



How to help

Glossy Black-Cockatoos

Image: Colin Driscoll 2022 birdlifecyclephotography.org.au

The South-Eastern Glossy Black-Cockatoo (*Calyptorhynchus lathami lathami*) is the smallest of Australia's cockatoos.

It is listed as nationally Vulnerable, with declining distribution and population caused by habitat loss and the 2019/20 bushfires.

The rapid human population expansion of NE NSW's coastal hinterland is increasing pressure on habitat, worsening fragmentation.

Climate change will drive increasing pressure on Glossy Black-Cockatoos, through:

- » decreasing nutritional quality of food resources;
- » increasing the risk of extreme weather events (heat waves, droughts, excessive rainfall, severe fire).

Glossy Black-Cockatoos feed primarily on seeds from the cones of *Allocasuarina* [She-oak] trees.

With a diet solely comprising She-oak seeds, it is vital that their feed trees produce cones with high seed-fill rates and seeds with a high protein content. High seed-fill rates may be influenced by soil and moisture.

Depending on the species, She-oaks take 10-15 years after bushfire to produce food for Glossy Black-Cockatoos, so the loss of food trees can have serious consequences.

The Glossy Black-Cockatoo Food for the Future Project used historical observations of Glossy Black-Cockatoos to find the soil types that support preferred feed trees.

The resulting Potential Habitat Map identifies priority areas of cleared land with these soil types, where Glossy Black-Cockatoo food tree revegetation and infill plantings would be most valuable:

- » to replace stands that have been burnt,
- » to improve connectivity of food resources, and
- » to increase insurance against future fires.

If you live in an area where Glossy Black-Cockatoos are found, you can help these wonderful birds by planting *Allocasuarina* food trees on your property so that:

- » the areas of high-quality habitat for Glossy Black-Cockatoos increase;
- » the resilience of this unique species to future fires is enhanced.



The Glossy Black-Cockatoo Food for the Future Project is a collaboration between Brunswick Valley Landcare, Byron Shire Council, Conservation Volunteers Australia, the Glossy Black Conservancy, and Tweed Shire Council. Factsheet by Margaret Hall, Joanne Green, Sarah Legge and Jaana Dielenberg.



Image: c Pam Kenway 2016 birdlifephotography.org.au

IS IT A GLOSSY BLACK-COCKATOO?

Adult male

- » Unbarred red tail feathers
- » Dusty black/brown on head

Adult females

- » Barred red tail feathers
- » Irregular yellow blotches on head and neck

Juvenile

- » Barred red tail feathers
- » Can have yellow spotting on feathers
- » Females get yellow feathers on head after 9 months

To report a Glossy Black-Cockatoo sighting in NE NSW:

<https://birddata.birdlife.org.au>

What tree species should I plant?

Glossy Black-Cockatoos have been recorded as eating from three species of She-oak in NE NSW, *Allocasuarina torulosa*, *Allocasuarina littoralis*, or *Casuarina equisetifolia*. The She-oak species best suited to your property will depend on your location, soils and reference plant community.

To download a copy of the **South-eastern Glossy Black-Cockatoo Field Guide**, visit:

<https://glossyblack.org.au/field-guide-glossy-black-cockatoo/>

or, **BirdLife**: <https://bit.ly/SEblackcockatoolD>

Allocasuarina torulosa [Forest She-oak]

A slender tree, 5-20 m high.

