

A Nest Box Used by the Striated Pardalote

DAVID MILLEDGE

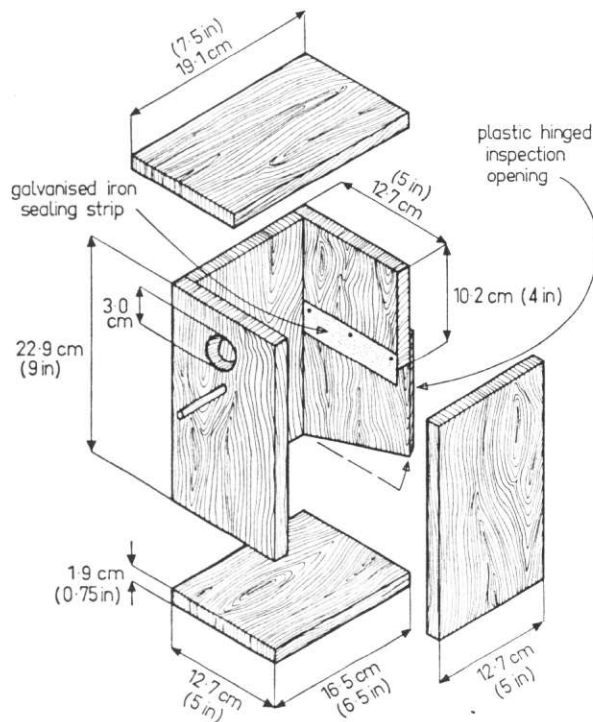
In June 1970 eight nest boxes of the design shown in Figure 1 were fixed to the sides of eucalypt trees at Tinderbox in south-eastern Tasmania. The boxes were positioned at heights varying from 2 m to 4 m above the ground in an attempt to attract Forty-spotted Pardalotes *Pardalotus quadragintus* as part of a study of the ecology of this species.

The boxes were placed within an area of 4 ha on an east facing hillside with the closest being 8 m apart with each box positioned to vary the aspect of the entrance hole. Several were fixed to trees containing nest holes used by Forty-spotted Pardalotes in previous seasons.

The three species of pardalotes occurring in Tasmania bred regularly in the Tinderbox area and the 4 ha plot containing the nest boxes had many old holes of all three species. At Tinderbox the Spotted Pardalote *P. punctatus* always tun-

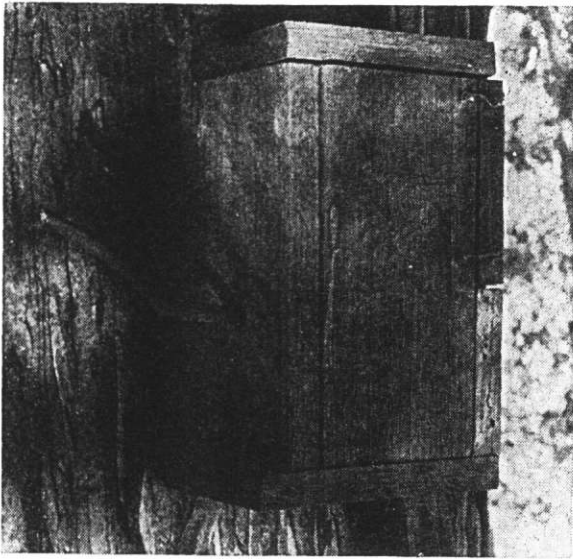
nelled its nest chamber into a bank in the ground, whereas the Forty-spotted and Striated *P. striatus* Pardalotes mostly used tree holes. Because the Forty-spotted Pardalote began breeding in August before the arrival of the migratory Striated Pardalote it was anticipated that more Forty-spotted than Striated Pardalotes would use the boxes. This did not eventuate and during four breeding seasons the boxes were only used by Striated and never by Forty-spotted or Spotted Pardalotes.

The first occupation was two seasons (1971-72) after installation, when a pair of Striated Pardalotes was observed building in a box 2 m above the ground on 29 September 1971. This pair successfully raised three young. Two boxes were occupied the following season (1972-73), when clutches of four young were successfully raised in each box. Three boxes were used in the 1973-74 season and four in the 1974-75 season, but clutch sizes and the numbers of young successfully raised are not known for these occupancies. However, N. Brothers (*pers. comm.*) reported four newly hatched chicks in one box on 17 November 1974. By this time only five boxes remained due to two having fallen down and another being removed by children.



● Figure 1. Nest box construction details and dimensions.

The hardwood used for construction of the nest boxes was untreated "Tasmanian oak" *Eucalyptus* sp. and the boxes were nailed directly to the trunks of mature trees using a 10 cm strip of flat galvanized iron at each corner of one side. The opening at the back was hinged with stout plastic and wired shut between inspections. The circular entrance hole, diameter 3 cm, was located close to the top of the box and a 2.5 cm roof overhang prevented rain from entering. Boxes were positioned with the front slightly inclined to the ground to facilitate water



● Nest box fixed to side of tree.

run-off from the roof and a short perch was fixed under the entrance hole.

It appears that this nest box design is suitable for the Striated Pardalote because the internal volume (2 581 cm³) and proportions allowed the normal dome-shaped nest to be built and the usual clutch for this species to be successfully raised in all cases observed. Boxes sited lower than 2 m and higher than 4 m would also probably be suitable because I have recorded Striated Pardalotes breeding in Tasmania in natural holes from the ground to 30 m above ground level. However, boxes placed much higher than 4 m would become impracticable for inspection purposes and those lower than 2 m would become more vulnerable to predation.

A more secure fixing method than the nailed galvanised iron strips, such as adjustable wires or straps, should be used for longer life. The two boxes that fell down after four years had their strips broken by bark growth outwards from the trunk.

It is not readily apparent why Forty-spotted Pardalotes did not use the boxes, because they frequently chose very poor nest sites close by that failed after heavy rain and were easily predated. Perhaps the Striated Pardalote is far more

opportunistic in its choice of sites than the other species and, with the Spotted Pardalote which digs its own nest holes, is at a considerable selective advantage over the Forty-spotted Pardalote. This could be one of the contributing factors in the present decline of the Tasmanian endemic pardalote.

Acknowledgement

I wish to thank Nigel Brothers, of the Tasmanian National Parks and Wildlife Service, who provided me with information on the occupants of the nest boxes in 1973 and 1974.

David Milledge, Dept. of Terrestrial Ecology,
The Australian Museum, Sydney, 2000.

Yellow-eyed Cuckoo-shrike and Native Figs

Each year a party of Yellow-eyed Cuckoo-shrike *Coracina lineata* comes to our locality to feast on the fruit of a large native fig tree *Ficus* sp. This year the birds arrived on 17 March 1977, but they were a little early for the figs and had to wait until the end of March until these ripened. The crop was so good that the small number of Cuckoo-shrikes that stayed on for the feast could not eat all the supply. The maximum number of Cuckoo-shrikes counted in the tree at any one time this season was only seven, including one in immature plumage. The birds moved on when the *Monolepta* beetles started on the figs on 24 April 1977.

It has been noted over the years that when these beetles move into a fruiting or flowering tree the birds move out except for brief "reconnaissance" visits. Sometimes after the beetles have gone the birds return to the tree to feed. I have not been able to determine whether the beetles repel the birds by emitting a smell or whether their presence in the birds' feathers is the potent factor.

Miss Ella Pratt, Reserve Creek, Murwillumbah,
N.S.W. 2484.