

MONITORING GLOSSY BLACKS

AGEING & SEXING GLOSSY BLACK-COCKATOOS

Young Glossy Black-Cockatoos in eastern Australia leave the nest (fledge) between August and October, three months after hatching, in a juvenile plumage characterised by yellow barring on the throat, belly and under-tail coverts, yellow, orange or red spots on the upper and under-wing coverts, and indistinct ear covert spots. Within a few months of fledging, juveniles begin to moult into an immature plumage that is complete by one year old. The immature plumage is similar to the adult plumage, but some birds retain some juvenile feathers for a further year and birds may only acquire a full complement of adult tail feathers by the age of four years. To sex and age a Glossy Black-Cockatoo, a combination of features should be used (see below), which will typically require good views of the head, wing coverts, belly and especially the colour patterns and wear of tail feathers.

Feature	Male	Female
Ear covert spotting: juveniles of both sexes have indistinct spotting on the feathers covering the ear, each feather having a very faint, pale yellow spot 1 mm in diameter and 3 mm from the tip of the feather.	Spots on the ear coverts (feathers covering the ear opening) are lost during the post-juvenile moult when 12-18 months old.	As for male.
Wing covert spotting: juveniles of both sexes have spotting on the upperwing and underwing coverts (feathers covering the shafts of the main flight feathers), 1-2 mm in diameter and 3 mm from the tip of the feather.	Males have yellow or orange spots, which are lost when juvenile feathers are replaced with entirely black feathers during post-juvenile moult when 12-18 months old.	Females have yellow spots; feathers replaced during post-juvenile moult when 12-18 months old may retain some spots on lesser secondary coverts and underwing, and some adults have a few yellow spots throughout life.
Body barring: juveniles of both sexes have 2 mm-wide yellow bars on the otherwise black feathers of the throat, belly and under-tail coverts, although the barring may be sparse to absent in some males.	All body barring is lost during post-juvenile moult when 10-12 months old.	Body barring is generally lost during post-juvenile moult when 10-18 months old, but some females may retain some barred feathers as adults, especially on the under-tail coverts.
Yellow feathers on the head and neck: presence versus absence of yellow feathers that contrast with the otherwise brown feathers of the head and neck is the most reliable method of sexing immature and adult birds.	Males typically lack any yellow feathers, but the rare bird may acquire a few yellow feathers.	Females start to acquire yellow feathers at one year old, with the number increasing by two years old. The extent (from just a few feathers to around 50% of the head and neck) and pattern of yellow varies greatly between individual females.
Tail feathers: besides the central two tail feathers, which are entirely black, the other five feathers on either side of the tail have a large red to orange-red panel. Juvenile feathers are more pointed, and the shaft extends beyond the tip. The extent of pale yellow edging and black barring (number, width and completeness) varies with age and between sexes. In captive birds, tail feathers are moulted every second year, with half the feathers, in random order, moulted in any year.	Juvenile tail feathers have broader black bars that cross the red tail panels; panels lack yellow edging. Half the juvenile tail feathers are replaced in the post-juvenile moult when 12-18 months old and the remainder a year later. The number and completeness of the barring becomes progressively reduced with each moult. At least some unbarred feathers are acquired by two years of age, but incomplete bars may persist into 4 th year in wild birds.	Juvenile tail feathers have broader black bars that completely cross the red tail panels that are edged yellow. Feathers replaced in the post-juvenile moult at 12-18 months old have bars that are narrower and reduced in number and/or completeness, and the extent of yellow edging is reduced. Tail feathers of older females can have panels that almost lack barring, and presence of some incomplete bars may only be visible when the birds spread their tails.



The Glossy Black Conservancy is a not for profit consortium that seeks to increase awareness and promote a collaborative conservation management approach for Glossy Black-Cockatoos across SEQ and north-east NSW, through a partnership between government, private enterprise, researchers and the wider community. Information included in this fact sheet does not necessarily express the views of all Conservancy partners.

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Juvenile female in 1st year, showing yellow spots on ear coverts and wing coverts, and barring on the belly (juvenile characteristics) and a few yellow feathers emerging on the head (female characteristic). Young juveniles will often be heard begging for food from parents.

Photo ©: Anonymous.



Top: juvenile female about one year old, showing indistinct spots on ear coverts and faded and new spotted wing coverts. Bottom: female, either an adult that maintains a few pale spots on the upper-wing coverts, or an older immature 2-3 years old that has extensive yellow on the head.

Photos ©: George Gornacz.



