

Carnaby's Cockatoo *Calyptorhynchus latirostris*

Conservation Status: Endangered

Identification

Carnaby's cockatoo *Calyptorhynchus latirostris* is a white-tailed black cockatoo found in the south-west of Western Australia, most often observed in flocks at dawn or dusk as they leave or return to a roost site. It is similar in appearance to Baudin's cockatoo *Calyptorhynchus baudinii*, the only other species of white-tailed black cockatoo. Carnaby's cockatoo is a mostly a dull black with rectangular white panels on the tail feathers and white cheek patches.



Photos: R. Dawson/DBCA

Carnaby's is a slightly larger sized bird than Baudin's, and its bill has a shorter and wider upper mandible. Experts are also able to distinguish between the two species by the sounds of their calls

The male has a black bill and reddish eye-ring, while the female has a whitish bill, grey eye-ring and a more distinct cheek patch. Juvenile birds are similar in appearance to the adults, except that juvenile males have pale bills which begin to darken after the second year. They are best distinguished from the adults by the harsh, rasping call that they make when begging for food.

Length: 53-60 cm

Weight: 520-790g

Taxonomy

Family: Cacatuidae

Genus: *Calyptorhynchus*

Species: *latirostris*

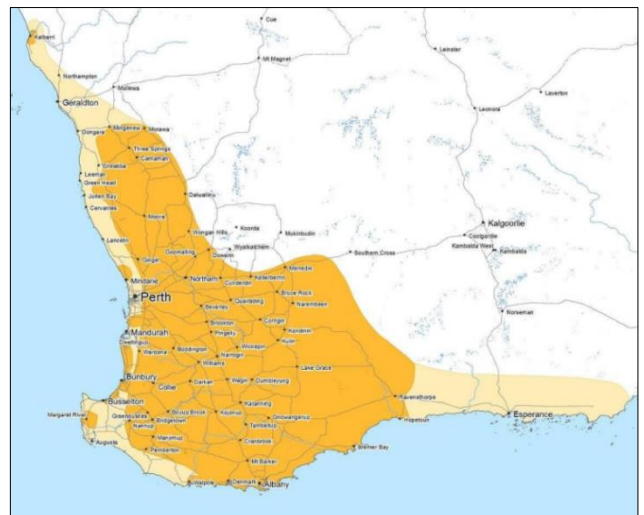
Other common names: Carnaby's black cockatoo, short-billed black cockatoo

Distribution and Habitat

Carnaby's cockatoo is endemic to the south-west of WA, ranging from the Kalbarri in the north to Esperance in the south-east, and inland to Coorow, Kellerberrin and Lake Cronin. They are most common in semi-arid parts of the south-west.

It is estimated that the species' range has been reduced by approximately 50% and is continuing to decline due to widespread vegetation clearing since the 1970s. The population is estimated at 10,000-60,000 breeding individuals.

Carnaby's cockatoo occur in uncleared and remnant areas of woodland, shrubland and kwongan heath dominated by proteaceous species. They breed in the semiarid and subhumid interior eucalypt woodlands, principally dominated by Salmon Gum *Eucalyptus salmonophloia* or Wandoo *Eucalyptus wandoo*. The Avon Wheatbelt bioregion is an



Breeding (orange) and non-breeding (light yellow) range of Carnaby's cockatoo ([SEWPac, 2012](#)).

important breeding area for the species. After breeding, flocks tend to migrate coastward in search of food, with the Swan Coastal Plain recognised as an important foraging area.

For further information regarding the species distribution, please refer to www.naturemap.dpaw.wa.gov.au.

Community Involvement

If you think you have seen a Carnaby's cockatoo, fill out a [fauna report form](#) and send it to the Department's Species and Communities Branch at fauna@dbca.wa.gov.au. The Department keeps track of the distributions of threatened species to help monitor population trends and inform management decisions.

The [Great Cocky Count](#) is a long-term citizen science survey that monitors known roost sites of Carnaby's cockatoos, but also takes note of Baudin's and forest red-tailed cockatoos. Anyone can get involved, with volunteers participating in the one-night survey every autumn across the south-west of WA.

Artificial nesting hollows can be installed for any of the black cockatoo species, which allows cockatoos to breed in areas where natural hollows are now limited. The Department of Parks and Wildlife have produced information sheets on [designing, monitoring and maintaining artificial hollows](#) for Carnaby's cockatoos that are applicable for all black cockatoo species.

