



Ngoolarks Forever

Keep Carnaby's Flying

Photo by Molly Spaulding

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Management Project***

<https://blackcockatooconservationwa.com/>

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





Topic 1

The World of Carnaby's Cockatoos

Photo by Molly Spaulding



What bird is
this?

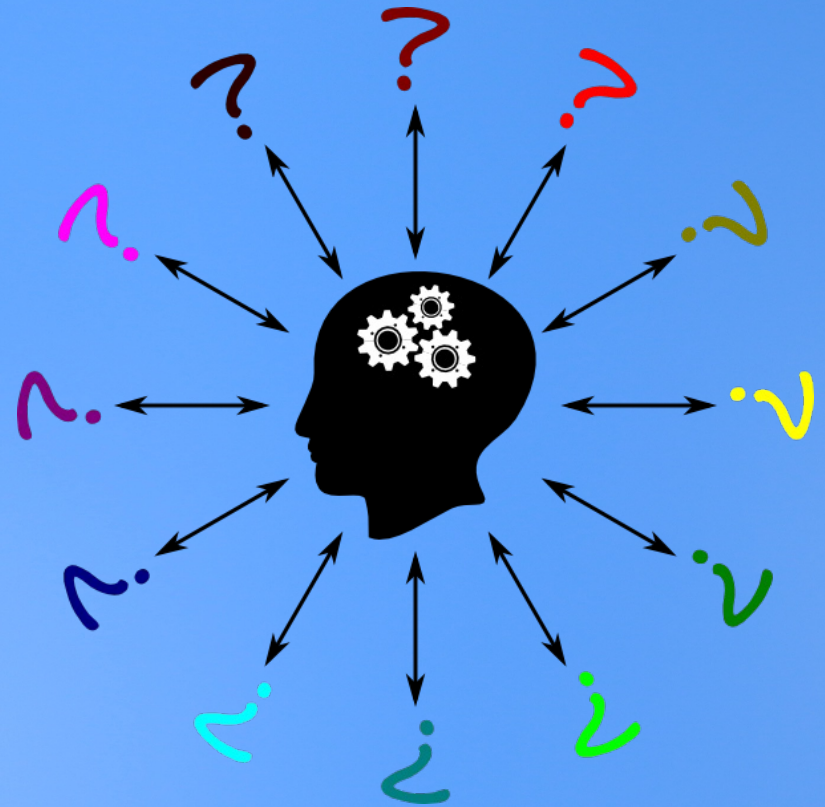
Photo by Molly Spaulding



What do you
already know
about
the
Carnaby's
Cockatoo?

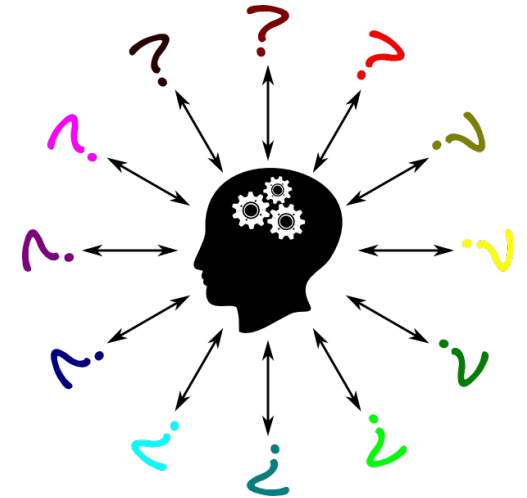
Photo by Molly Spaulding

Write down your ideas & what you know.

