Observations of Regent Honeyeaters in the lower Hunter Valley of New South Wales during winter 2012

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The Regent Honeyeater Anthochaera phrygia is an endangered species of honeyeater that occurs in open forests and woodlands from south-east Queensland to Central Victoria. Its range formerly extended into South Australia but it is now considered extinct there (Geering & Ingwersen, in prep.). The species has undergone a severe contraction in range and drop in population such that it is now listed nationally as 'Endangered' and as 'Critically Endangered' within New South Wales (NSW), the state which forms the stronghold for the species. It is generally accepted that the total population of Regent Honeyeaters is fewer than 1000 birds, but a review of recent data suggests it may be significantly lower than this (Regent Honeyeater Recovery Team unpublished data).

Regent Honeyeaters occur regularly within the Hunter Valley (e.g. Stuart 1994-2011; Roderick & Stuart 2010; Barrett *et al.* 2003) and the area has traditionally been recognised as an important supplementary or subsidiary foraging area for the Capertee Valley sub-population (Geering & Mason 2009; Geering & Ingwersen in prep.). The species also occurs in areas proximate to the Hunter Valley, particularly around Lake Macquarie and the NSW Central Coast (Barrett *et al.* 2003; A. Morris pers. comm.).

In the lower Hunter Valley (defined as those parts of the valley coastward of about Jerrys Plains), Regent Honeyeaters predominantly occur in the dry open forests in association with the seasonal blossoming of winter-flowering Eucalypts such as Spotted Gum *Corymbia maculata*. The species may persist and breed if blossoming occurs in spring-flowering Eucalypts such as Forest Red Gum *Eucalyptus tereticornis*, Broad-leaved Ironbark *E. fibrosa* and Brown / Blue-leaved Stringybarks *E. capitellata / E. agglomerata*.

In early April 2012 it was evident that Spotted Gums were beginning to flower across a broad area centred on the Cessnock Local Government Area (LGA). Significant blossom started to appear at Pelton within Werakata State Conservation Area at this time and it had been noted that many Spotted Gum trees in the area had been carrying substantial bud for at least 18 months (M. Roderick pers. obs.).

The first record of Regent Honeyeaters came on 6 May 2012, when 2 individuals were seen along the Kearsley South Fire Trail in Werakata National Park near Kitchener (D. Lyons pers. comm.). The number of birds recorded at this site built to a maximum of 27 during the national survey weekend co-ordinated by BirdLife Australia on 20 May. During that same survey, 4 birds were also recorded at Pelton and a further 16 birds on private property at Quorrobolong. Surveys on the Quorrobolong property 3 days later, including areas that were not surveyed on 20 May, revealed >40 birds indicating that at least 71 Regent Honeyeaters were present in the lower Hunter Valley on 20 May.

In the ensuing weeks, greater numbers were seen at the Quorrobolong property. On 30 May, observations suggested that there were 50+ birds on that property alone suggesting that the previous minimum estimate should be raised from 71 to at least 80. Further to this and the other sites surveyed on 20 May, Regent Honeyeaters were also recorded on two separate parcels of Crown Land south of Kurri Kurri and in bushland south of Ellalong; with two of these sites being in areas where they had not been previously recorded (Regent Honeyeater Recovery Team unpublished data). The total number of birds at these three latter sites was counted as approximately 40 (authors pers. obs.).

The birds south of Ellalong and south of Kurri Kurri almost certainly were distinct from the Quorrobolong and Kitchener birds. We have concluded that all of the sightings of Regent Honeyeaters involve distinct groups due to the availability of blossom at each site and the fact that the Quorrobolong birds appeared to be a stable group that had dispersed locally, as opposed to travelling to sites up to 10km away (as those other sites are). In other words, it is probable that the birds at Quorrobolong had dispersed within the broader "Quorrobolong area" and that the initial counts of 40-50 birds were of recent arrivals to the area, given their "flocking" behaviour.

In summary, it is probable that at any given time during the May to July period, conservatively at least 80 and almost certainly more than 100 Regent Honeyeaters were in residence within the lower Hunter Valley woodlands of the Cessnock LGA (all within a 10km radius of 32° 52' 10" S, 151° 22' 12" E). Furthermore, large areas of potential habitat were not surveyed, so this count may significantly underestimate the number of birds.

This constitutes the maximum known concentration of Regent Honeyeaters anywhere across the range of the species since 2005 and comprises a significant proportion (probably >10%) of the total population of the species. It is also of significance that during the previous Spotted Gum flowering "event" (in 2009) up to 60 birds were recorded across the same area of the lower Hunter Valley (authors pers. obs.). Furthermore, in summer 2007 a successful "semi-communal" breeding event took place on forested land zoned for industrial development as part of the Hunter Economic Zone in an area that was likely used as a breeding locality in the past (Regent Honeyeater Recovery Team unpublished data; A. Zoneff pers. comm.). Nesting has also been recorded over several seasons in recent years at the Quorrobolong property, though no fledged young have been observed at that site (A. Morris and R. Miller pers. comm.).

In light of the recent significant numbers of Regent Honeyeaters and past breeding records, the lower Hunter Valley dry open forests should be recognised as being of crucial importance to this critically endangered species, both in terms of providing an essential winter food source and significant opportunity for birds to breed.

REFERENCES

- Barrett, G., Silcocks, A., Donnelly, C., Cunningham, R. and Poulter, R. (2003). 'The New Atlas of Australian Birds'. (Royal Australasian Ornithologists Union: Melbourne.)
- Geering, D.J. and Ingwersen, D.A. (in prep.). National Recovery Plan for the Regent Honeyeater *Anthochaera phrygia*. (New South Wales Office of Environment and Heritage: Dubbo, and BirdLife Australia: Melbourne.)
- Geering, D.J. and Mason, T. (2009). Capertee Valley Regent Honeyeater Regional Works Plan. Unpublished report to the National Regent Honeyeater Recovery Team and the Hawkesbury – Nepean Catchment Management Authority, May 2009.
- Roderick, M. and Stuart, A. (2010). The status of threatened bird species in the Hunter Region. *The Whistler* **4**: 1-28.
- Stuart, A. (Ed.) (1994-2011). Hunter Region of New South Wales Annual Bird Report Numbers 1 to 18 (1993-2010). (Hunter Bird Observers Club Inc.: New Lambton, NSW.)



Figure 1. Numbers and locations of Regent Honeyeaters in the lower Hunter Valley woodlands of Cessnock LGA during May - July 2012.