

The Glossy black-cockatoo Recovery Program

- » A continued nesting success rate of around 50%, is vital if the SA glossy black-cockatoo population on Kangaroo Island is to survive in the long term.
- » Fur found in hollows with damaged eggs and, occasionally, a small dead nestling, matches that of the common brushtail possum. Possums have been found to be a significant threat to glossy black-cockatoo nesting success.
- » Corrugated iron collars have been fitted around the base of all known nest trees to prevent possums from access. Tree collars have greatly improved nesting success, from 26% in unprotected nests in 1996 to around 50% in recent years.
- » Each year, from late summer to early spring, volunteers assist Natural Resources Kangaroo Island staff to monitor nests and, in particular, to locate and protect new nest trees.
- » Galahs first arrived on Kangaroo Island in 1913 and had become abundant by the 1960s. Galahs compete with the glossies for nesting hollows and have been known to destroy eggs.
- » Little corellas were first seen on KI in 1969 and first recorded breeding in 1991. Corella pairs begin nesting in July–August and have been known to attack and kill glossy nestlings that are about to fledge.
- » Numbers of galahs and little corellas have increased on Kangaroo Island as more land is sown to grain and seed crops.
- » Around 90 artificial nest hollows have been erected to address the shortage of natural hollows in some traditional nesting areas, and are used by glossies in several nesting areas on KI. Up to half of the successful nests located each year are in artificial hollows.
- » Wild swarms of feral honeybees regularly occupy hollows that glossies have used in previous seasons. Small deterrent strips are placed in a proportion of nesting hollows each spring to discourage invasion by feral bees and wild hives are removed from known nest trees.

Images left to right: Newly planted drooping sheoak. Collaring to prevent possums. Volunteers searching for glossies.



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Glossy black facts

The glossy black-cockatoo on Kangaroo Island

Location and population size

- » The South Australian subspecies of glossy black-cockatoo (glossies), *Calyptorhynchus lathami halmaturinus*, is now found only on Kangaroo Island and is listed as endangered under both national and state legislation.
- » It had disappeared from the Mount Lofty Ranges by the 1970s, mainly because of large scale clearance of its habitat.
- » The SA subspecies is smaller but has a bigger bill than the subspecies that occurs along the Great Dividing Range and east coast of Australia.
- » The Kangaroo Island population is currently estimated at 356 birds (2014 census).

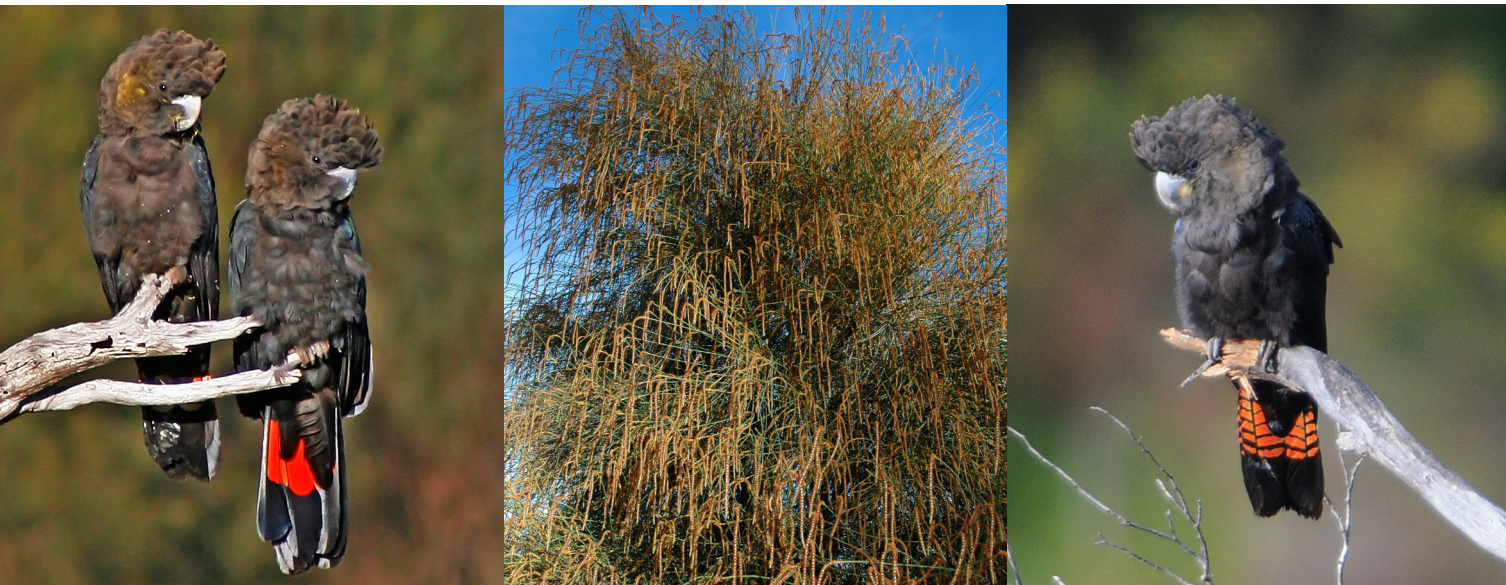
Plumage

- » Adult males have plain brown heads and bright red panels in their tail feathers.
- » Females have barred red tail panels and yellow markings on their head, especially around the neck.
- » Young birds under three years of age have barred tails like adult females, but plain brown heads like adult males.