The Department runs a variety of volunteer projects across WA including scientific research, community education and manual labour. Further information about these opportunities can be found on the Department's [webpage](#).

Biology and Behaviour

Carnaby's cockatoos are a very long-lived species with the oldest known adult in the wild surviving approximately 34 years. They are a gregarious species, living in small to large flocks (up to 5,000 individuals) in the winter, non-breeding season. Baudin's and Carnaby's cockatoos have been observed within the same flock during non-breeding times.

They have large roost sites generally situated within 6km of potential feeding sites, and smaller roost sites for when foraging distances are too large. Carnaby's feed on a wide range of proteaceous and myrtaceous species, as well as opportunistically foraging in fruit and nut orchards. On the Swan Coastal Plain, *Banksia* woodlands and pine plantations are the main food sources during the non-breeding season.

During the breeding and nesting season the large flocks split into pairs and family groups. Family groups are made up of a female, male and juvenile and occasionally also an immature from a previous breeding season. Pairs begin breeding from four years of age, and nest in hollows of large, old (c. 120-130 years) *Eucalyptus* species, particularly Salmon Gum *Eucalyptus salmonophloia* and Wandoo *Eucalyptus wandoo*. One to two eggs are laid between early July and December, but usually only one chick is raised to fledging. Both the female and male in a pair are involved in selecting the nest hollow but only the female prepares the hollow and incubates and broods.

Conservation Status

Carnaby's cockatoo is recognised as a threatened species under State and Commonwealth legislation. In Western Australia the species is listed as fauna that is 'likely to become extinct' in the wild (Specially Protected) under the [Wildlife Conservation Act 1950](#) and has been assigned the threat status ranking of Endangered using [International Union for Conservation of Nature](#) (IUCN) criteria. Nationally the species is listed as Endangered under the Commonwealth [Environment Protection and Biodiversity Conservation Act 1999](#).

The species has experienced a continued population decline since the 1950s (Garnett *et. al.*, 2011). Loss of feeding habitat is considered the principal threat to the species, with remaining habitat often too far from nesting habitat to allow for successful breeding. Furthermore, remnants are highly fragmented and are undergoing further degradation due to salinisation, weed invasion, *Phytophthora cinnamomi* dieback and fires. Other threats impacting on the species includes:

- Extensive clearing of breeding habitat and a lack of regeneration of potential nest trees due to grazing by sheep and rabbits;
- Competition for nest hollows with other birds and the feral European honey bee.
- Death and injury resulting from vehicle strike;
- Illegal shooting by orchardists and pine plantation owners;
- Nest robbing for the bird trade (in the past);

- Reduced food and water availability due to climate change;
- Death and injury resulting from extreme weather events exacerbated by climate change.

Management

Recovery Plan

A [national recovery plan](#) has been produced for Carnaby's cockatoo, and outlines the recovery actions required to prevent further decline in distribution and abundance of the species (DPaW, 2015). Management objectives from this plan for Carnaby's cockatoo include:

- Identify, protect and manage habitat critical for survival (nesting, foraging and roosting) across the species' breeding and non-breeding range.
- Monitor population parameters, habitat, threats and status of the species.
- Undertake research into the biology, ecology and conservation management of the species.
- Monitor the impacts and implement strategies to reduce other factors detrimentally affecting Carnaby's cockatoo and support rehabilitation programs.
- Engage with the broader community for the conservation of the species.
- Develop and distribute educational and guidance material for decision makers, establish joint management agreements and provide for improved sharing of information between agencies.

Existing Conservation Measures

The Carnaby's Cockatoo Recovery Team, led by the Department of Biodiversity, Conservation and Attractions, has been assisting with the implementation of recovery actions as outlined in the recovery plan since 1999.

The [Western Australian Museum](#) and the [Water Corporation](#) launched the [Cockatoo Care](#) research initiative in 2001, with the aim of researching the distribution and ecology of black cockatoos and threats to their survival, as well as implementing measures to encourage the conservation of the species.

BirdLife Australia has a [Southwest Black-Cockatoo Recovery Program](#), which has involved working on recovery actions for black cockatoos since 2001.