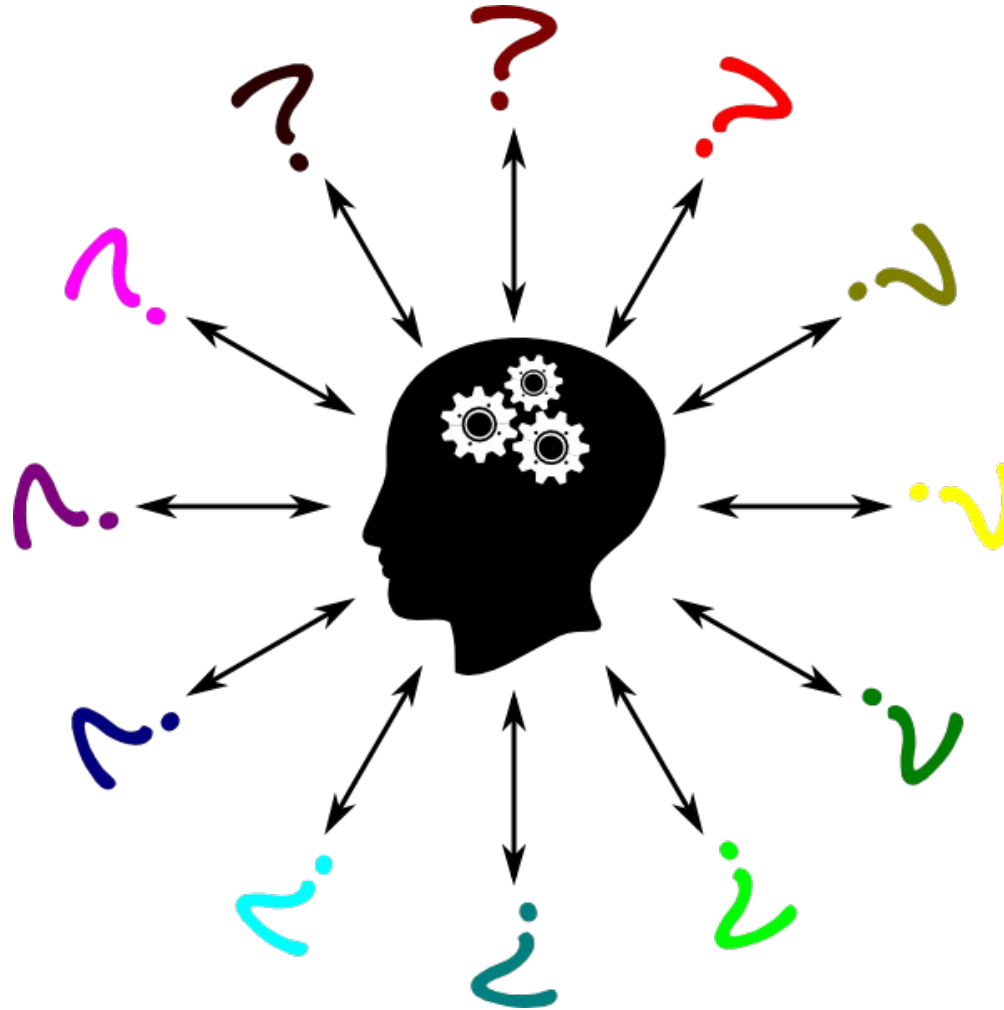


What do we know about Carnaby's Cockatoo?

- Share what you wrote down with your group and combine your knowledge to make a bigger list.
- Be ready to share your ideas with the class



Add the things your class already knows about Carnaby's Cockatoo that are not on your page.



What don't we know yet?

- **What information do you think is missing?**
- **Are there other things we need to find out about?**
- **How will we do our research?**



RESEARCH: CARNABY'S COCKATOO

WebQuest

Description	Conservation Status
Threats	Range
	Nesting Habitat
Fun Facts	Feeding Habitat
	Diet
	Lifespan

Find information for each box using the information on the fact sheet or online at:

<https://blackcockatoorecovery.com/cockatoos-and-animals/black-cockatoos/carnabys-cockatoo/>

Carnaby's Cockatoo Doodle Notes:

