

FIRST CONFIRMED BREEDING RECORD OF GREY GOSHAWKS IN SOUTH AUSTRALIA

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ABSTRACT

During November and December 1999 a Grey Goshawk *Accipiter novaehollandiae* nest was found near Mt Gambier in South Australia, and subsequently a juvenile female was observed with two adult birds. There are no previously accepted records for this species breeding in South Australia.

INTRODUCTION

The Grey Goshawk *Accipiter novaehollandiae* is a solitary, secretive hawk of tall, wet forest in eastern and south-eastern Australia and riverine forest in northern Australia. It occasionally appears in more open woodland and urban areas (Marchant and Higgins 1993). I have made observations of Grey Goshawks at a location near Mt Gambier (37°41'S, 140°47'E) in 1995, 1997, 1998 and 1999.

Nesting was suspected, so on 27 November 1999 a search for the nest was undertaken with the help of six local birdwatchers. After c. 90 minutes the nest was finally found when the

female Grey Goshawk flew out from a pine plantation and harassed a Whistling Kite *Haliastur sphenurus*. She then flew directly back into the pines, and by following the direction she had taken we were able to narrow the search area. The female was flushed from the nest as we approached the tree. The nest was sited c. 25 m high in a radiata pine *Pinus radiata*. As no movement could be seen from our position, and not wanting to disturb the birds, we decided to leave the area. In December 1999 a juvenile female was observed with the adult pair, and the pair appeared to be trying to protect it (see Distraction behaviour).

HABITAT

The area of most activity for this pair consisted of a dune ridge vegetated mainly with brown stringybark *Eucalyptus baxteri* woodland (3 ha). At the bottom of the ridge was a mixture of brown stringybark and manna gum *E. viminalis*

cygnetensis (2 ha), and the north side of the ridge contained a small radiata pine plantation (2 ha), in which the nest was located.

COMPARISON WITH OTHER SPECIES

The birds differed unmistakably from the Brown Goshawk *Accipiter fasciatus* and Collared Sparrowhawk *A. cirrhocephalus* in that the plumage was far too pale (i.e. grey and white), the barring on the breast stopped well short of the legs, and when seen at close range (c. 30 m) with the aid of 10x binoculars the red eyes were very obvious. Additionally, on 27 December a direct vocal comparison was made with a Brown Goshawk, which was present c. 100 m away, with the Brown Goshawk being slightly higher in pitch and a little quicker than the Grey Goshawk.

BEHAVIOUR

Aggressive Behaviour: Aggressive behaviour towards me was recorded on three occasions, the first on 20 November 1999. The two adult birds were seen flying from the pine plantation towards me, they separated and the female landed c. 50 m away from me. The male then swooped me; his legs and talons were outstretched in front and he was calling loudly. The male swooped five times, in between perching at varying heights ranging from the canopy down to c. 5 m from the ground.

At one point the male flew up to perch next to the female, she then moved c. 50 m west and the male swooped one more time. I then decided to leave as they were obviously agitated by my presence. It appeared that, had I not ducked each time, the male would have made contact as he was within c. 5 m when I ducked.

On 28 November 1999, as I emerged from the pine plantations, the adult female swooped twice to c. 5 m; she also was very vocal.

On 16 December 1999 as I emerged from the pine plantation the adult male swooped once, calling loudly and holding his talons forward.

Inter-specific aggression: On 27 November 1999 and on 27 December 1999 the adult female was seen driving off a Whistling Kite which was flying over 100 m away from the nest site. On the November date the female had come from the direction of the nest and returned to it immediately after.

Distraction behaviour: On 16 December 1999, just after the male had swooped me, I heard a third bird c. 50 m in front of me. As I approached the source of the call, the male was flying around very agitatedly in the canopy directly above me. As the other two birds (adult female and juvenile female) circled around back into the pines, the male continued his very noisy and conspicuous behaviour directly above me as if to draw my attention.

Favoured tree: Grey Goshawks like to perch for long periods in exposed positions, high in tall trees on creeklines or at the edge of forests (Debus 1998). In the present study there was a single manna gum, apart from others, on the track separating the pine plantation from the native woodland, that the birds seem to prefer to perch in and call from.

JUVENILE

I believe my earliest sighting of the juvenile was on 28 November 1999. A third bird was glimpsed as it moved through the canopy; it was noticeably darker than the adults and was not harassed by them although it was in close company. Its call was indistinguishable from that of the adult female, but no positive visual identification was possible. On 16 December the bird was confirmed as a juvenile; all three birds were calling and the hidden bird's call was identical to that of the adult female. The juvenile was glimpsed briefly before the male swooped; it was perched c. 40 m away. Following an hour of patient observation by myself, the adult male moved away and showed less interest in me. About 10 minutes later the juvenile female flew up into the canopy 30 m in front of me, where she remained for about 30 seconds. The best description possible was that she was almost identical to the picture in Simpson and Day (1996), the only difference being that she had a pale brownish wash across the upper chest barring. She then returned to a hidden position and the male flew to where she had vacated, and they continued to call to each other.

On 19 December 1999 the adult male emerged from the pines and perched in the favoured tree, where he was joined for about 10 seconds by the juvenile female. She then flew c. 40 m away to perch in the canopy and then returned to the pines. On 27 December 1999 the juvenile was

Table 1. Previous observations at the same location.

Date	Observation (Observer)
12/12/95	One adult (Robert Green, RG)
29/9/97	Adult pair flew into pine plantation (RG)
14/12/98	First-year female seen, second bird heard calling (RG)
24/12/98	Adult male seen, second bird heard (RG)
28/12/98	Glimpse of two birds, then the adult male seen carrying a small bird in its talons (RG)
31/12/98	First-year female seen, second bird heard (Don Mount, Ranger NPWS)
1/1/99	First-year female seen, second bird heard (RG)
-/1/99	Two birds seen (Tim Collins, Senior Ranger NPWS)

seen fleetingly; I tried to follow it but it kept moving away to stay 50–100 m distant. The adult female kept her distance but continued to call, and the juvenile responded with an identical call. After the juvenile had returned to the pines, she emerged with the adult female but flew to a concealed position.

OTHER RECENT LOCAL RECORDS

From previous observations at the same location it is possible that the birds successfully bred during 1998, but the absence of a record of an adult female and any further information makes this speculative (see Table 1).

Grey Goshawks have been sighted at three other locations in the South-East of South Australia recently (J. Berggy pers. comm. 2000). Namely:

- an adult female with a juvenile female near a swamp c. 15 km NE of the pair I have recorded (my initial suspicion that these might be the same birds was later discounted, as observations were made at both sites at about the same time);
- a juvenile female near Struan (37°05'45"S,

140°51'00"E); and

- an adult female near Glencoe (37°39'30"S, 140°36'00"E).

FIRST BREEDING RECORD FOR SOUTH AUSTRALIA

A search of literature and local records produced no previous records of the species nesting in South Australia, and very few sightings. A nest reported near Robe (Brummitt 1934) is referable to the Brown Goshawk (Condon 1969; Marchant and Higgins 1993). Therefore the observational records herein constitute the first confirmed breeding record for South Australia.

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