# The Status and Distribution in Victoria of the Grey-fronted Honeyeater Lichenostomus plumulus

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#### Introduction

The Grey-fronted Honeyeater Lichenostomus plumulus has a wide, though patchy distribution across arid and semi-arid Australia (McGilp 1945). In most areas it is uncommon but it can be locally abundant, particularly along creeks in rocky country such as in the Flinders Ranges, South Australia, and the Kimberleys, Western Australia (Pizzey 1980). It inhabits mallee and other semi-arid eucalypt and acacia scrubs. It is locally common in parts of south-eastern Australia including the Murray Mallee (Boehm 1944) and Ninety Mile Desert of South Australia (McGilp 1945) and central New South Wales, but is rare in south-western New South Wales (Jenkins and Miller 1976). In Victoria the species is rare and little known, being recorded only from a small area in the Sunset Country and Big Desert in the north-west of the State. Here we review its distribution and habitat in Victoria, give details of recent records and comment on its status.

### Victorian Records

Despite considerable ornithological activity in the Victorian Mallee for most of this century there have been few records of the Grey-fronted Honeyeater. Howe (1928) reported a colony at Tutye in 1921 and there is a specimen in the American Museum of Natural History (No. 695451) labelled 'Underbool' which was collected by C. F. Cole in August 1910. More recently, several authors have referred to the species breeding in the Pinnaroo-Carina area (Bland 1967, Favaloro 1966, Gannon 1962, Officer 1964 and Wheeler 1967) but few details are available. Presumably all these authors were referring to a 'colony' located during the early 1950s by the late Roy Ribbons of Pinnaroo which persisted at least until August 1966 (Bland 1967). Favaloro (1966) gives more details: 'they have become established as residents in the far W. sector of the Sunset some 20 miles [32 km] to the north-east of Pinnaroo ... at present there are at least 60 resident breeding pairs in the colony'. Favaloro also refers to another 'colony' north-east of Panitya but gives no further details. The main 'colony' was near a eucalyptus distillery operated by Ribbons (K. Hough, pers. comm.).

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The only specimen from south-eastern South Australia in the South Australian Museum (SAM) is a clutch of eggs collected by R. G. Ribbons on 7 September 1950 (SAM No. B24091). The locality is given as Pinnaroo, South Australia and in his notes about the clutch, Ribbons states that he had not previously seen the species in the Pinnaroo district. This clutch may well have come from Ribbons's 'colony' 32 km northeast of Pinnaroo, and in Victoria, as it is contemporaneous with the discovery of the 'colony'.

We have searched the literature and questioned birders from the Mallee and can find no records of Grey-fronted Honeyeaters in Victoria, apart from those at Ribbons's 'colony', between 1921 and 1979. Further, there are no Victorian records in the RAOU Atlas of Australian Birds from this period (M. Blakers, pers. comm.). Nor has the species been recorded from Wyperfeld or Hattah-Kulkyne National Parks, or Pink Lakes State Park, despite intensive ornithological interest in these areas for decades (Anon. 1971, 1977 & 1980).

During fieldwork for the RAOU Atlas of Australian Birds (1977-1981) only one record was accepted for Victoria. This was a sighting, by Doug Robinson, of an immature bird near Big Billy Bore (35°31′S 141°19′E) on 28 November 1979. At the time there were large numbers of honeyeaters of several species present but only one Grey-fronted Honeyeater was seen (D. Robinson, pers. comm.).

On 24 May 1982 we mist-netted and collected a single Grey-fronted Honeyeater at Ross Spring, 12 km south of Tutye in the Big Desert (35°21'S 141°29'E) (NMV B12588). The bird had very worn plumage and its black gape and bill indicate that it was an adult. No other Grey-fronted Honeyeaters were seen during six days of observing and mist-netting.

On 28 and 29 August 1982 we visited the site of Ribbons's eucalyptus distillery which is actually 27 km NNE of Pinnaroo (35°03'S 140°59'E). During our stay hundreds of Yellow-plumed Honeyeaters *Lichenostomus ornatus* and smaller numbers of Brown-headed Honeyeaters *Melithreptus brevirostris*, White-eared Honeyeaters *Lichenostomus leucotis*, Striped Honeyeaters *Plectorhyncha lanceolata* and Spiny-cheeked Honeyeaters *Acanthagenys rufogularis* were observed drinking at a sheep trough near the ruins of the distillery but no Grey-fronted Honeyeaters were seen. We also searched the surrounding area without success but, as our efforts were concentrated in only about 30 hectares, the present status of Ribbons's 'colony' remains unknown.

