

Observations of a Regent Honeyeater performing mimicry of a Little Wattlebird

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The Regent Honeyeater *Anthochaera phrygia* is a medium-sized species of honeyeater that occurs in open forests and woodlands from south-east Queensland to Central Victoria. It has suffered significant declines in recent decades and is listed nationally as 'Endangered' and as 'Critically Endangered' within New South Wales (NSW).

On 3 August 2014, a male Regent Honeyeater was located by Jenny Powers and Chris and David Eastham at the end of a causeway track on the eastern side of Belmont Swamp, Lake Macquarie NSW (33° 2' 36" S, 151° 39' 52" E). The bird was seen feeding on the blossom of a small number of Swamp Mahogany *Eucalyptus robusta* trees and was in the presence of White-cheeked Honeyeaters *Phylidonyris niger*, Brown Honeyeaters *Lichmera indistincta* and Noisy Friarbirds *Philemon corniculatus*. At the time of writing, 29 October 2014, this was one of only two Regent Honeyeaters recorded in the Lake Macquarie catchment in 2014.

The following morning I confirmed that the bird was an adult male, predominantly determined by the extent and structure of the warty face. The bird was also very vocal, but interestingly the vocalisations almost exclusively involved precise mimicry of a Little Wattlebird *Anthochaera chrysoptera*. Typical Regent Honeyeater calls (or parts thereof) were intermittently used, usually at the end of a burst of Little Wattlebird mimicry. Regent Honeyeaters and Little Wattlebirds both use bill-clapping widely when calling (Prendergast 1987); although in this case the clapping calls were exaggerated to enhance the mimicry effect. This was also the case when I revisited the site on 8 August 2014.

Regent Honeyeaters are known to mimic larger honeyeater species and the 'quality' of the mimicry is said to be high (e.g. Veerman 1992, 1994; Ley 1992), particularly when in the presence of those larger species in mixed foraging flocks.

Veerman (1992, 1994) suggested mimicry in Regent Honeyeaters only occurs in the non-breeding season (usually winter), typically in the direct presence of the mimicked species and usually whilst associating with them, but in the absence of any other Regent Honeyeaters. Since then, many more cases have been observed, including several filmed (by Veerman and others, pers. comms.). The context of the behaviour in these recent observations has remained, with few exceptions, remarkably consistent with the statements made there. Mimicry has rarely been heard near Regent Honeyeater nest sites during the breeding season (Ley & Williams 1998).

Veerman concluded that the mimicry is used in the sense of "deception" to either attempt to achieve cohesion with a foraging flock of larger birds (e.g. friarbirds *Philemon* spp. and wattlebirds *Anthochaera* spp.) or as a territorial defence against smaller honeyeaters. On one occasion he observed a Regent Honeyeater approach a Red Wattlebird until almost touching and perform a call of a wattlebird, after which the Red Wattlebird departed and the Regent Honeyeater did more mimicry. Veerman also concluded that such use of mimicry is behaviour unique among Australian honeyeaters.

For this observation, it is thought that the mimicry was used to assert an impression of a larger honeyeater being present to other smaller honeyeaters nearby. The Regent Honeyeater was aggressive to White-cheeked and Brown Honeyeaters, in defending the clearly-favoured Swamp Mahogany tree where it was predominantly observed. The use of mimicry could have been employed to minimise the need to chase birds away and hence expend energy. On the day of the first observation there was much aggression shown towards the Regent Honeyeater by up to four Noisy Friarbirds, though no mimicry was heard that day (J. Powers pers. comm.). It is possible that the bird engaged in the use of

mimicry in the absence of the Noisy Friarbirds to attempt to maintain governance of the favoured tree.

The typical pattern from prior observations is that the species being mimicked has been present in the immediate vicinity; however this was not the case here. The closest point where I found Little Wattlebirds was approximately 300m to the east. Little Wattlebirds are relatively common in other parts of Belmont Swamp (J. Powers pers. comm.) and are the common large honeyeater in the areas dominated by coastal scrub vegetation (*Banksia* spp. and *Leptospermum* spp.). Whether or not the Regent Honeyeater chose to mimic the call of a locally-dominant honeyeater (as opposed to one that is less common or transitory) is a matter for speculation, though it would seem likely that it was a deliberate choice given the location and circumstances.

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REFERENCES

- Ley, A.J. (1992). Regent Honeyeater on the brink? *Wingspan* 5: 1-2.
- Ley, A.J. and Williams, M.B. (1998). Nesting of the Regent Honeyeater *Xanthomyza phrygia* near Armidale, NSW. *Australian Bird Watcher* 17: 328-336.
- Prendergast, H.D.V. (1987). Notes on bill snapping in Australian Birds. *Canberra Bird Notes* 12(3): 86-89.
- Veerman, P.A. (1992). Vocal mimicry of larger honeyeaters by the Regent Honeyeater *Xanthomyza phrygia*. *Australian Bird Watcher* 14: 180-189.
- Veerman, P.A. (1994). Batesian acoustic mimicry by the Regent Honeyeater *Xanthomyza phrygia*. *Australian Bird Watcher* 15: 250-259.