WELCOME SWALLOWS IN WHANGAREI COUNTY, 1962/68

By MURRAY MUNRO

Until 1965 the only swallow nests reported in Whangarei County were along No. 1 Highway at Hukerenui, Whakapara, Hikurangi, and four miles north of Kamo; and birds had been sighted at Riponui and Awaroa River between Whangarei and Onerahi (Edgar 1966, Notornis 13; 54-55). In 1968/69 season I made a survey of the County, searching for nests along all main roads and most of the by-roads. About 150 breeding pairs were located, but the total population must be considerably larger as many pairs undoubtedly nest away from public roads, under farm-bridges and culverts.

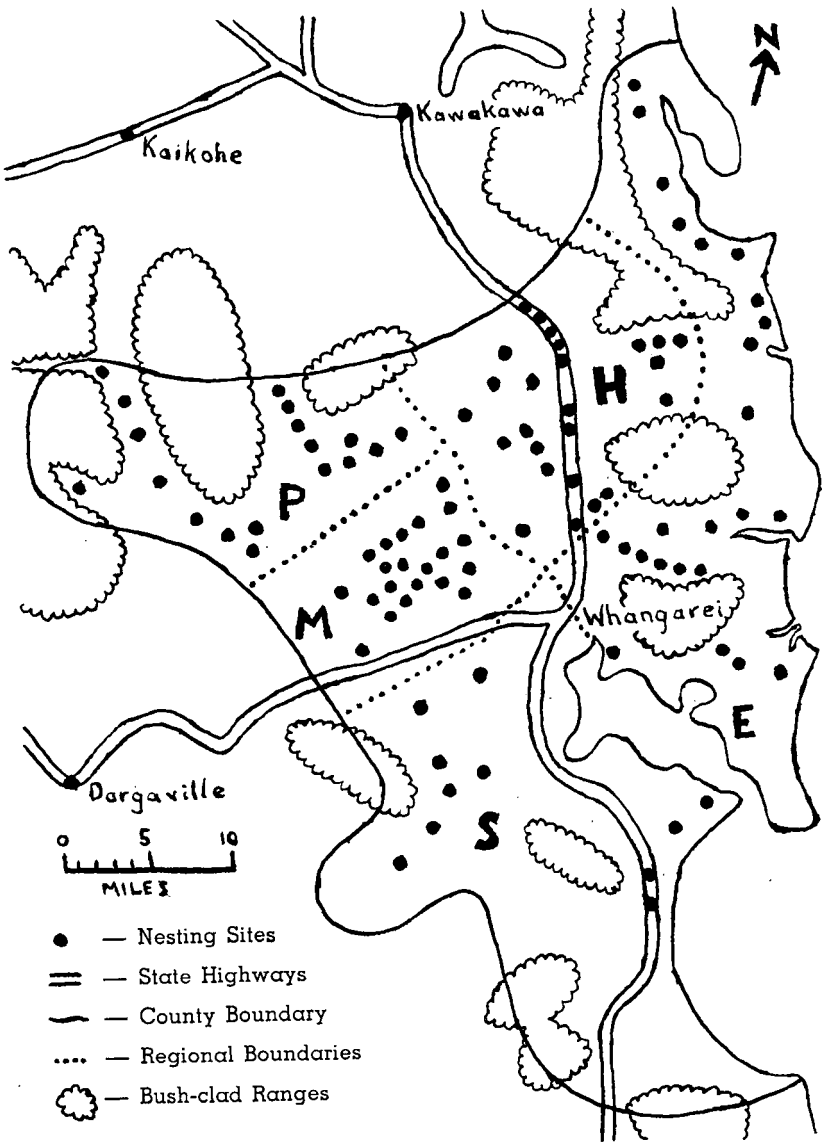
Distribution of nests is shown on the map, on which I have divided the County into five regions, indicated by dotted lines and lettered as below:

H — Hikurangi Swamp
E — East Coast
P — Parakao - Pipiwai
M — Maungatapere
S — Southern Area

Hikurangi Swamp is the large area of low-lying land north of Whangarei, to which swallows apparently spread southwards from Waiomio (Bay of Islands) and were first recorded nesting in 1962.

East Coast covers the area from about 7 miles south of Cape Brett to Bream Head and Whangarei. In the northern part of this region the coastal strip is backed by high bush-clad ranges. Birds found in 1966 and 1967 at Ngaiotonga, Whangaruru, Mokau, Helena and Teal Bays, Mimiwhangata, and possibly those seen at Whananaki in March 1968, may have reached these localities by southward spread along the coast. A. T. Edgar (in litt.) informs me that in Whangaroa County swallows occupied Taupo, Tauranga, Wainui and Matauri Bays in 1966 and 1967, and that Purerua peninsula (north head of the Bay of Islands) now carries a swallow population. Up to 1965 no swallows had been reported from these areas; this may indicate that movement along the coast in the non-breeding season could be partly responsible for extension of breeding range. The birds in the southern portion of the region have probably spread out from the Hikurangi swamp. Population increase on the north side of Whangarei harbour has been relatively slow since C. W. Devonshire saw two birds on the Whangarei-Onerahi road in August 1964, but there have been sightings at the Town Basin and at Tamaterau (C. W. Devonshire) and a nest was found in the Parua Bay area by Alan Wagener in 1965/66.

