Carnaby's Black Cockatoo night roost surveys in the Perth region

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Carnaby's Black-cockatoos (*Calyptorhynchus latirostris*) are a threatened species that is endemic to Western Australia and under serious threat from habitat loss. Each year many birds migrate to the Swan Coastal Plain over the non-breeding summer period where they become a highly visible and iconic part of the Perth environment. A survey of Carnaby's Cockatoos by Birds Australia in 2006, identified 16 night roosts and showed that at least 4,510 birds visit the greater Perth region. This first Great Cocky Count also identified night roost counts as the most accurate way to estimate the number of birds and monitor changes over time. Subsequent surveys by DEC volunteers in 2008 and 2009 identified 70 known or likely roost sites, and in 2010 DEC joined with Birds Australia to repeat the 2006 Great Cocky Count.

During the 2010 Great Cocky Count on April 7^{th} , 350 volunteers completed 189 surveys across 223 sites in the greater Perth Region. An estimated 6,600 birds occurred across 130 night roost sites (excluding 80% of the 2,123 birds recorded in the Perth Hills roosts that were thought to be Baudin's Black-cockatoos). The16 roost sites surveyed in 2006 were compared with 47 sites that occurred within 2.5 km of these sites, and found no significant difference in the number of Carnaby's Cockatoos between the two survey periods (p=0.9, df=13). However, the average number of birds per roost was lower in 2010 (220 \pm 54 compared with 322 \pm 135 in 2006), as was the total number of birds estimated for the Greater Perth region (3,084 in 2010 compared with 4,510 in 2006).

A typical night roost site has tall, dense canopied trees, close to water where the birds can drink and close to food trees such as banksias, bottlebrush and Marri. The roost trees are usually clumped and at larger roosts, cover an area of at least five hectares. Maps showing the pattern of use of trees at a large, permanent roost in Bentley will be shown to demonstrate the shifting nature of roost sites. Monthly roost counts with volunteers are currently underway and will be repeated in subsequent years as a means to accurately monitor population changes. The proportion of single birds to pairs to triplets, flying into the night roosts, is also recorded as a measure of breeding success.

Threatened Species Research Forum





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