutoko Valley earlier in the year and the

dog that was successful then had been no more experienced in seeking these birds than either of those accompanying us now. Furthermore, as all the evidence suggests Kakapo are scarce in the Tutoko area, though it might have been chance, it certainly was not abundance that made the search successful there. The October party, therefore, was either unlucky or else, as seems far more likely, Kakapo are now very scarce on the Goulard Downs and in their immediate vicinity. Only one of the "classical" signs of their presence did we come across. This was apparently-chewed snow-grass still hanging on the plant. However, this was so common on Mt. Goul on the western faces above the tree-line and occurred so high up on the plant and in the complete absence of any other likely sign whatsoever, that we have attributed it to deer, which are everywhere common. Nevertheless it is an unusual deer sign. There is the possibility that it could be wind-tangle.

In his early days Clouston stated that Kakapo were numerous. In fact, it was partly because of such statements that the refuge was proclaimed in the first place. Other visitors to the Downs (including Dr. Tillyard of the Cawthron Institute) did not agree with Clouston and, as time went on, his comments on abundance grew less optimistic until in 1930 he reported them to be "seen only occasionally." Though asked to capture some for scientific purposes, those two or three he did catch escaped before they could be sent to Nelson. There are only two references to calls and one of these is the one quoted earlier which describes what he heard as a "shrill nocturnal whistle" which is at variance with almost every other description. His evidence for the occurrence of the species on and about the Downs is based almost entirely on his finding of what he considered to be their feeding sign, though he did occasionally report finding feathers.

I cannot help feeling that Clouston, who was apparently not very familiar with other than the commonest native birds, always over-estimated the numbers of Kakapo and sometimes attributed the feeding signs of deer or opossums to this species. In 1922 Dr. Tillyard stated after visiting the area with Clouston, "Kakapo are either exceedingly rare up there or practically extinct."

In Williams (1956) I included a report by Dr. Falla that a number of Kakapo were captured on the Downs in the early 1920's to be sent too the Wembley Exhibition. No mention of this is found in Clouston's reports, nor have I since been able to find references to such a consignment elsewhere.

South Island Kaka. These were numerous throughout the forest areas during our survey and seemed consistently to be the last of the diurnal birds to go to roost at night. Though Clouston records seasonal and annual variations in their numbers, they seem always to have been one of the commonest species in spring and summer. There is no indication that the species has decreased in numbers over the last 30 or 40 years.

Kea. Though we heard and saw a few Keas we did not consider that they were numerous and indeed the Downs must be very near to the northern limit of their range. They are probably nearly always rather scarce, for Clouston mentions them only two or three times during the 17 years of his reports. The birds we did see were unusually shy and incurious about us or our equipment.

Parakeets. We had no opportunity to distinguish between species since we saw no parakeets closely enough. They were not numerous on the Downs but were more commonly heard along the Track on the Aorere Valley side. Clouston reported both species from time to time and remarked upon their occasional changes in abundance. In his report for March, 1923, he notes a "great increase" in both species.

Shining Cuckoo. We heard some calling on the Downs. Clouston has reports of their being present from October to November.

Long-tailed Cuckoo. Neither seen nor heard by our party. Clouston has a few references to their presence in spring which give the impression they appeared *after* the Shining Cuckoo.

Morepork. For a species now so common there is surprisingly little reference by Clouston. He mentions it twice, at most, in passing yet it must surely always have been numerous among the limestone bluffs and overhangs.

Laughing Owl. We hardly expected to have the good fortune of finding evidence of the existence of this species, but Clouston mentions it three times. In his report for September, 1919, he reports having heard what he thought to be a *Whekau*; he had heard one in Otago "years ago." He goes on to say that "Mr. Charles Lewis saw, on the border of the Sanctuary last season, a very fine specimen of the Laughing Owl. Mr. Lewis watched the bird for quite half an hour. . . It was moulting." This certainly seems more than just a circumstantial record and the limestone country seems good *Whekau* habitat. In his report for July, 1916, Clouston states he again heard one.

