

Keep Carnaby's Flying – Ngoolarks Forever

Topic 2 Lesson Plan

Lesson T2.1 (Y3-7) A Ngoolark Year: Biology & Life Cycle of Carnaby's Cockatoo

- Exploring the life cycle and habitat needs of Carnaby's Cockatoo over a year.
- Suitable/adaptable for Years 3– 5

Resources

- NF-T2P y3-7 Biology & Lifecycle.pdf Slides for projection
- NF-T3W Cloze & word search y3-5.pdf Worksheet
- NF-T5W Persuasive Text Planner y3-7 Worksheet

Lesson Plan

- *Slide 3* : Project the slides (*NF-T2P y3-7 Biology & Lifecycle.pptx*). At slide 3:

This is a Carnaby's Cockatoo

- Who has seen one of these?
- When did you see it/them?
- Where were they?
- What were they doing.

A Noongar name for Carnaby's Cockatoo is "Ngoolark".

- What other names have you heard them called?

(Note: [Noongar](#) means 'a person of the south-west of Western Australia,' and is the name for the 'original inhabitants of the south-west of Western Australia' one of the largest Aboriginal cultural blocks in Australia stretching from Geraldton on the west coast to Esperance on the south coast.)

- *Slide 4*: Class Discussion/brainstorm
 - What do Carnaby's Cockatoos need to survive?
 - Use think/pair/share or facilitate a whole of class brainstorm to gather as many different ideas. Challenge the students to provide detail and reasons for their answers. Try and generate a fairly comprehensive list of ideas.
- *Slide 5*: Habitat

How did we go with our class list?
All animals need HABITAT to survive.
Habitat is the natural home or environment of an animal, plant, or other organism.
Habitat provides FOOD, water and shelter.
- *Slide 6*: Some animals have different needs at different times. Ask:
 - What is Breeding?
 - Students can look up a definition of breeding and write it in their workbooks.
 - What do Carnaby's Cockatoos need for breeding habitat?
 - What is Foraging?
 - Students look up the meaning of foraging and write it in their workbooks.
 - What do Carnaby's Cockatoos need for foraging habitat? How is it different to breeding habitat?
 - What is Roosting?
 - Students can look up a definition of roosting and write it in their workbooks.
 - What do Black Cockatoos need for roosting?



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- *Slides 7 -11:* Read through these slides together as a class and ask the students questions as you progress. Suggested questions are provided below. Bolded words are keywords that appear in the cloze worksheet.

Carnaby's Cockatoos need different habitat at different times.

- What habitat do you think they need for breeding?
- What might they need for food?
- What does 'roosting' mean?

Breeding Season

- Ngoolarks live in eucalypt woodlands with **tree** hollows for breeding between July to December.
- Carnaby's Cockatoo (Ngoolarks) make nests in tree hollows. Only certain types of native trees form hollows for black cockatoos, and they only do that when they are *at least* 200 years old.
- Baby Carnaby's Cockatoos are usually born in a **nest** in the hollow of a tree, and that is their **home** until they have 'fledged' and are ready for **flight**. Their mother and her **mate** fly with them and **lead** them to the coastal feeding grounds, and back to the breeding habitat the next year.

Non-breeding Season

- Ngoolarks are seen **flying** through the **sky** from breeding habitat to coastal areas between January and July because there is more **water** to drink, and more **nuts** and **seeds** to eat.

- *Slide 12 - 13:* Introduce worksheet revising key ideas from the slides
 - Give out the worksheet *NF-T3W Cloze & word search y3-5*
 - ask students to have a go at completing this with what they have just learned.
 - Then they can complete the word search, and find the hidden word.
- *Slide 14 - 15:* Class discussion - Carnaby's Cockatoo an endangered species.
 - One reason for this is habitat loss and fragmentation (land clearing for farming or urbanisation).
 - We need to protect old eucalypts in our forests. Without trees that have nest hollows black cockatoos cannot lay eggs and raise chicks, and they will become extinct.
 - We need to protect bushland in feeding areas to make sure there will be enough food and water for Black Cockatoos.
 - Understanding is habitat loss
 - What would happen if all the houses where we live were suddenly removed?
 - What if there our shops were removed – where would we get our food?
 - Unfortunately, because humans have cleared so much nesting and feeding habitat sometimes a Carnaby's Cockatoo family can return to an area to find that their home is **gone**.



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- *Slide 16 - 17: Can we reverse habitat loss?*
 - Think of some things that could be done in your area or around your school to provide foraging habitat for Carnaby's Cockatoos.
 - Hint: Food plants and water stations (must be permanently full and clean).
 - Ask students to think of other reasons Carnaby's Cockatoo have become endangered.
 - **Answers:** Predation; vehicle strike (being hit by cars); illegal shooting, disease; and poaching.
 - What do you think could be done to protect Carnaby's Cockatoos from some of these other threats?
- *Slide 17: What Can We Do?*
 - What else can be done to protect Carnaby's Cockatoos and their habitat.
 - **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)
 - 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 by protecting their habitat
 - Create an action plan or a list of suggestions that you think could be done around your school or your community.
 - Send this to your Principal and your local council and ask them if they can help protect this endangered species.
 - You may wish to use this as the basis for a persuasive text exercise (use *NF-T5W Persuasive Text Planner y3-7.pdf*)

