# Targeted species survey guidelines

# Painted honeyeater Grantiella picta

Vulnerable (*Nature Conservation Act* 1992) | Ecological Sciences, Queensland Herbarium

### Identification

Medium-sized honeyeater, reaching a total lenth of 14-15 cm, with a wingspan of 16 cm (Watson 2012).

White below with light black streaking, back is

glossy black with bright yellow panels on edges of wing and tail feathers, little white patch under the ear. Pink bill and red eyes. Females are more brownish and not as colourful as the males (Higgins et al. 2001; Watson 2012).



### Distribution

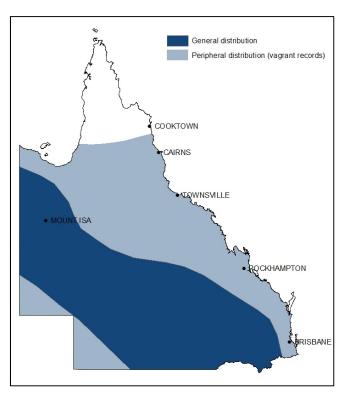
This highly nomadic species is distributed mainly west of the Great Dividing Range, and occurs from north Queensland, south to the Australian Capital Territory and Victoria where breeding populations appear to have declined.

Mostly recorded from inland New South Wales, north to southern Queensland (Pizzey and Knight 2001; Watson 2012).

In Queensland, the species regularly occurs west of the Great Dividing Range (Whitmore and Eller 1982). However, non-breeding individuals have been recorded occasionally from coastal areas along the eastern seaboard (Watson 2012; WildNet 2012), where it is considered vagrant.

### **Habitat**

Mostly occurs in woodland habitats which have an abundance of mistletoes. These woodlands are usually dominated by *Acacia* spp. (e.g. brigalow *A. harpophylla*, weeping myall *A. pendula*, and mulga *A. aneura*), belah *Casuarina cristata* and bull-oak *Allocasuarina luehmannii*. Also found in white cypress *Callitris glaucophylla* woodlands in the eastern part of their range, if mistletoes are abundant.





Riparian woodlands of *Eucalyptus* spp. (e.g. river red gum *E. camaldulensis*) are also utilised, particularly those affiliated with acacia shrubs.

Nests of painted honeyeater are typically found in drooping branches of trees and usually in the vicinity of abundant fruiting mistletoes. They may also be located within mistletoe clumps (Watson 2012). Breeding appears to be timed in response to mistletoe fruiting with peak fruit abundance usually coinciding with fledging. Birds rely heavily on two species in particular during breeding, grey mistletoe *Amyema quandang* and needle-leafed mistletoe *A. cambagei* (Barea and Watson 2007; Watson 2012).

The highly specialised diet of painted honeyeater consists mainly of mistletoe fruit (e.g. Maiden's mistletoe *Amyema maidenii*), although when there is a shortage of this food item, nectar and insects will also be consumed (Higgins et al. 2001; Oliver et al. 2003). In addition, birds have also been recorded feeding on similar sized fruit from other plant species, including the introduced pepper-corn tree *Schinus molle* and grapes *Vitis vinifera* (Watson 2012).

## Seasonal and timing considerations

Due to the diet of painted honeyeater comprising almost exclusively of mistletoe fruit, and the timing of their breeding coinciding with periods of mistletoe fruit and flower abundance, surveys should be conducted in early spring to late summer (Oliver et al. 2003). In addition, this is the period when birds are more likely to gather in aggregations, engage in displays, and become highly vocal and thus, more detectable (Watson 2012). For example, surveying in November to January on the Darling Downs (southern Queensland) will increase the likelihood of detecting birds (M. Mathieson pers. comm. 2012).

Surveys should be undertaken during daylight hours and preferably in the early morning (< 2 hours after sunrise) and late afternoon (< 2 hours before sunset), and avoid inclement weather (i.e. rain and wind).

## Recommended survey approach

The following survey technique is recommended:

#### Area searches

Area searches (during breeding season) involve systematically searching for birds and signs of their presence (e.g. nesting habitat), as well as listening for their calls, throughout the project area (DEWHA 2010). Surveys for this species should be conducted on foot and target foraging and breeding habitat, which includes woodlands where mistletoes are abundant, and in particular, when they are in fruit (Watson 2012).

# Survey effort guide

There is currently no published information on detection probabilities for painted honeyeater. However, the recommended level of effort below is based on published data from systematic surveys of this species (Oliver et al. 2003; Barea and Watson 2007). This suggested effort may provide reasonable opportunities to detect painted honeyeater, during optimal survey conditions, if suitable habitat is present within the project area.

It is important to note that the detectability of this species in the breeding season is very different to the non-breeding season. In the non-breeding season, birds show up in random areas outside their core habitat (usually in association with fruiting mistletoes) either singly or in small groups. Calling is also infrequent and are more nomadic in their behaviour. This should be taken into account if surveying outside the breeding period, particularly in terms of increasing survey effort (D. Watson pers. comm. 2012).

Per 50 ha area of suitable habitat		
Survey technique	Minimum Effort	Minimum number of days
Area searches	4 hours	4
e.g. at least 1 hour of surveying per day for a minimum of 4 days.		

# Ethical and handling considerations

- Avoid extremely close range inspection of birds during breeding and feeding.
- Every effort should be made to minimise disturbance of nesting sites.
- These survey methods do not involve handling or trapping of birds and therefore have a minimal direct impact on the species.

## Acknowledgements

These guidelines were prepared by Jesse Rowland in October 2012. Advice and comments on drafts for painted honeyeater were provided by Michael Mathieson and David Watson.

### Citation

Rowland, J. 2012. Painted honeyeater, *Grantiella picta*. Targeted species survey guidelines. Queensland Herbarium, Department of Environment and Science, Brisbane.

## Key references

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