Kingfisher. One seen by us in the Aorere Valley near Browns Creek. Clouston recorded them occasionally — apparently from the same area.

Rifleman. Common in the beech forest — though, as usual, they were more often heard than seen. Known to Clouston as the "green wren," he says of them in the summary of his report for September, 1930, that they were "scattered about the reserve." He twice mentions the Matuhi or Bush Wren as being present. We did not see it.

Rock Wren. One was encountered on exposed rocks of Mt. Goul at 4200 feet. This must be one of the northernmost records of the species. Not reported by Clouston.

Skylark. We saw and heard these on the open down country just beyond where the track crosses Shiner Creek about $\frac{3}{4}$ mile west of the hut. They are not mentioned by Clouston at all. J. D. Pascoe, after a visit in 1938, reports "larks" as "the only birds seen" on the refuge.

Fantail. Though not frequently seen by us on the Downs during our stay, this species would doubtless become common in the summer when insects become more abundant. Clouston has little to say of it, his main observation was of one being pursued and killed by a falcon.

Yellow-breasted Tit. Frequently seen in forested areas. Clouston mentions them only in passing.

Robin. As our party saw and heard only one in the forest near the western end of the Downs we would say that the species was not common though it may well be more so in summer. It was occasionally reported 30-40 years ago but most of the few references appear to refer to altitudes well below the 2000 feet of the Downs themselves.

Fernbird. This is a common species on the Downs over which it is widely distributed wherever *Dracophyllum* or manuka grow among the dominant red tussock. We found them from 2000 feet to nearly 3000 feet, and the latter must surely be close to the greatest height at which they have been reported established in the South Island. Clouston refers to Fernbirds frequently claiming, logically enough, that an increase in their numbers had occurred with the cessation of burning off the tussock country after the Downs had been made a scenic reserve.

Brown Creeper. Seen in pairs and often heard, Brown Creepers are apparently not significantly different in numbers now from those of 30-40 years ago. In his report on birds for the month of September, 1930, Clouston mentions that they could occasionally be seen "in flocks of hundreds on the mountain," i.e. the lower slopes of Mt. Perry.

Yellowhead. One of the birds most frequently mentioned by Clouston though his reports do not always refer to the Downs themselves. They were not seen by us.

Grey Warbler. The only references I can find to this species in Clouston's reports are a record of their occurrence in the Lead Hill area which lies well to the east of the refuge, and to one being killed by a Kingfisher apparently near Bainham. We heard a few.

Song Thrush and *Blackbird*. Seen by us or heard in full song. The Blackbird is common on the Downs. Neither species is mentioned 30-40 years ago, more likely through lack of interest than because of absence.

Dunmook. Very occasionally seen or heard by us. This is the only exotic bird mentioned by Clouston and he refers to them only once — in his report for February, 1931.

Pipit. Not mentioned at all by Clouston, which is both surprising and significant I think, as far as his knowledge of birds is concerned. We saw them both on the open country of the Downs and commonly above the tree line to at least 3,500 feet. These could be the "larks" referred to by J. D. Pascoe.

Bellbird. Common. Also numerous in Clouston's time. He records young in the nest in September.

Tui. Common, especially on lower parts of the Heaphy Track. An albino was seen in September, 1921. The species was common in those days, too.

Waxeye. We saw and heard a few. Clouston mentions them only once to say that their numbers had increased (his report for March, 1931). Marked seasonal variations in the numbers of Waxeyes are to be expected because of their habit of moving in flocks.

Lesser Redpoll. Small flocks were frequently seen in open country.

Chaffinch. Occasionally heard in October, more numerous during the winter trip.

Yellowhammer. Not seen on the spring visit, but two small flocks were reported on the Downs by the winter party.

Starling. On one occasion two or three starlings were seen flying across the open grassland near the hut.

