

be open to disturbance, and most of our shy birds would not settle there.

I would also suggest that a bird sanctuary of one mile be made around all country schools. This would stop a lot of the nest-robbing by small boys. Also if members of the R.A.O.U. had the same power to prosecute as is possessed by members of the Society for the Prevention of Cruelty to Animals, it would enable members to stop much of the shooting during closed seasons. If additional copies of *The Emu* were printed and placed on sale at bookstalls, they would interest the general public, and inform them of what is being done by the R.A.O.U. and other societies. At present *The Emu* is not known at most bookstalls. A gentleman told me recently that he tried all the bookstalls in Sydney, but the officers in charge said they knew nothing of such a magazine, and even said that no such magazine existed. How can we expect the public to be interested while we are working behind a screen?

Notes on The Ground Parrot

By H. V. EDWARDS, R.A.O.U., Bega, N.S.W.

My acquaintance with the Ground Parrot (*Pezoporus walli-cus*) began about the year 1884, at which period, though never apparently numerous, it might usually be flushed from the long coarse grass and tussocks which then covered most of the gullies and flats of the Kameruka Estate, in the Bega district on the far south coast of New South Wales. The bird also haunted the swamps, and was occasionally discovered among bracken on the hillsides, but kept mainly to the denser cover, unless disturbed and driven to take shelter elsewhere. It was most commonly found singly, although at times a couple of birds might be driven from the same patch of cover. This Parrot rarely flies far, and after covering a short distance in jerky, hesitating flight, plumps back into cover, much as a Quail does. During a day's Quail shooting a few Ground-Parrots were almost invariably flushed or were seen at times only a few yards in front of one's feet, running silently through the tussocks, as they are loath to take wing if they can escape by this means. These birds carry a strong scent, and dogs set them as they do Quail. On one or two occasions I found the dull-white eggs two in number, lying on bare, damp earth beneath the shelter of a tussock, without the slightest pretence of the formation of a nest. In those unregenerate days beautiful and always more or less rare birds like the Ground-Parrot were very commonly shot and added to the bag.

Personally I have never seen the Ground-Parrot perch—even momentarily, on tussocks or elsewhere, but Horace Wheelwright

(the "Old Bushman") writing in the fifties of last century of the fauna of Victoria, says that he occasionally saw the Ground-Parrot perch on teatree scrub, and that he found the bird at times about swamps in which, in places, the water was knee-deep. The country in which Wheelwright made his observations lay at the furthest not more than forty miles from Melbourne. He also noted that pointers and other sporting dogs would set the Ground-Parrot. The crops of birds incidentally shot on the south coast of New South Wales contained seeds chiefly.

This Parrot was also found, at the period first mentioned, on the rich Tarraganda flats, quite close to the town of Bega, but during a long experience I have never met with or even heard of it on the much colder Monaro highlands immediately above the far south coastal districts. So far as the coastal districts mentioned are concerned the Ground-Parrot has long been but a memory of the past. To its practical—probably entire—extinction three causes contributed:—

First, the increase in numbers of the perfectly useless and terribly destructive European fox, introduced to this district, and probably spreading also into it from others about the late eighties of last century. This cunning animal must have played havoc with the eggs and nestlings of the Ground-Parrot, and no doubt also often stalked and seized adult birds as well.

Secondly, the advent and quick increase in numbers of rabbits, which penetrated over the Australian Alps to the Monaro district, and from it soon spread to the coastal districts below.

Poisoned wheat and other grains were at first used as baits for the destruction of the rabbit, and the Ground-Parrot, being mainly a seed eater, suffered greatly, in common with many other birds.

Thirdly, radical alterations in and destruction of its natural environment, many swamps being drained and the tussocks and other coarse grasses eaten off close in consequence of heavier stocking, while other changes in the country, also destructive of the Ground-Parrot's natural sanctuaries, followed on the heels of closer settlement and the subdivision into smaller areas of the best agricultural and pasture lands. These three causes—but especially the two first, finally rang the death knell of the Ground-Parrot so far as the quarters under consideration are concerned.

But what to the writer seems strange (seeing that the Ground-Parrot survived it, though it may in part account for the fact that the bird has never at any time been numerous) is the circumstance that the grassy gullies and swamps in which it was most at home were always haunted in number by native cats (*Dasyurus*). These actively predaceous little animals, keen of scent, continually scoured the gullies and swamps, often in secluded places, by day, in quest of food, of which terrestrial birds, their nestlings and eggs, formed no inconsiderable part.

Yet in spite of these primeval natural enemies, the Ground-Parrot held its own. Owing to the direct agency of rabbit poison, and the fact that native cats (unlike the tiger cat, which prefers to kill its own meat) fed on the carcasses of poisoned rabbits, these animals have themselves also become practically extinct in this district.

In conclusion, I may mention that, some years ago, a writer in the *Sydney Mail* stated that, in a certain quarter of New South Wales, where the Ground-Parrot then still existed, the birds had taken to nesting in hollows excavated in steep banks and cliff-faces affording spaces of soft earth sufficient in depth for the formation of tunnels. They are said thus to have escaped at any rate the ravages of foxes.

Discovery of a Breeding Place of Buller's Shearwater, Poor Knights Island, N.Z.

By R. A. FALLA, R.A.O.U., Auckland, N.Z.

Synonymy and References.

- Puffinus bulleri*, Salvin, *Ibis*, 1888, p. 354; Buller, *Birds N.Z.*, vol. II., p. 240, pl. 41, fig. 2, 1888; Buller, *Trans. N.Z. Inst.*, vol. 23, p. 42, 1891; Salvin, *Cat. Birds Brit. Mus.*, XXV., p. 371, 1896; Anthony, *Auk*, XV., p. 38, 1898; Loomis, *Pr. Cal. Acad. Sci.* (3), Zool., II., p. 319, 1900; Buller, *Suppl. Birds N.Z.*, vol. I., p. 101, 1905; Goodman, *Mon. Petrels*, p. 81, pl. 23, 1910; Mathews and Iredale, *Ibis*, 1913, p. 227; Loomis, *Pr. Cal. Acad. Sci.*, 4th ser., vol. II., p. 146, 1918; Falla, *Emu*, vol. XXI., p. 206, 1922.
Puffinus zealandicus, Sandager, *Trans. N.Z. Inst.*, Vol. XXII., p. 291, 1890.
Thyellodroma bulleri, Mathews and Iredale, *Aust. Av. Rec.*, vol. IV., p. 50, 1920; Bent, *U.S. Nat. Mus. Bull.* No. 121, p. 101, 1922.

Description of Brooding Female.—Crown, neck and small wing coverts sooty brown; tail and primaries dark blackish brown, the latter paling to white on the fringe of the inner web; major wing coverts brownish grey margined with greyish white; median coverts and secondaries sooty brown margined with greyish brown; back and scapulars slate grey, each feather margined with brown; rump sooty brown, feathers tipped with white; upper tail coverts pale slate grey, tipped with white; under tail coverts white, the outer ones splashed with slate grey; throat, sides of face, foreneck, underside of wings, and all underparts pure white; feathers of lores slate grey tipped white, giving slightly mottled appearance; ear coverts slate grey. Irides blackish brown; bill bluish black, edge of mandibles bluish grey; inner edge of tarsi,