Parakao-Pipiwai covers the north-western corner of the county and mainly comprises high bush-clad ranges with large river valleys. The swallow population is only in the river valleys. In the western valley Malcolm Ross reported a sighting in the Mangakahia area in December 1962 and breeding was recorded north of Pakotai in 1965/66 season; nine nest sites were located in my 1968 survey. The birds in this valley have probably spread down from the Kaikohe district. In the eastern portion of this region nine nest sites were located in



Map Showing the Distribution of Welcome Swallows in Whangarei County in the 1968/69 Season

my 1968 survey. The birds in this area may have their origin in southward spread from Motatau and Matawaia, or in westerly spread from the Hikurangi swamp.

Maungatapere region, west of Whangarei, is mainly well-watered farmland with plenty of bridges. I first saw swallows near Maungatapere in winter 1966; in 1966/67 season breeding was recorded at Kara and Poroti and at Titoki (J. R. McKenzie) and by 1968 swallows were plentiful in this region, winter flocks of up to twenty birds being reported on a number of occasions. One farmer at Ruatangata West in the northern corner of the region reported that this season he had at least 15 swallow nests under culverts on his farm, and that some of the culverts had three or four nests. The birds in this region may have their origin in spread from both the Hikurangi swamp and the Parakao-Pipiwai region.

The western portion of the southern region is mainly undulating farmland with very few bridges. Although there are very few swallows in this area they are very widespread and are nesting under most of the bridges. Two birds seen at Mareretu (Otamatea County) in February 1969 may have spread down from this area. Swallows are still very scarce in the Ruakaka-Waipu area and although I have searched most of the roads in this area only four breeding pairs were located.

NEST SITES, NEST CONSTRUCTION, MULTIPLE NESTING

Welcome Swallows in Whangarei County nest mostly under bridges and culverts but I know of six records of nesting in buildings, including one of a nest attached to the inside wall of a car shed.

Of bridge nests 45% were under concrete bridges and 55% under wooden bridges, but this is probably only because there are more wooden than concrete bridges in areas away from the main highways. One nest was under a small wooden bridge used as a cow track. Eight nests were found in culverts; two in large box culverts about six feet high, two in small box culverts about three feet high, and four in round culverts: In one round culvert which normally has only an inch or two of water a September nest was built only a few inches above water level and would not have survived even a small flood. At another, the nest was built not in the pipes themselves but on the concrete extension at the end of the culvert — a much safer situation. A pair which nested in a small box culvert with only about 12 inches between the water and the top of the culvert lost three nests by flood and only reared two chicks.

Most nests examined were of the " unsupported " type, attached to a vertical surface, only seven being " flat " nests placed on a horizontal support — one on top of a sagging log girder under a wooden bridge, one on top of a pipe, one on the malthoid layer between a wooden beam and steel girder, the others on steel girders. One nest was built so that it was partially supported by two large nails projecting from a wooden girder; eight nests were built on top of bolts projecting from concrete girders, seven of them in one district where the concrete bridges were so constructed. Some of these nests had come unstuck from the concrete girder but were still firmly attached to the bolt. Another of these nests consisted of a new nest built on top of an old one; this is the only record in my experience of this type of building which is said to be common in Australia but apparently rare in New Zealand.

Six bridges in Hikurangi swamp had more than one nest — one two-nest bridge at Kauri and two at Opuawhanga, and three-nest bridges at Opuawhanga, Otonga and Riponui. In the Parakao-Pipiwai region there were three two-nest bridges — one at Parakao and two at Pipiwai. In the Maungatapere region there was a five-nest bridge at Ruatangata West and the multi-nest culverts on a farm in the same district, which have already been mentioned. In the southern region there were two two-nest bridges near Tauraroa.

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SHORT NOTE

AN EARLY RECORD OF THE ORIENTAL CUCKOO IN NEW ZEALAND

Hamilton (1889) has described a specimen received by the Hawkes Bay Museum in the following terms: " Amongst a collection of New Zealand bird-skins sent to the Museum, I found a skin of what appeared to be *Eudynamis* with the long tail-feathers imperfect, some not fully grown. On taking up the bird to ticket it, I saw that the breast, instead of the usual brown marks, was distinctly transversely barred with black metallic bars, as in the Bronze Cuckoo *(Chrysococcyx)*. These bars extend from the beak to the vent. The bill is less robust than *Eudynamis*. The feet are light in colour, like those of an albino specimen. It has certainly the character of *Eudynamis* when seen from the back; but from the under side it suggests a cross between *Eudynamis* and *Chrysococcyx*."

The suggestion of a hybrid origin can be safely dismissed, the description fitting in all essentials one of the rufous phases of the Oriental Cuckoo, referred to by Grant (1964) in his account of the bird seen at Kaihinu. Pough (1957, p. 134) remarks that, " There are two types of juvenile plumage. In one the birds are grey brown above and weakly barred, in the other they are bright rufous brown and strongly barred. Some females called ' hepatic ' wear the latter plumage all their lives."

Oliver (1955) gives the measurements of the Long-tailed Cuckoo *(Eudynamis taitensis)* as Wing 188-195 mm., Bill 23-25 mm., Tail 230-250 mm., and those of the Oriental Cuckoo as Wing 188, Bill 23, and Tail 160. Pough (l.c., Pl.16) illustrates the hepatic female of the Oriental Cuckoo. The above specimen would be the first Oriental Cuckoo recorded in New Zealand, so that Hamilton's failure to recognize it is understandable. The similarity of the two species in size, except for the tail length would account for his confusion.

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— D. H. BRATHWAITE