Saddleback. There are three earlier references to this now very rare species: In his report for August, 1915, Clouston states that Saddlebacks were seen in the summer of 1914/15 in the Waingaro, "the home of the Saddleback . . . where we heard the birds calling previously." He says this is near to the upper branch of the Heaphy, but in reality there is a fair amount of country in between. It is outside the reserve.

Report for November, 1919. A pair were seen with a flock of Yellowheads and Brown Creepers on "the most southern portion of the reserve."

Report for January, 1922. A pair were said to have been seen during a trip made with Dr. Tillyard. In a fairly full report on this trip, Tillyard makes no mention of this unusual experience.

The 1958 expedition saw or heard no sign of Saddlebacks. However, the species has been reported from inland Nelson within the last few years.

Piopio. In the monthly report for January, 1916, there is the statement that a pair of Piopio were seen along the Heaphy Track by a Mr. G. Harris of Karamea. This sighting was apparently outside the boundaries of the reserve. Though also beyond the Downs, a second reported sighting of a Piopio by a party at Boulder Lake about June, 1928, is also worth recording.

This completes the list of species for the Goulard Downs Wildlife Refuge and Scenic Reserve and for a rather ill-defined area around it. Since Clouston's observations and those of our party are only qualitative and ours refer to just a short period, it is clearly impossible to make other than a very general comparison between the status of the avifauna 30-40 years ago and that of the time of our visit.

The major difference seems to lie in the occurrence or numbers of just a few species. Though Clouston did not record Rock Wrens, Pipits, Blackbirds, Song-thrushes, Chaffinches, Redpolls, Skylarks and Starlings, this is almost certainly because he did not consider most of these species of interest or was not very familiar with the remainder (Rock Wrens and Redpolls *may* come into the latter class). That *we* did not record Little Spotted Kiwis, Yellowheads, Grev Ducks, Grey Teal, Falcons, Harriers, "land rails," Grey Warblers or Bitterns is more likely to be because of chance or lack of opportunity rather than because of absence, as some of these species are probably limited in distribution or only occasional visitors to the Downs.

But with Kakapo, Saddleback, Laughing Owl, Bush Wren and Piopio — and especially the first of these — there could have been marked changes in abundance in 30-40 years. Those species becoming rare in Clouston's time may now be reduced to very small and scattered populations; those already at that stage then, may now be locally extinct.

Insofar as all the other species in the list are concerned, there does not, on the whole, seem to have been any marked change in numbers.

Because of the influence mammals may be having, directly or indirectly, on the birds, some comments on them seem justified.

Deer have been in the locality for at least 40 years and have probably increased in numbers over at least some of that time. Even so, they are not particularly numerous now, though they have had some effect on the vegetation. There were more on the Downs during the winter visit than in the spring. No doubt the snow had driven them in from the higher country.

Rats, too, have been part of the mammalian fauna for a very long time. Clouston reported them as particularly numerous in the latter part of 1925 and the earlier part of 1926. Although he calls them "kioere," those specimens collected by him were identified as one of the introduced species. For those interested in the possible predatory effects of introduced mammals, he has an interesting observation about finding a stoat with a rat in its mouth.

Stoats were frequently recorded by Clouston and there are a number of references to his finding birds said to be killed by them — usually Wekas. For what it may be worth, his report for the month of December, 1916, explicitly states that "weasels" had not been seen on the Reserve to that date. His first mention of mustelids is of stoat tracks in January, 1918.

Opossums are first mentioned in the report for October, 1930. They are still present and their characteristic droppings and feeding sign may be seen widely distributed over the Reserve.

Though I have been unable to find records of hedgehogs in Clouston's own reports, there is mention of their presence on the Downs in a letter from the Director of the Dominion Museum dated 30 December, 1920.

The observations in this paper are not only mine but include those of all other members of the parties: Messrs. R. T. Adams, D. V. Merton, P. J. Rowley, B. D. Bell, N. B. Ewing and F. L. Newcombe, I am grateful to them for putting their material at my disposal. The botanical notes are based on a report by Mr. F. L. Newcombe.

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