GLOSSY BLACK-COCKATOO IDENTIFICATION

The Glossy Black-Cockatoo, Calyptorhynchus lathami, is found in eastern and south-eastern regions of Australia with three subspecies being The most widespread of these recognised. subspecies, C. I. lathami, can be found in Victoria, New South Wales and Queensland, while another, C. I. erebus, occurs in central Queensland. The final subspecies, C. I. halmaturinus, occurs as an isolated population on Kangaroo Island in South Australia. The species shares its range with two other black-cockatoo species, namely the Yellowtailed Black-Cockatoo, Calyptorhynchus funereus Red-tailed Black-Cockatoo, well as the Calyptorhynchus banksii. This overlap among the three species can create some confusion in differentiating Glossy Black-Cockatoo from the other. This is particularly relevant in southeast Queensland and northern New South Wales where all three species coexist (Figure 1).

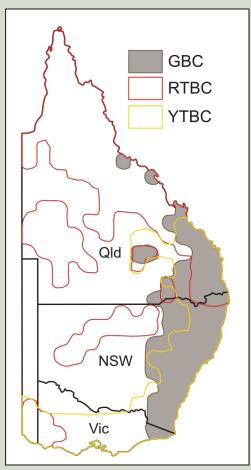


Figure 1: Overlapping distribution of Glossy Black-Cockatoo (GBC), Red-tailed Black-Cockatoo (RTBC) and Yellow-tailed Black-Cockatoo (YTBC) in eastern

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Why is identification important?

Accurate identification of these species is important for a number of reasons.

- Confirmation of the presence of Glossy Black-Cockatoo within a region may limit development and associated transformation of habitats.
- (2) Identification is central to field surveys and population monitoring, which form the basis of regional conservation strategies.
- (3) Raising the awareness of the conservation requirements of Glossy Black-Cockatoo more generally requires that individuals can be recognised by members of the broader community.

This fact sheet aims to provide such information to reduce the level of confusion, as even Torresian Crows have been mistaken for Glossy Black-Cockatoo.

Differences among the black-cockatoos

The three black-cockatoos of interest can be separated from one another based on their appearance. Although the three species are of different size, this may not be immediately discernible in the wild. Plumage features are of more value and the three species can be differentiated as follows:

Yellow-tailed Black-Cockatoo – This species is larger than the Glossy Black-Cockatoo and all individuals have large pale yellow panels (coloured sections) in their tail feathers as well as a single large yellow patch of feathers behind the eye (Plate 1). Males have a distinctive pink ring around the eye that is only obvious at close range. The species tends to occur in large flocks and has a slow labouring flight pattern. During flight these birds are quite noisy, especially compared with the quieter Glossy Black-Cockatoo.

Red-tailed Black-Cockatoo – Despite being the largest of all the three black-cockatoo in this region, this species is more likely to be confused with the Glossy Black-Cockatoo as a result of the bright red panels in its tail feathers. Distinguishing features for this species include the



Plate 1: Yellow-tailed Black-Cockatoo male (photo: Bob Inglis)

overall richer black colouration, a prominent crest in both males and females, and in the case of females and juveniles extensive pale yellow barring and spots on the breast plumage (Plate 2). Only males have the solid bright red tail panels while females and juveniles have red/orange panels with horizontal black barring.

Glossy Black-Cockatoo - This is the smallest of the black-cockatoos and also the least 'black'. Both males and females have a browner tone to the head and males have a much smaller crest than the Red-tailed Black-Cockatoo. Adult males have the solid bright red panels in the tail feathers while in females these panels range from red to light orange/yellow with horizontal black barring. Females are distinguished from females of the Red-tailed Black-Cockatoo by having irregular patches of yellow feathers on the head and neck (Plate 3). These can be quite extensive in some individuals while others have only one or two small patches. Both males and females also have a large bulbous bill used to process the species' primary source of food, she-oak cones.



Plate 2: Red-tailed Black-Cockatoos, female (left), male (right) (photo: Birds QLD)



Plate 3: Female Glossy Black-Cockatoo (photo: Terrie Saunders)



Plumage variation in Glossy Black-Cockatoo

Plumage features vary with the sex and age of Glossy Black-Cockatoos. Accurately aging and sexing birds in the field is therefore important as this can provide valuable information for the conservation of the species. For example, the proportion of juveniles in the population can be indicative of the performance of the population as a whole.

