

BREEDING OF THE WHITE-THROATED GERYGONE IN THE ALDINGA SCRUB

C. B. ASHTON AND E. M. ASHTON

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INTRODUCTION

The infrequent reports of the White-throated Gerygone *Gerygone olivacea* in south-eastern South Australia have been summarised by Smyth (1976) and Attwood (1979). The latter author concluded that the species is "a more or less regular migratory visitor to the South-East of the State and to the southern parts of the Mount Lofty Ranges." Only twice has breeding been reported: A. Ey found a nest with three eggs at Millicent on 12 November 1938 (Condon 1962); M. J. Arthur found a nest with one cracked egg near Happy Valley

Reservoir on 19 February 1972 (Arthur 1973). This note documents the first record of a successful breeding attempt by this species in South Australia.

Observations were made in the Aldinga scrub 50 km south of Adelaide at the southern end of the Adelaide Plains. The scrub forms an island of dry sclerophyll woodland of 200 ha midst agricultural and urban land. The particular habitat, 800 m from the sea, comprised Pink Gum *Eucalyptus fasciculosa* and *E. porosa* to five metres in height, spindly Golden Wattle *Acacia pycnantha*, Kangaroo Thorn *A.*

paradoxa and Quandong *Santalum acuminatum* with an undercover mainly of grasses, also *Rhagodia* spp, *Leucopogon rufus*, *Calythrix tetragona* and *Clematis microphylla*.

Below appears a summary of our nesting observations. Full details have been lodged with the Nest Record Scheme of the Royal Australasian Ornithologists Union.

OBSERVATIONS OF BIRDS' ACTIVITIES AND PLUMAGES

An adult White-throated Gerygone was first seen in the scrub on 1 November 1979. The pair was first seen on 13 November when one bird was carrying plant down. Observations for about 45 minutes were then made every two or three days until 15 December whereafter observations were made daily. On each occasion the male (see below) was under observation much of the time, the female appearing for only a few minutes, and usually once. While she was present the male did not leave, so there was no evidence of help in incubation by the male. The nest was discovered on 6 December when the birds were seen making frequent entries to feed their young. It was almost obscured by foliage from any viewpoint. On 10 December two nestlings were observed. They fed approximately every three minutes and there was no evidence of daytime brooding. On 15 December feeding of young was approximately every minute. On 21 December twelve feedings were observed in 23 minutes. Usually nothing could be seen in the parent bird's bill though several times a small bolus was seen protruding from the sides of the bill tip.

The sexes of the parent birds were initially assessed on the basis of calling behaviour described in Reader's Digest (1976). Both parent birds were photographed at close range and this demonstrated further differences in the birds: the throat of the presumed male was pure white, that of the female having less white with a small central brown bib due to displacement or loss of feathers revealing the dark bases of the throat feathers (S. A. Parker, pers. comm.); undertail coverts of the male were whitish, those of the female yellowish, apparently an individual variation (W. E. Boles, pers. comm.). At 0.900 on 23 December the two young had fledged and were being fed by both parents. They resembled the adults except for yellow throats and, especially in one, a shorter tail. The length of time spent by the young in the nest after hatching was therefore at least 17 days from the first observed signs of parental feeding. This agrees with the 15-17 days found

by contributors to the R.A.O.U. Nest Record Scheme.

On 1 and 2 January 1980 the parents with one juvenile were observed for two and one and a half hours respectively some 200 m from the nest site. The juvenile was fed only by the female, the trilling male being seldom closer than 50 m. On 12 January the adults were seen moving about closely together or individually.

DESCRIPTION OF NEST AND EGGS

The nest was slung by a thick band of cobweb 30 cm from the ends of two supple stems of a horizontal branch of a *Eucalyptus porosa*, two metres from the ground. It was domed, pear-shaped, with a hooded side entrance and tail, composed almost entirely of thin slivers of bark felted with cobweb and decorated with wood grub castings. The tail, however, was a piece of caterpillar cocoon of the Mistletoe Moth *Euproctis* sp. of spun silk filled with a mass of tiny brown caterpillar droppings. (Such material is abundant in the scrub around nodal attachments of Mistletoe *Amymma* spp.) Total length with tail 17.9 cm; length of tail 7.0 cm; width (max.) 5.8 cm; projection of hood 1.0 cm placed 2.0 cm below the top. Inspection of the vacated nest revealed an infertile egg with liquid contents and a fresh faecal sac. The egg was matt white, speckled pink brown. The nest was lined with plant down. It was subsequently deposited at the South Australian Museum, reg. no. B33491.

CALLS

The male trilled frequently throughout the observation period. To some 200 male calls a short responsive trill from the female was heard thrice only. The length of trill (described by Hartshorne 1953) varied between 3.5 and 8.5 seconds. From a distance sounding like a perfect descent in musical intervals, phrases were, in fact, broken by one or two repetitions of the same or a higher note. Usually single phrases were often run together, lasting up to 20 seconds. Two to four syllables of sweet whistling and some low pitched agitation calls of 'eek' and 'ik ik' were heard occasionally.

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