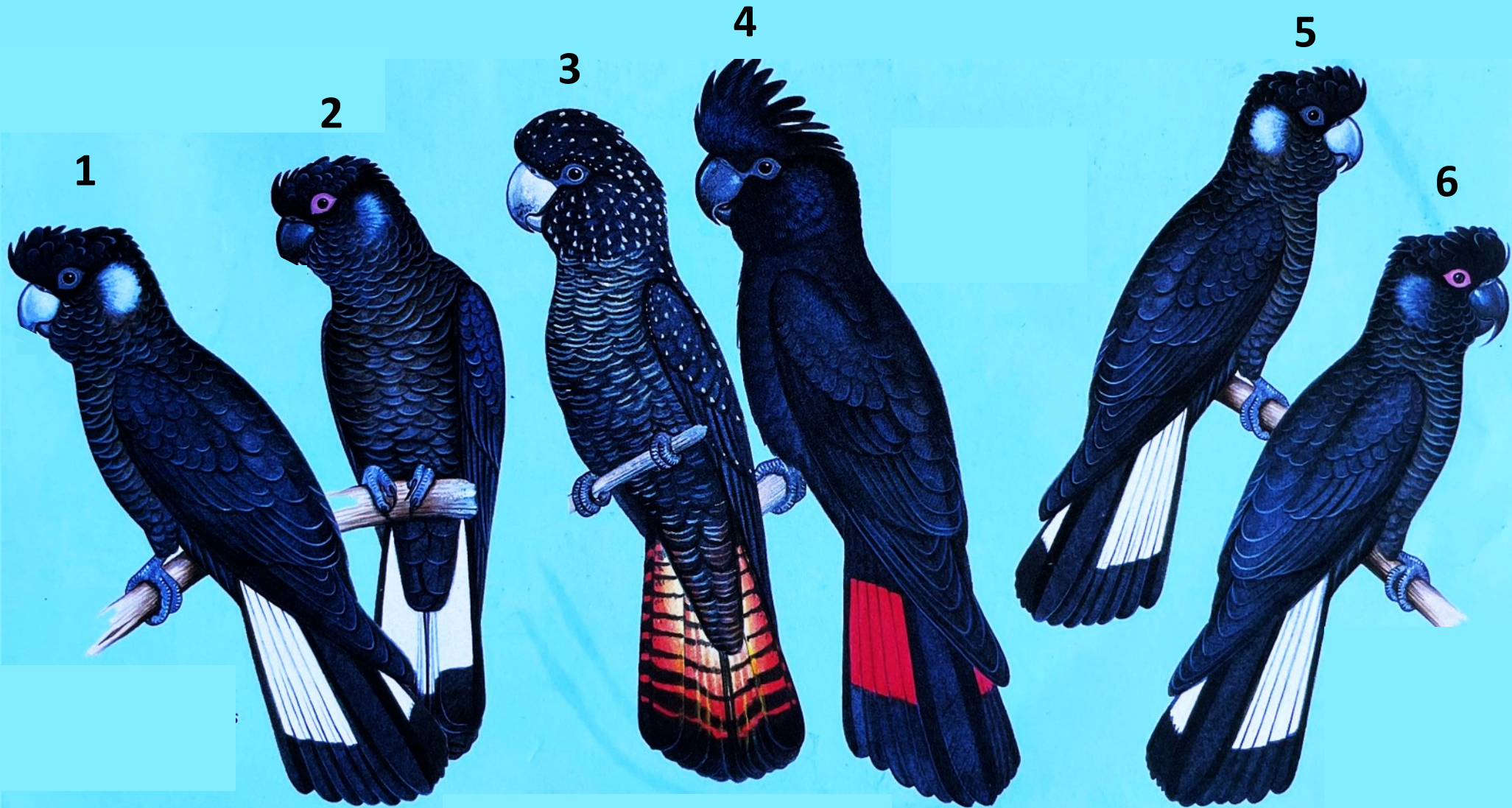
The diagram illustrates the layout of the 'Doodle Notes' worksheet. It consists of three identical rows. Each row starts with a 'Word' box at the top. An arrow points from the 'Word' box to a 'Definition:' box on the left and a 'Drawing:' box on the right. A second arrow points from the 'Definition:' box to the 'Drawing:' box. A third arrow points from the 'Drawing:' box back to the 'Word' box. A small illustration of a Carnaby's Cockatoo is shown on the right side of the diagram.

Doodle Notes

Choose 3 keywords and fill in the worksheet with the definitions and a drawing.