Foraging habits

- » Glossy black-cockatoos feed exclusively on the seed of sheoak. The South Australian subspecies feeds mainly on drooping sheoak, *Allocasuarina verticillata*.

Images left to right: Female and male glossy pair. Drooping sheoak tree. Immature female glossy (R Tipper).



- » Glossies generally forage on sheoaks growing on sandstone and basalt areas along the north coast and major inland rivers of Kangaroo Island.
- » Non-breeding glossies feed on around 60–80 sheoak cones/day and spend around 30–40% of the day feeding.
- » A male feeding a nesting female may eat nearly double this amount (120+ cones) and feed for over 50% of daylight hours.
- » Since the birds need to spend a significant proportion of the day feeding, it is important to minimise disturbance of feeding birds, especially during the breeding season.
- » The cockatoo twists the hard woody cone from the sheoak with its sturdy bill, transfers it to (usually) its left foot and chews it, extracting the protein-rich kernels from the seeds with its tongue.
- » It takes a cockatoo about three minutes to chew all the seeds from a sheoak cone.
- » The percentage of seeds with kernels (seed fill) varies from tree to tree and the cockatoos generally feed from trees whose cones have over 70% seed fill.
- » Trees where glossies have fed can be identified by the chewed remains of sheoak cones, known as ‘chewings’, on the ground — these are cream to pale green when very fresh but change to a rich orange with exposure to air and moisture over a few weeks.

Nesting and raising young

- » Glossy back-cockatoos form strong pair bonds; paired birds are rarely more than a few metres apart, except when the female is in the nest.
- » Between late January and May, the cockatoo pairs search for a suitable nest hollow, usually in a tall sugar gum or South Australian blue gum, possibly a dead tree.
- » Tall, old trees that have large enough hollows are mostly found along river systems.
- » There is competition for suitable hollows. Young yellow-tailed black-cockatoos have not always fledged the nest when the glossies are ready to nest in late summer. Sometimes a pair of glossies must wait to use the hollow of their choice.
- » Galahs, little corellas, common brushtail possums and feral honeybees also occupy hollows suitable for the glossies during the nesting season. Invasion of a hollow already in use by nesting glossies will likely result in egg loss and may even cause the death of a nestling.
- » Shortly after the glossies mate, the female lays a single egg, about the size of a bantam’s (average 43 mm x 33 mm), on a layer of woodchips chewed from the inside of the hollow.



- » While the female incubates the egg, which takes about 30 days, the male returns each evening to feed her with regurgitated sheoak kernels.
- » In some areas, the male flies 12 km twice a day, between the nest and the preferred sheoak feeding area, but in most cases feeding trees occur within a few kilometres of nests.
- » The tiny, fluffy, yellow, newly hatched nestling weighs less than 20 g and its eyes remain closed until it’s about 11 days old.
- » Fed by its mother with regurgitated sheoak seed, it grows quickly and the yellow down is gradually replaced by black feathers.
- » Female nestlings are distinguished from males by the sprinkling of yellow spots on the belly and shoulders, and orange-yellow barred tails — the males have red barred tails and few orange-red spots (if any)on the body.
- » At around 90 days after hatching, the nestling weighs 450 g and is ready to leave the nest.
- » From 1996, most glossy nestlings have been individually banded with a small steel Commonwealth Scientific and Industrial Research Organisation (CSIRO) leg band on their left leg. These bands are generally only visible with binoculars or a spotting scope and considerable practice is usually required to read band numbers.
- » The young cockatoo sits at the hollow entrance for some days before taking its first and final flight from the nest.
- » Its fledging flight is strongly encouraged by its parents — often other glossies are present in the area, watching closely.
- » The juvenile remains dependent and receives food from its parents for at least another six months — young glossies are clumsy and take several months to develop the specialised skills of extracting seed kernels from sheoak cones.
- » On average, there have been about 28 successful nests per year over the last 12 years. It is thought that only about half of all glossy fledglings survive their first year.
- » Two year old females have successfully bred, but usually females do not commence breeding until 3–4 years of age.
- » A male takes four years to replace all the barred immature feathers in its tail with plain red and black adult plumage. Several banded males, 4–5 years of age, have been observed paired with nesting females.

Images left to right: Male glossy feeding. Sheoak cone chewings. Nest in hollow. Young chick in artificial nest. Possum in nest. Banded fledgling.

