

**THE DIET AND HABITS OF SEVERAL SMALL PASSERINES AT A SMALL TIMBER SAWMILL.** This note documents observations of feeding by the Superb Fairy-wren *Malurus cyaneus*, White-browed Scrubwren *Sericornis frontalis* and Scarlet Robin *Petroica multicolor*, within a small timber sawmill work-shed 3.5 km NW of Lobethal, South Australia (34°53'S, 138°5'E).

The 12 x 6 m sawmill work-shed is open on three sides and provides cover for broken-down logs (i.e. longitudinally sectioned), a central saw-bench, two operators, sawn timber and offcut heaps. I was one of two operators at the sawmill from 1984 to 1994. The surrounding bushland supports many bird species and by 1990 some *M. cyaneus* had a well established habit of frequenting the sawmill work-shed for food, many times on most days. A food item commonly consumed by wrens in the sawmill work-shed was the larvae and pupae of bark beetles (Coleoptera: Curculionidae).

The larvae of bark beetles construct gallery systems beneath the bark of the radiata pine *Pinus radiata* sawlogs that have been stored in the adjacent sawmill work-yard. There the larvae develop into pupae and then into adult beetles, and their feeding appears to hasten the loss of bark from the logs. From summer to late autumn the presence of the beetles seems most obvious, as logs that have laid in the work-yard for apparently sufficient time lose their bark in large sections when handled, exposing and dislodging large numbers of bark beetles. Although the wrens feed on these beetles around the work-yard, the final stages of sawing within the sawmill work-shed expose many more beetles, providing a food bonanza for the wrens.

The introduced Golden-haired Bark Beetle *Hylurgus ligniperda* was commonly found at the sawmill. It is closely related to Australian bark beetles (CSIRO 1991), some of which may have also been found at the mill.

It was obvious that larvae and pupae of bark beetles were being consumed, since they are cream in colour and could clearly be seen to be eaten by the wrens. Adult bark beetles were also consumed, however since they are dark brown to black this was not as readily observed, and the impression was that the larvae and pupae were preferred.

Wrens visited the sawmill work-shed frequently throughout the year, but were most frequent from summer to late autumn when there were generally many beetles to provide food. There were sometimes as many as 10 wrens feeding either on the floor of the sawmill, upon log sections, or amongst offcuts. Feeding generally took place during a break in the operation of the noisy equipment, but on many occasions wrens would be feeding within the sawmill work-shed during sawing activities. On numerous occasions I had to delay throwing aside offcut pieces since one or two wrens were feeding amongst the offcut heap. Newly fledged offspring were brought in to feed. One of the two regular visiting males moulted from one nuptial plumage directly into the next during each of several consecutive years, whilst the other male went into eclipse plumage.

A pair of *P. multicolor* occasionally came into the work-shed, usually when the weather was cold, and were seen feeding on bark beetles. One to three *S. frontalis* regularly visited the work-shed and were also seen feeding on bark beetles. Just as *S. frontalis* prefers to keep to dense cover in the bush, individuals visiting the sawmill seemed to prefer to forage within the offcut heap or under the tractor fork-lift parked just under the roof of the work-shed. *S. frontalis* constructed a nest 150 mm above ground level in a grass tussock against a patch of blackberry *Rubus* sp. only 10 m from the saw-bench, but this nest was not used following its completion.

#### ACKNOWLEDGMENTS

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#### REFERENCE

CSIRO. 1991. *The insects of Australia*, 2nd edition. Melbourne University Press, Carlton, Victoria.

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