Whistler are often uttered by the male whilst sitting on the nest during the period of incubation. The male also assists in constructing the home and, in some cases, that task is monopolized by him. One particular nest under observation revealed, on each of four visits to the locality, the male at work carrying material.

During autumn and winter months *P. inornata*, like many of our song-birds, becomes silent and its movements are naturally hard to follow on that account. From a series of notes regarding the species, however, I find that it is not stationary, but ventures far from the dense scrub-lands after nesting operations have been completed. Single birds have been seen silently feeding, in open timber country many miles from their nesting haunts. The return to the scrub takes place during August. Nest building commences immediately, and the first brood has usually left the nest by the first week in October.

Pachycephala rufogularis has not been recorded from the "Whipstick" area, although a close watch has been kept for the occurrence of that species in the Bendigo district The north-western Mallee appears to be the stronghold of *P. rufogularis*. How far south in the Victorian Mallee does its range extend?

## Bird Movements at Nangeenan, W.A.

By ERIC H. SEDGWICK, Nangeenan, Western Australia

Being myself a nomad, I have had little opportunity in the past of noting the movements of birds, but I have now spent five years at my present station, and, during that time, have taken an increasing interest in the movements of birds occurring here. I have come to regard the period from May to December as one favourable to bird life. Practically all our rain—averaging twelve inches—falls within that period, insect larvæ are particularly numerous in spring, and in early summer many native fruits and seeds are ripe. On the other hand the period from January to April is very dry and periods of great heat are experienced. Although the imago forms of many insects are plentiful, I regard the period as one in which birds are scarce, both as regards individuals and species.

Red-tailed Black Cockatoos (Calyptorhynchus banksi) appear usually in flocks of from six to twenty from March to October. It would seem that the movement is southerly until about the end of June. A northerly movement then sets in. The birds rarely remain in the locality for more than a few hours. The Regent Parrot (Polytelis anthopeplus) is our commonest Parrot. Numbers fluctuate a good deal, but my records show a marked scarcity of the birds from December to March each year. Port Lincoln Parrots

(Barnardius zonarius) are never very plentiful, but that species also seems most scarce during the height of summer. An invasion of Cockatiels and Galahs has already been

noted (The Emu, vol. xxxv, p. 237).

A pair of Nankeen Kestrels (Falco cenchroides) has provided an interesting study. In 1934 I realized that the birds are in the locality only at breeding time. Each year they nest in a spout of a dead tree very like the one depicted in the fine photograph by Mr. L. G. Chandler in The Emu, vol. xxxv, pl. 34. In 1934 they arrived on August 19, and in 1935 on August 17, and in both years departed during January, while I was on holiday. This year (1936) they appeared on August 13. I have assumed that the birds appearing annually at the same spot are one pair and only one.

Welcome Swallows (Hirundo neoxena) and Tree Martins (Hylochelidon nigricans) may be seen at all seasons, but vary considerably in numbers. In my opinion neither of these species is, in this area, subject to any regular migration, but must be regarded as nomadic. Both species breed here. Flocks of White-breasted Swallows (Cheramæca leucosterna) appear occasionally throughout the year.

Honeyeaters seem definitely to favour the May to December period, but I do not attach much importance to the actual dates of their appearances, because at times when a species is absent from the immediate vicinity, flocks may be found only two or three miles away. The Tawny-crowned Honeyeater (Gliciphila melanops) keeps to the sandplain a little to the south, but the Brown-headed (Melithreptus brevirostris), White-eared (Meliphaga leucotis), White-bearded or Yellow-winged (Meliornis novæ-hollandiæ), Singing (Meliphaga virescens), Brown (Gliciphila indisand Spiny-cheeked Honeyeater (Acanthagenus rufogularis), the Dusky Miner (Myzantha obscura), Red Wattle-bird (Anthochæra carunculata) and probably the White-naped Honeyeater (Melithreptus lunatus) have appeared from time to time in the forest. The Red Wattlebirds are numerous from April to October, but scarce at other times.

I have recorded Black-faced Cuckoo-Shrikes (Coracina novæ-hollandiæ) during all months, but the number present

probably fluctuates somewhat.

The Rainbow-bird (Merops ornatus) favours the height of summer. Except for a record in August, 1935, all my observations have been made in October, November, December, January, February and March.

The following is a digest of my records of certain other

movements:

10th Sept., '33.—First record of Horsfield Bronze-Cuckoo (Chalcites basalis). None appeared in 1932.
 2nd Nov., '33.—Last appearance of Bronze-Cuckoo for this season.

3rd July, '34.—First record of Horsfield Bronze-Cuckoo for this year. 7th Aug., '34.—Pallid Cuckoo (Cuculus pallidus) calling for the first time.

19th Aug., '34 .- Pallid Cuckoos, after being much in evidence for a time, disappeared.

1st Sept., '34.—A Rufous Song-Lark (Cinclorhamphus mathewsi) in

the vicinity.

2nd Sept., '34.-First record of the White-winged Triller (Lalage tricolor).

21st Sept., '34.-Last appearance of the Rufous Song-Lark. I am not well situated for observing this species, but the bird in question spent much time in or near my garden.

15th Oct., '34.—White-winged Trillers, which were numerous, dis-

appeared.

21st Nov., '34.-Last record of Bronze-Cuckoo for the Numerous this year.

4th July, '35.—Saw first Pallid Cuckeo. None calling. 27th July, '35.—Heard Bronze-Cuckeo at a locality seven miles to the south.

7th Aug., '35.—First appearance of Bronze-Cuckoo at Nangeenan. 12th Aug., '35 .- Pallid Cuckoos calling for first time. Cuckoos have been much in evidence since July 4.

22nd Sept., '35.—Last record of Pallid Cuckoo for this season. 28th Sept., '35.—Saw White-winged Triller. 9th Nov., '35.—Last record of adult Bronze-Cuckoo.

Nov., '35.-Few White-winged Trillers have appeared since

October 2. This year they have been scarce,

15th Dec., '35.—Thornbills feeding young Bronze-Cuckoo.

3rd Aug., '36.—Horsfield Bronze-Cuckoo calling for the first time this year.

6th Aug., '36.-Pallid Cuckoos calling all the morning. (This was the only time that Pallid Cuckoos appeared in the vicinity, although apparently there were a few elsewhere in the district.)

20th Sept., '36.—Saw White-winged Trillers at a place a few miles away. None has appeared at Nangeenan.
22nd Oct., '36.—Horsfield Bronze-Cuckoo calling for the last time.

I think, from the evidence I have collected during my brief residence here, there are few true migrants and these fluctuate greatly in numbers from year to year. Furthermore, the dates of first appearances are very irregular and do not, apparently, indicate the arrival of the main body of the species in this latitude. It seems likely that this district is remote from any regular migratory route and that, in consequence, the occurrence of migrants here is erratic.

White-fronted Honeyeater.-In the north-western Victorian Mallee the White-fronted Honeyeater (Gliciphila albifrons) appears to be migratory in habit. It arrives in the spring and soon makes its presence known by its melodious notes. The nesting site is varied. Sometimes, as appears from the illustration, the nest is built on top of a small stump; again it may be found in a fork of a tree, or placed amongst shoots. I have also found nests built in porcupine grass (Triodia). The birds are rather shy and difficult to photograph. Soon after the nesting season is over they disappear. As in the case of most Honeyeaters the young are fed on an insect diet.—L. G. CHANDLER, Red Cliffs, Vic., 2/3/37.