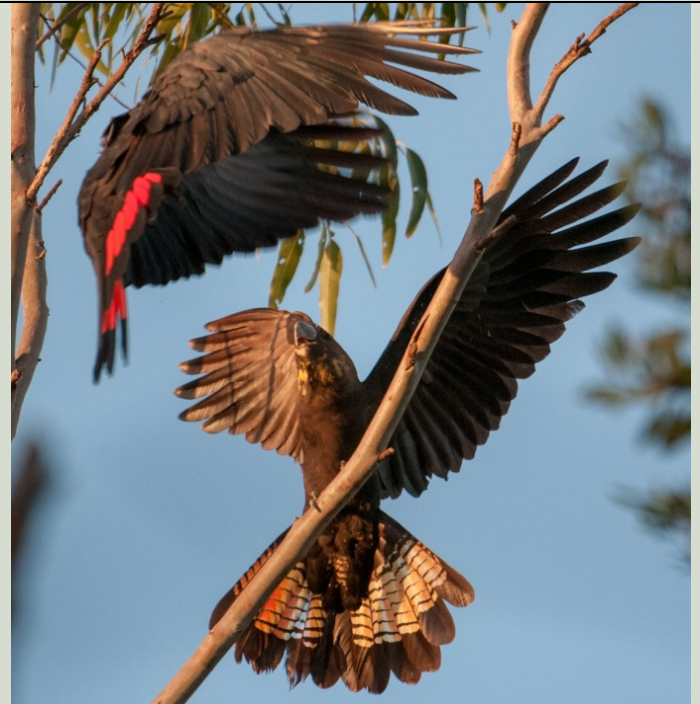
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Male aged between 1 and 3 years, showing mixture of old, worn juvenile (barred black, more pointed with shaft extending beyond the tip) and newer immature (barred to partially barred) or adult (unbarred) tail feathers.

Photo ©: Bobbi Marchini.



Adult male (above), showing unbarred, red tail panels and immature female aged between 1 and 3 years (below) with at least one worn, juvenile tail feather (more pointed, with shaft extending beyond tip) and retained barring on some under-tail coverts, but with extensive yellow on the head.

Photo ©: George Gornacz.



Immature male aged between 1 and 3 years, showing mixture of old, worn juvenile (barred, more pointed, with shaft extending beyond the tip) and newer immature (barred but less pointed) or adult (unbarred) tail feathers.

Photo ©: Bobbi Marchini.



Mature adult female, showing a few yellow feathers on the head and typical yellow edging to the tail panels, but extensive loss of complete barring indicative of older age. Note this bird has a few cream to yellow spots on the upper-wing and under-wing coverts. Photo ©: George Gornacz.



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Adult male, showing brown head lacking any yellow feathers. Photo ©: George Gornacz.



Adult female, showing an individual with extensive yellow feathers on the head. Photo ©: Terrie Saunders.

Lynn Pedler has written an excellent article on using plumage characteristics to age and sex the subspecies of Glossy Black-Cockatoo (*Calyptorhynchus lathami halmaturinus*) on Kangaroo Island, South Australia (see link to this article in the Bibliography). On Kangaroo Island, juveniles can be sexed on the basis of the colour of the spots on their body and wing coverts (males have red spots, females have yellow spots) and their tail feathers (females have at least some yellow edging to the orange panels, males lack any yellow edging). However, there is still some uncertainty as to whether juveniles of the eastern Australian subspecies in southern Queensland and New South Wales (*Calyptorhynchus lathami lathamii*) can be sexed in the same way, particularly whether juvenile males may have yellow or orange (instead of red) spots on the body and wing coverts. So, if you have any photos of good resolution of juvenile or immature Glossy Black-Cockatoos, please let us know by emailing GBC(at)biodiversity.tv with copies of the photos.

Please report your sightings, including the number of birds, their age and sex (where possible to distinguish) on the Glossy Black Conservancy online sightings mapping tool available at:

<http://glossyblack.org.au/>.

Bibliography

1. Courtney, J (1986). Plumage development and breeding biology of the Glossy Black-Cockatoo *Calyptorhynchus lathami*. *Australian Bird Watcher* 11: 261-273.
2. Higgins, PJ (ed.) (1999). *Handbook of Australian, New Zealand and Antarctic Birds, Vol 4, Parrots to Dollarbird*. Oxford University Press, Melbourne.
3. Pedler, L (2007). Feather features: using plumage to determine age and sex of Glossies. *Chewings* 26:2. <http://users.adam.com.au/kic01/glossy/archive.html>



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