<https://www.blackcockatoorecovery.com/wp-content/uploads/2016/02/Fact-sheet-Carnabys.pdf>

Which Cockatoo is which?



Black Cockatoos of Western Australia

Carnaby's Cockatoo

1

2



Carnaby's Cockatoo
Zanda latirostris
(Female left, male right)

Forest Red-tailed
Black Cockatoo

3

4



Forest Red-tailed
Cockatoo
Calyptorhynchus naso
(Female left, male right)

Baudins Cockatoo

5

6



Baudin's
Cockatoo
Zanda baudinii
(Female left, male right)

What is a Carnaby's Cockatoo?

The Carnaby's Cockatoo is endemic (found only) in Western Australia.

The species is named in honour of naturalist Ivan Carnaby.

People in Perth recognise this iconic species by its white tail and 'wee-loo' call.



Distribution of Carnaby's Black Cockatoo

‘Ngoolark’ is a Noongar name for me



Photo by Karen Riley

What does a Carnaby's Cockatoo look like?

- tail feathers are solid black with broad white bands and black tips.



Photo by Molly Spaulding

What does a Carnaby's Cockatoo look like?

- mostly black, with narrow white scalloping on the edges of dark feathers.
- a clear patch of cream-white feathers on its cheek.



Photo by Molly Spaulding

What does a Carnaby's Cockatoo look like?

- longer feathers on their head form a short crest that can be raised and lowered



Photo by Molly Spaulding

What does a Carnaby's Cockatoo look like?

Its strong beak is shorter and broader than the closely related Baudin's black cockatoo (*they are quite difficult to tell apart*).