# Habitat in Victoria

Information on the habitat of the Grey-fronted Honeyeater was not given in the early Victorian records. The habitat at Ribbons's eucalyptus distillery is now a stony limestone plain with tall, sparse mallee shrubland of Eucalyptus oleosa, E. socialis, E. dumosa, E. incrassata, E. gracilis and E. foecunda interspersed with treeless, grassy areas carrying clumps of Acacia brachybotrya and Melaleuca lanceolata. Most of the mallee trees were old coppiced regrowth following harvesting for eucalyptus oil.

The two recent records from the northern Big Desert were in similar habitat: heathland dominated by Banksia ornata, Callitris verrucosa,

Leptospermum laevigatum and Triodia irritans with scattered emergent clumps of mallee eucalypts, Eucalyptus foecunda at Ross Spring and E. foecunda and E. incrassata at Big Billy Bore.

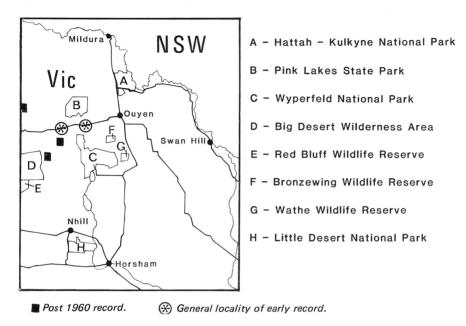


Figure 1. Distribution of records of the Grey-fronted Honeyeater in Victoria in relation to the present system of conservation reserves.

#### Discussion

Clearly, north-western Victoria is the southern limit of the range of the Grey-fronted Honeyeater and within this region it is confined to a small area in the south-west of the Sunset Country and north-west of the Big Desert (Figure 1). The range does not include any of the conservation reserves in the Victorian Mallee and all records are from uncommitted Crown Land or Crown Land which is leased for grazing or eucalyptus oil production (Land Conservation Council 1977). The species appears to be centred on the area north of Panitya although its present status there is uncertain (see below). The sporadic records away from this centre of distribution appear to be either post-fledging movements of immature birds or movements of adults presumably related to variations in food resources; the species is primarily insectivorous (Ford & Paton 1976) but takes nectar from eucalypt blossoms when available. Movements of birds away from the main centres of distribution in New South Wales have been reported (Jenkins & Miller 1976, Morris et al. 1981).

Several authors have noted that the species prefers areas with scattered dense clumps of low or regenerating mallee (Boehm 1944 & 1957, Jenkins & Miller 1976, Ford & Paton 1976, Schodde 1981) in



The Grey-fronted Honeyeater from Ross Spring.

Plate 30

Photo: J. Davies



An adult Yellow-plumed Honeyeater in non-breeding plumage.

contrast to the Yellow-plumed Honeyeater which prefers tall, open mallee (Boehm 1957, Jenkins & Miller 1976, Hunt 1979). The two recent records reported here from the Big Desert were also in areas with scattered clumps of dense, low mallee. Perhaps the eucalypts regenerating after having been harvested for eucalyptus oil produced suitable dense, low clumps of mallee for Grey-fronted Honeyeaters around Ribbons's eucalyptus distillery. Once harvesting ceased the mallee grew tall and may have become less favourable to Grey-fronted Honeyeaters and more favourable to Yellow-plumed Honeyeaters. This may have allowed Yellow-plumed Honeyeaters to displace the Grey-fronted Honeyeaters from Ribbons's eucalyptus oil lease.

Another contributing factor to the lack of records of Grey-fronted Honeyeaters in Victoria may be that the species has been incorrectly identified as the Yellow-plumed Honeyeater which is common throughout the Victorian Mallee (pers. obs.). This is likely since many observers are not aware that the species may be present in Victoria. The Grey-fronted Honeyeater can be distinguished from the Yellow-plumed Honeyeater by its lighter, more sparse streaking on the breast, yellowish rather than white underparts and brighter green head with a small grey patch on the forehead. The plume is bright lemon-yellow, broad and rounded and has a distinct black line along the upper edge; that of the Yellow-plumed Honeyeater differs by being narrower and pointed with stiff, erectile feathers and the smudgy black upper margin does not run the entire length of the plume (Plates 30 and 31).

This possible confusion is enhanced by the brighter green upperparts and heavier streaking of Grey-fronted Honeyeaters in south-eastern Australia; variation from pale yellowish birds with light streaking in north-western Australia to greenish; more heavily streaked birds in south-eastern Australia is clinal (Hall 1974).

We encourage all birders visiting the Victorian Mallee to take careful note of all 'yellow-plumed' honeyeaters and to report any sightings of Grey-fronted Honeyeaters.

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