Only adult male Glossy Black-Cockatoo have the distinctive solid bright red panels in the tail feathers, whereas younger birds of both sexes have orange/yellow panels in the tail with the additional horizontal black barring across these coloured panels. The number of bars varies

between five and seven (Plate 4). Juveniles also have pale yellow spots on the wings and head as well as pale yellow barring across the chest (Plate 5). As individuals mature they lose these pale spots and barring before finally displaying adult body plumage and this typically occurs within the first 12-18 months.

In females the irregular yellow patches on the head and neck develop from an early age (about 10 months) and are retained into adulthood. These yellow feathers are replaced during the moult. Observers may be able to use these distinctive yellow feather patterns to distinguish individual females from one another.

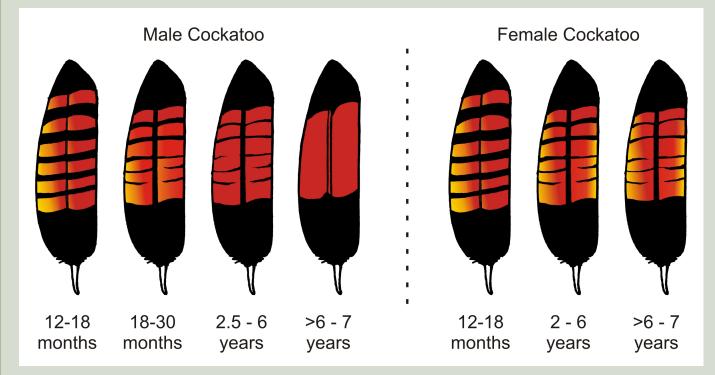


Plate 4: Diagrammatic representation of the tail feather plumage phases of the Glossy Black-Cockatoo. Changes in the male and female cockatoo are shown (simplified from Courtney 1986)

Tail feather plumage in Glossy Black-Cockatoo

Changes in the extent of barring of the tail feathers typically varies with age and sex. By way of background, tail feathers are lost with each moult (each individual will drop half of the tail feathers randomly at each moult) before being replaced. The first moult occurs at about 18 months, usually between September and November.

The second moult during which the second half of the nestling tail is lost occurs at about 2.5 years. New feathers (post-nestling) remain in place for two years but moults occur annually because half the tail feathers are lost at each moult. During the first moult the number of black bars across the coloured areas decreases in both sexes, as does the prominence of these bars.

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For males, the coloured panels become progressively redder with each moult and the horizontal black barring is lost during this

process, such that tail feather panels are all red (lacking orange or yellow) by 2.5 years although barring can persist until seven years (Plate 4). By contrast, females do not lose either the black barring or yellow from the tail, but rather retain these features into adulthood.

Field identification

In the field there are some tell-tale signs that can provide the casual observer with other clues as to the species identification, sex and age of individual Glossy Black-Cockatoos.

Firstly, this species tends to occur in smaller groups than the Yellow-tailed Black-Cockatoo. Group sizes are commonly of only two or three birds, although larger flocks do aggregate at watering holes when individuals gather to drink and roost for the night. If two birds are detected it is likely that this will be a bonded male and female pair. If three birds are observed it is likely to be a breeding pair with a fledged chick from the most recent breeding season.

The behaviour of the birds can provide clues to whether there is a chick present. If young birds are present there is often a considerable amount of begging for food taking place and both the male and female will feed the chick. The chick will test she-oak cones during this time but is far less adept at removing the kernels than the adults and will take longer to process the she-oak cones.

Secondly, at certain times of the year a larger proportion of male birds may appear to be present. This will more likely occur during the breeding season when the female is confined to the nest within a suitable hollow-bearing tree.

Other behavioural cues that assist to confirm that Glossy Black-Cockatoos have been sighted include:

- the birds are seen feeding in a she-oak species (e.g. black or forest she-oak),
- the birds are making a distinctive clicking noise as they process the she-oak cones, perhaps punctuated by soft calls,
- there are a large number of chewings from she-oak cones under the feeding trees.



Plate 5: Juvenile female Glossy Black-Cockatoo

Note the spotting around the ear, breast and wings as well as the yellow feathers starting to show on the head. Also note the yellow barring on the abdomen and the orange / yellow tail panels with the horizontal black barring. This individual is likely to be older than nine months but younger than 18 months based on these plumage patterns. (photo: Anonymous – Glossy Black Conservancy)

