## Observations on the Genus Petroica with Notes on Nidification

By FRANK E. HOWE, R.A.O.U., Canterbury, Vic.

Scarlet Robin. Petroica multicolor.

This beautiful bird enjoys a very wide range in Australia, extending, as it does, from South Queensland to Tasmania, and right across the continent to Western Australia. At Norfolk Island it is represented by a closely-allied subspecies. Some ornithologists have considered the western birds as generically distinct from the eastern, on account of their more brilliant colouration, particularly in the females. This variation, however, occurs in the females in Victoria, and I have very often seen females, particularly at Ringwood, with a very brilliant red extending almost to the abdomen. This species is a very early breeder, and I have often taken its eggs in July. In August and September, the season with them is in full swing, and three broods are often reared. The cup-shaped bark nest, often cosily lined with hair or feathers, is usually about ten to twelve feet from the ground, but often placed very high up. They love to nest in the rough bark trees, such as the stringy-bark or messmate and occasionally in peppermint. The maximum clutch of eggs is three, and it is often "parasitised" by the Horsfield Bronze-Cuckoo (Chalcites basalis) and the Brush Cuckoo (Cacomantis pyrrhophanus).

Red-capped Robin. P. goodenovii.

This little gem is distributed practically over the whole of the Commonwealth. It is essentially peculiar to the interior, having a decided preference to thinly-timbered country, but at the wattle plantations at the You Yangs, near Geelong, it is a fairly common bird, and it has been recorded by us at Ringwood. At Parwan I have twice secured males with red throats. The nest is generally placed about four or five feet from the ground, and is composed of soft bark and grass and decorated externally with delicate lichens and lined with fur. The eggs are three in number and the bird is a foster parent to the young of the Horsfield Bronze-Cuckoo. Males have been found breeding in immature plumage. The song of the male is a peculiar rattling one, while that of the female is an oft repeated "tick-tick" slowly uttered. They delight to nest in such trees as wattle or bulloak, and the species is double-brooded.

Flame Robin. P. phoenicea.

This lovely form extends from New South Wales to Tasmania and westward to South Australia. In early autumn



Female Red-capped Robin on nest. Photo. by K. A. Hindwood, R.A.O.U.

this species is very abundant in southern Victoria, more particularly on the open plains, where it is seen to advantage, flitting from rock to rock. In fact, it is to this habit that the generic name Petroica was bestowed on it, the word literally meaning a lover of rocks. I well recollect an irruption of the birds at Parwan some years ago, when there were thousands of them, and the birds were very listless, as if they had just arrived after a big flight. As the spring approaches, the birds near Melbourne retire to the ridges of the Dandenongs and other ranges to breed. The nest is generally placed on the side of a dead or burnt tree, and is somewhat similar to that of P. multicolor, save that it is decorated externally with pieces of charred wood. sionally it is built into a bank, and twice I have found it in a like position. The eggs are three in number and the species is double-brooded. At Ferntree Gully I found the birds breeding in immature plumage.

P. rodinogaster. Pink Robin.

This form inhabits Victoria and Tasmania, and is accidental in South Australia, where it was once observed at Mount Lofty. Although it is an inhabitant of the deep mountainous gullies I have seen it in the timber on the plains at Parwan twice. Three years ago many females, and possibly some males in immature plumage, were seen in the wattles at the You Yangs. The note of the female may be likened to the sound produced by snapping a thin, dry twig. I have yet to find the nest of this species, but last season (1931) Mr. F. E. Wilson, whilst collecting entomological specimens at the Dee River, near Warburton, on December 6, saw a nest containing three fresh eggs. The season before he found an old nest in the same locality, and from these facts it may be deduced that this bird is also fairly local, and double-brooded.

Rose Robin. P. rosea.

This beautiful little creature is a denizen of the deep mountain gullies, especially those parts clothed with hazel, musk, blanket-wood, and blackwood. It is never found far away from water. It ranges from North Queensland to Victoria. Until recently, this and the preceding bird were separated generically from the other three species, under the title Erythrodryas, meaning "red (or pink) nymph of the woods." Literally, and poetically, the title was a good one, and further research, and more intensive study may yet restore them to generic rank. From a field naturalist's point of view they are farther away from the true Petroica than is the Hooded Robin (Melanodryas cucullata). From an cological standpoint, however, they are similar to the former.

The localism of this species is very marked; not only does it nest in the same locality year after year, but often in the same tree, and occasionally in the very same fork of that tree. The nest is, I suppose, one of the most beautiful, if not the most beautiful found in Australia, being composed almost entirely of green mosses taken from the ferns or hazel, and musk trees, decorated externally with lichens and lined either with fern, down or fur, and generally placed on a lichen-covered limb of a musk, hazel or other small tree. Occasionally it is placed very high up in a tall blackwood. The eggs are usually three in number, but in a poor season very often only two are laid. From its nests I have taken the eggs of three species of Cuckoos, viz., Cacomantis flabelliformis, C. pyrrhophanus, and Chalcites basalis. broods are reared each season, and the birds have been observed breeding in an immature stage. The average date for fresh eggs is October 13.

From the foregoing remarks it will be seen that P. multicolor, P. goodenovii, and P. rosea are stationary, more particularly the last-named; while P. phoenicia and P. rodinogaster are nomadic, especially the former, and the latter to a very slight degree. They are all entirely insectivorous, the food of P. rodinogaster, and P. rosea being taken either in the air or from the tips of the leaves. One day at Ringwood a few seasons ago, we were following a pair of Speckled Warblers (Chthonicola sagittata) when a Scarlet Robin flew to the ground, and securing some insect proferred it to one of the Warblers, which readily accepted it.

As far as my observations go, the tasks of nidification and incubation, are entirely undertaken by the females. The former is carried out in a leisurely manner, taking about fourteen days, but if any accident happens to the eggs, the new nest is ready in exactly half the time. Incubation lasts from twelve to fourteen days.

Description of Eggs of the Cave Owl (Tyto novæ-hollandiæ troughtoni).—The eggs, two in number, are oval in shape; texture of shell coarse, with a faint trace of gloss; Colour, white. Measurements in inches:—A: 1.68 x 1.25; B: 1.63 x 1.28. Eggs were deposited on the bare sand, in a blow-hole on the Nullarbor Plain. Collected by D. J. Hall in November, 1931.—E. LINDSAY HYEM, R.A.O.U., Barrington, N.S.W.