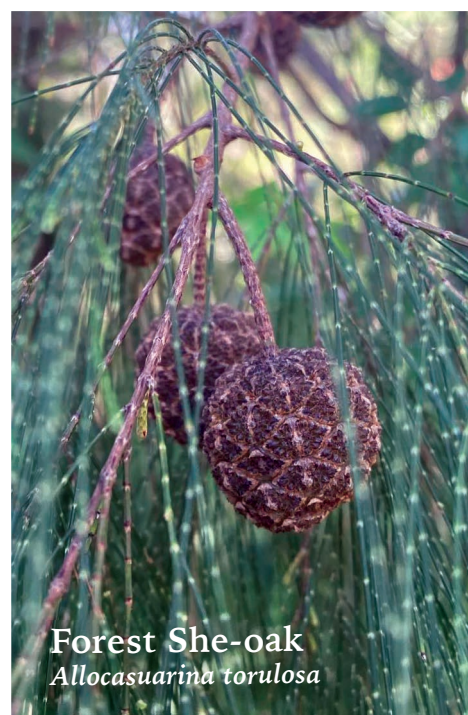
Distribution: Grows on coastal hills and ranges, and as a midstorey in tall, open forest. Grows on a wide range of soils, but generally found on higher nutrient soils and in moister situations than *Allocasuarina littoralis*. Drought hardy once established.

Bark: Light orange and 'corky' in texture.

Foliage: Fine, drooping branchlets [*A. torulosa* and *A. littoralis* have similar foliage.]

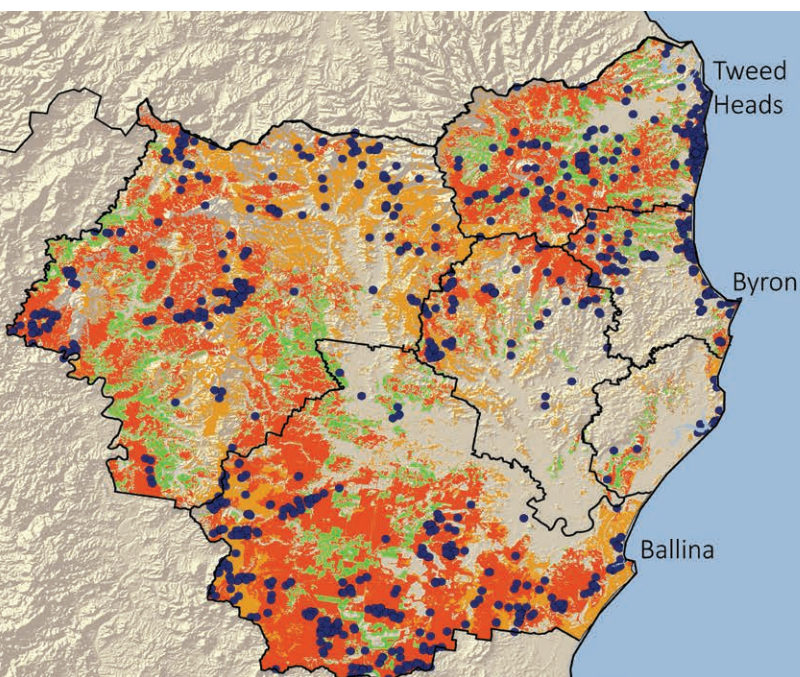
Cones: 'Warty', ovoid to globular in shape, 15 – 33 cm long, 12 – 25 mm diameter.

***Allocasuarina torulosa* is also an important component for Koala habitat in NSW.**



Forest She-oak
Allocasuarina torulosa

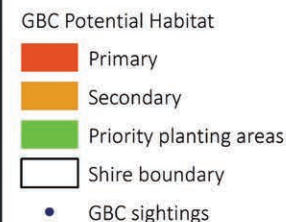
Allocasuarina torulosa cone.
Image: Harry Hackett



Glossy Black-Cockatoo Potential Habitat Map

NE NSW is an important region for the Glossy Black-Cockatoo. Woodlands and forests with *Allocasuarina* food trees and nesting tree hollows are important to the survival of this species.

To access a high resolution, geo-referenced version of this map, contact your local Northern Rivers Council.





Black She-oak
Allocasuarina littoralis



Coastal She-oak
Casuarina equisetifolia

Both cone images above: John Tann

Allocasuarina littoralis [Black She-oak]

Tree, 5 – 15 m high.

Distribution: Coastal and adjoining tableland regions. In woodland or occasionally tall heath, on sandy or otherwise poorer soils than *Allocasuarina torulosa*.