The Department and BirdLife Australia identified critical nesting and foraging habitat in the Wheatbelt region in 2009-2010, which led to the fencing of high quality areas of remnant native vegetation. Methodology to map roosting cockatoos on the Swan Coastal Plain and Jarrah Forests has been developed, leading to the production of maps of breeding, roosting and feeding habitat. BirdLife Australia has also identified 12 Important Bird Areas specifically for Carnaby's cockatoo, and the Department monitors key nesting sites across the Wheatbelt region.

The Department, BirdLife Australia and the WA Museum have been involved in installing artificial nest hollows, and repairing damaged and degraded natural nest hollows.

The Department of the Environment and Energy has published a [referral guideline](#) for the three species of black cockatoos in WA, which provide guidance for vegetation clearing and other activities that could have a significant impact on the species and their habitats.

[Kaarakin](#), a black cockatoo conservation centre, and [Perth Zoo](#) are involved in rehabilitating injured black cockatoos for release back into the wild. Kaarakin also revegetates areas of degraded bushland and educates the community about the conservation of these species.

Damage Prevention and Control

Carnaby's cockatoo have been recorded feeding on pine trees, persimmons and various nut crops, and have been known to do so since the 1950s when widespread land clearing for forestry and agricultural activities removed large proportions of the species' suitable feeding habitat. The damage they cause to individual orchards is minimal in most years but appears to be greater in years when there is a shortage of natural food sources. Killing of Carnaby's to protect crops (or for any reason) has been considered an offence since 1989 under the provisions of the Western Australian [Wildlife Conservation Act 1950](#). Unfortunately, black cockatoos continue to be illegally shot each year, resulting in injuries and deaths. Offenders may face a fine of up to \$10,000.

Studies have shown that shooting or otherwise destroying black cockatoos is not an effective means of preventing damage. The Department's fact sheets on [minimising damage to crops](#) outline how to control damage caused by

black cockatoos using non-lethal methods, including various scaring techniques and exclusion netting.

If you suspect black cockatoos are being harmed or captured, or find an injured or dead cockatoo, call the [Wildcare 24-hour Helpline](#) on (08) 9474 9055.

Related Information Sheets

Department of Parks and Wildlife fact sheets: [Bird Control in Orchards](#)

BirdLife Australia webpage and brochure: [Identify your Black-Cockatoo](#)

Western Australian Museum webpage and fact sheet: [Carnaby's Cockatoo](#)

Citation

Department of Biodiversity, Conservation and Attractions. (2017). *Fauna Profile - Carnaby's cockatoo Calyptorhynchus latirostris*. Retrieved from <http://www.dbca.wa.gov.au/>

Key References and Further Reading

Department of Parks and Wildlife. (2013). *Carnaby's Cockatoo (Calyptorhynchus latirostris) Recovery Plan – Western Australian Wildlife Management Program No. 52*. Perth, WA: DPaW. Retrieved from: <http://www.environment.gov.au/biodiversity/threatened/publications/recovery/calyptorhynchus-latirostris-recovery-plan>

Department of the Environment. (2016). *SPRAT Profile: Calyptorhynchus latirostris - Carnaby's black cockatoo*. Retrieved from <http://www.environment.gov.au/sprat>

Garnett, S., Szabo, J. & Dutson, G. (2011). *The Action Plan for Australian Birds 2010*. Melbourne, VIC: CSIRO Publishing.

Glossop, B., Clarke, K., Mitchell, D. & Barrett, G. (2011). *Methods for mapping of Carnaby's cockatoo habitat*. Perth, WA: Department of Environment and Conservation.

Johnstone, R. & Storr, G. (1998). *Handbook of Western Australian Birds: Volume 1 – Non-passerines (Emu to Dollarbird)*. Perth, WA: Western Australian Museum.

Pizzey, G. & Knight, F. (2007). *The Field Guide to the Birds of Australia (8th ed.)*. Sydney, NSW: Harper Collins.

Valentine, L. & Stock, W. (2008). *Food resources of Carnaby's black-cockatoo (Calyptorhynchus latirostris) in the Ngarara Sustainability Strategy study area*: Prepared for to the Forest Products Commission. Perth, WA: ECU & DEC.

Saunders, D. & Dawson, R. (2009). Research Note: Update on longevity and movements of Carnaby's black cockatoo. *Pacific Conservation Biology* 15: 72-74.

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