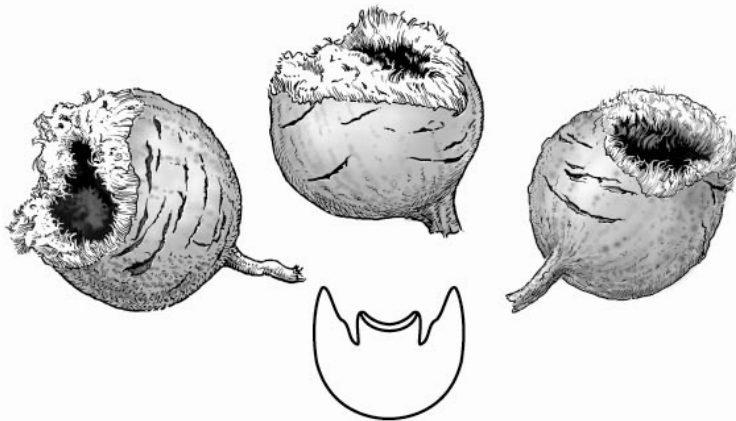


Carnaby's Cockatoo

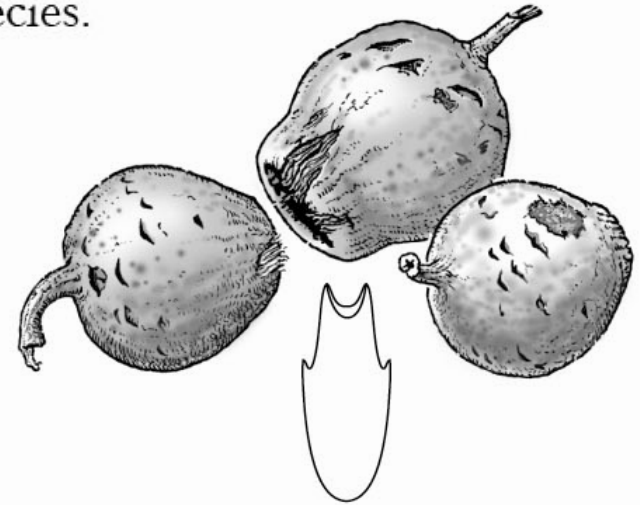
Baudin's Cockatoo

Beak shape and chewed Marri nut ID

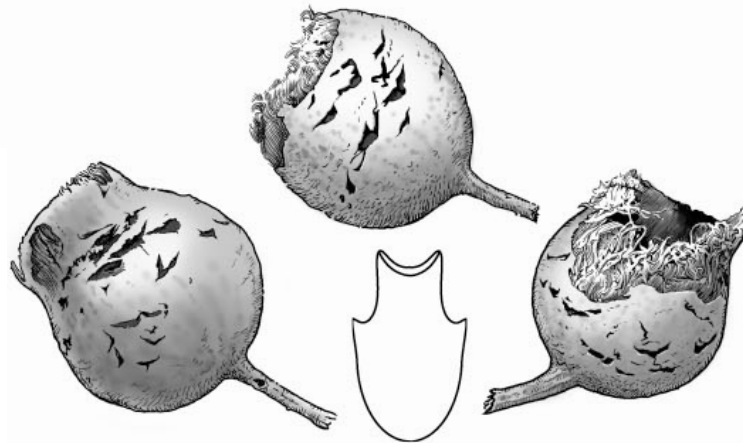
Chewed Marri nuts with end-on view of lower mandible of each species.



Forest Red-tailed
Black Cockatoo



Baudin's Cockatoo



Carnaby's Cockatoo

Carnaby's Cockatoos grow to 53–58 cm in length with approximately 100cm wingspan, and weigh between 520–790 grams.



Photo by Molly Spaulding

Adult females:

white beak, grey eye-rings & cheek patches that are whiter/brighter than males.

Adult males:

dark grey beak, smaller greyer cheek patches & pink eye-rings. Legs and feet are also darker than females.

Carnaby's Cockatoo are known to mate for life.



Photo by Zoe Kissane

Juveniles (*young Carnaby's Cockatoo that have just learned to fly*) are as big as their parents, but can be distinguished by their constant calls – begging for Mum or Dad to feed them!



Photo by Molly Spaulding

Where do they live?

From late February to June
Carnaby's Cockatoo are
seen foraging (feeding) on
the Swan Coastal Plain,
mid- west and south coast,
often in and around pine
plantations and Banksia
woodlands.



Photo by Molly Spaulding

Where do they live?

From July to January they migrate to the Wheatbelt to breed (lay eggs and hatch their nestlings).

Here they need water, food and trees old enough to have formed big hollows inside where birds can make a safe nest. Only very old trees have big hollows inside.



Photo by Molly Spaulding



Breeding doesn't start until they are 3 to 4 years old.

They breed mainly in old smooth-barked eucalypts like Wandoo and Salmon Gum.

Photo by Karen Riley



But there is a
problem!

Once seen in flocks of
thousands that blackened
the sky like rain clouds,
Ngoolarks are now listed as
'Endangered' by the
International Union for the
Conservation of Nature
(IUCN).

Population Decline

It is estimated that the population of Carnaby's Cockatoo has decreased by over 50% since European settlement.