Cones: Woody, grey-brown; ovoid to cylindrical shape; usually length greater than width, on peduncle 4-23 mm long; cone body 10 – 30 mm long by 8 – 21 mm diameter.

Casuarina equisetifolia [Coastal She-oak]

Tree, 6-12 m high.

Distribution: Widespread along coastline, growing on rocky headlands and on sand dunes at the back of beaches; often on revegetated areas for dune stabilisation.

Although *Casuarina equisetifolia* is an important food resource where it occurs on the coast, it is not naturally locally occurring and widespread planting of this species is not recommended.

GLOSSY COCKATOOS PLANTING GUIDE

Picking the site:

- » Consider your **capacity to maintain** the site until trees are well established.
- » **Soil type:** red podsolics, yellow podsolics, brown earths preferred. Not suitable for krasnozems where Big Scrub Rainforest would be the pre-colonisation plant community.
- » **Proximity to existing nesting habitat:** planting close to old growth, hollow-bearing trees is better.
- » **Proximity to any extensive existing feed tree areas:** Look for connectivity of habitat, but not necessarily continuity (Cockatoos can fly over gaps, and gaps could limit the spread of fire).
- » **Proximity to reliable fresh water:** cockatoos need to drink every day.

Prepare the site:

- » **Remove weeds:** especially fast-growing or dominating weed grasses like *Setaria* and *Paspalum*.

Plan the planting:

- » *Allocasuarina torulosa* and *Allocasuarina littoralis* are the primary Glossy Black-Cockatoo food source - check on tube stock availability at your local native nursery.
- » **Plant *Allocasuarinas* clumped together in stands** rather than sporadically in a mixed-species planting.
- » **Plant trees closely [say 2-3m]** to produce denser stands, reducing overall foraging effort and possibly lessening predation risk.
- » **Include some eucalypts** to eventually provide hollows for nesting.
- » To help plant selection **follow your soils and local plant communities** as indicated on the map.
- » By including a **mixture of native species local to your area**, you will help to provide food and habitat for a range of other native wildlife.
- » A **suitable ratio** of Glossy Black-Cockatoo food trees to other native trees is 1:10.

- » **Leave a 5 m wide unplanted buffer near roads** for the birds to fly in and out and not be hit by traffic
- » **Keep all old trees.** Glossy Black-Cockatoos require large tree hollows for nesting and rearing their young. Retention of hollow-bearing trees is important for the continued breeding success of this species.
- » *Allocasuarinas* require **consistent moisture for establishment.** Water the trees daily in the first few days after planting, then weekly in dry times or as required.
- » **Mulching is important for tree establishment.** Use locally sourced hay or woodchip. Coir fibre mats can exclude water.

For more information on Glossy Black-Cockatoos and planting their food trees, visit the **Glossy Black Conservancy** website:

www.glossyblack.org.au

For descriptions & distribution of *Allocasuarinas* and other native species, visit **Plant Net**:

<https://plantnet.rbgsyd.nsw.gov.au/search/simple.htm>

PLANT SUGGESTIONS FOR YOUR GLOSSY BLACK-COCKATOO PLANTING

Coastal & Alluvial

<i>Acacia longifolia</i> v. <i>sophorae</i>	Coastal Wattle
<i>Allocasuarina littoralis</i>	Black She-oak
<i>Alphitonia excelsa</i>	Red Ash
<i>Arytera divaricata</i>	Coogera
<i>Banksia integrifolia</i>	Coastal Banksia
<i>Callistemon salignus</i>	White Bottlebrush
<i>Callitris columellaris</i>	Coastal Cyprus Pine
<i>Commersonia bartramia</i>	Brown Kurrajong
<i>Corymbia intermedia</i>	Pink Bloodwood
<i>Cupaniopsis anacardioides</i>	Tuckeroo
<i>Dodonaea triquetra</i>	Hop Bush
<i>Duboisia myoporoides</i>	Corkwood
<i>Eucalyptus robusta</i>	Swamp Mahogany
<i>Eucalyptus tereticornis</i>	Forest Red Gum
<i>Ficus coronata</i>	Sandpaper Fig
<i>Glochidion ferdinandi</i>	Cheese Tree
<i>Lomandra hystrix</i>	Mat Rush
<i>Lophostemon confertus</i>	Brushbox
<i>Melaleuca quinquenervia</i>	Paperbark
<i>Melicope elleryana</i>	Pink Euodia
<i>Syncarpia glomulifera</i>	Turpentine
<i>Syzygium smithii</i>	Lilly Pilly
<i>Tristaniaopsis laurina</i>	Water Gum

Foothills & Hinterland

<i>Allocasuarina littoralis</i>	Black She-oak
<i>Allocasuarina torulosa</i>	Forest She-oak
<i>Alphitonia excelsa</i>	Red Ash
<i>Alyxia ruscifolia</i>	Prickly Alyxia
<i>Banksia integrifolia</i>	Coastal Banksia
<i>Brachychiton acerifolius</i>	Flame Tree
<i>Breynia oblongifolia</i>	Coffee Bush
<i>Commersonia bartramia</i>	Brown Kurrajong
<i>Cupaniopsis newmanii</i>	Long-leaved Tuckeroo
<i>Eucalyptus microcorys</i>	Tallowwood
<i>Eucalyptus propinqua</i>	Grey Gum
<i>Eucalyptus tereticornis</i>	Forest Red Gum
<i>Ficus coronata</i>	Sandpaper Fig
<i>Glochidion ferdinandi</i>	Cheese Tree
<i>Grevillea robusta</i>	Silky Oak
<i>Hymenosporum flavum</i>	Native Frangipani
<i>Litsea australis</i>	Bollygum
<i>Lomandra longifolia</i>	Mat Rush

<i>Lophostemon confertus</i>	Brushbox
<i>Syzygium australe</i>	Scrub Cherry
<i>Syzygium oleosum</i>	Blue Lilly Pilly
<i>Syzygium smithii</i>	Lilly Pilly

Ridges & Ranges

<i>Acmena ingens</i>	Red Apple
<i>Allocasuarina littoralis</i>	Black She-oak
<i>Allocasuarina torulosa</i>	Forest She-oak
<i>Alphitonia excelsa</i>	Red Ash
<i>Banksia integrifolia</i>	Coastal Banksia
<i>Commersonia bartramia</i>	Brown Kurrajong
<i>Cryptocarya erythroxylon</i>	Pidgeonberry
<i>Cryptocarya glaucescens</i>	Jackwood
<i>Elaeocarpus reticulatus</i>	Blueberry Ash
<i>Elaeocarpus obovatus</i>	Hard Quandong
<i>Eucalyptus grandis</i>	Flooded Gum
<i>Eucalyptus microcorys</i>	Tallowwood
<i>Eucalyptus propinqua</i>	Grey Gum
<i>Eucalyptus tereticornis</i>	Forest Red Gum
<i>Ficus coronata</i>	Sandpaper Fig
<i>Ficus fraseri</i>	Sandpaper Fig
<i>Glochidion ferdinandi</i>	Cheese Tree
<i>Lomandra longifolia</i>	Mat Rush
<i>Lophostemon confertus</i>	Brushbox
<i>Mallotus philippensis</i>	Red Kamala
<i>Polyscias elegans</i>	Celerywood
<i>Syncarpia glomulifera</i>	Turpentine
<i>Stenocarpus sinuatus</i>	Firewheel Tree
<i>Syzygium australe</i>	Scrub Cherry
<i>Syzygium smithii</i>	Lilly Pilly



Image: c Les Peters 2012 birdlifephotography.org.au

For more local plant suggestions, check out:

My Local Native Garden or

Climate Resilient Landscapes - A planting guide for the Northern Rivers Region, available at:

<https://brunswickvalleylandcare.org.au/native-plants/>

or, <https://info.tweed.nsw.gov.au/native-species-planting-guide>