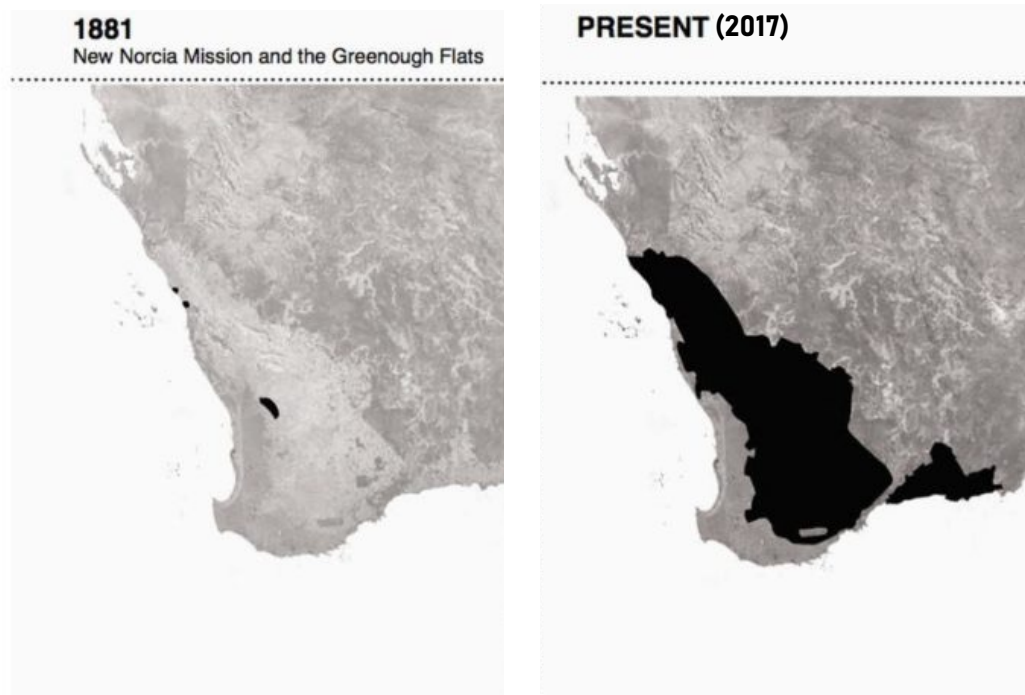


Why are Carnaby's Cockatoos disappearing?

The decline has been mainly caused by a loss of habitat and breeding sites.

Approximately 87% of Carnaby's cockatoo habitat in the Wheatbelt has been cleared of native vegetation since the 1950s.

The black areas below show land cleared for agriculture



Source: Hughes-d'Aeth (2017) <https://theconversation.com/writing-the-wa-wheatbelt-a-place-of-radical-environmental-change-76567>

Habitat Fragmentation

Clearing of bushland and habitat fragmentation is the greatest threat to Carnaby's cockatoos. It means they need to travel further to find enough to eat and may not find enough food for themselves and their young.



Images: Google Earth

Vehicle Strike

Death or injury from motor vehicle strikes is unfortunately a major cause of death and injury on the Swan Coastal Plain.

Carnaby's cockatoos feed in native bushland along the side of roads and drink water from potholes.

Due to their size, they need time to take off.... More time than it takes for a car to hit them!



Photo by Molly Spaulding





Disease

Black cockatoos can become ill from drinking water that is not fresh and clean. One disease has been discovered recently in Carnaby's Cockatoo, which paralyses their hind legs so they cannot stand or walk. It is called 'Cockatoo Hindlimb Paralysis Syndrome' (CHiPS). Wildlife vets are investigating its cause and what can be done to protect the birds.

Illegal Shooting

It is against the law to deliberately kill any threatened wildlife.

When there is not enough natural food left, hungry black cockatoos may be attracted to nuts in orchards. Instead of putting nets over their crops to stop the birds, orchardists may get out their gun.

To help protect the birds, there is a fine of up to **\$400,000** for shooting a black cockatoo.



Photo by Molly Spaulding

Poaching

Due to the rarity of Carnaby's Cockatoos, poaching is an issue.



Photo by Molly Spaulding

What can be done to save them?



Photo by Karen Riley

What can be done to save them?

- **Change ‘net loss’ of habitat to ‘net gain’, by planting more food trees and protecting what’s left**
- Plant black cockatoo food trees in your garden (e.g. banksia, hakea, macadamia)
- Put out a water source, even a small bird bath – and keep it full of clean water
- Get involved in council-run planting days to plant more food for black cockatoos
- Become a Citizen Scientist! - join the BirdLife Australia annual “[Great Cocky Count](#)”
- Report injured black cockatoos to the rescue service at Kaarakin Black Cockatoo Conservation Centre or DBCA’s wildlife helpline
- Learn more about black cockatoos
- Write to your council and Ministers and ask them to save Carnaby’s Cockatoo by protecting their habitat

Photo by Karen Riley

Kahoot!

Test your class knowledge with this
Carnaby's Cockatoo Quiz

<https://create.kahoot.it/share/carnaby-s-cockatoo-quiz/6c6a1cba-347a-4757-8bc5-2e008d6034fc>

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keepcarnabysflying.org.au



carnabys@birdlife.org.au

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