

CLIMATE CHANGE LESSON PLAN - Birds and Climate Change For Grade 5

Prepared by Elizabeth Martens

Description of Activity: Learners discuss special characteristics of birds. They focus particularly on beak shapes to determine the type of food various birds eat. Learners then determine what the effects would be on the birds if their habit was changed due to climate change especially what they would eat. Learners complete the bird poster by correctly identifying each bird using a bird identification book and colouring in the birds according to their true colourings. They then determine, according to their previous findings, which of these birds would be most likely to be affected by climate change.

This lesson should be completed over 3 40 min lessons or over 1 week.

Learning Area/s: Natural Science	Learning Outcomes: NS: LO 1, & LO3
Assessment Standard/s: LO1: AS2 Learner conducts investigations and collects data and communicates findings LO2 AS2 Learner crease own categories of objects and organisms	Subject Integration: Art and Culture, Social Sciences
Background knowledge required by learners: An understanding of how climate change works, how to calculate a carbon footprint. The role of individuals within a business, primary and secondary products, the purpose of advertising.	Materials Needed: Straw, tweezers, nutcracker, sieve, braai tongs, kebab skewer Appendix A (Appendix B answers to Appendix A) Paper, pencil crayons, bird identification book
<p>Activity Procedure:</p> <p>Lesson 1: Educator introduces the topic of birds to the learners. Ask learners what they know about birds; Are they aware of any special things that birds are capable of doing such as migration, preening their feathers, some birds are parasitic as they lay eggs in other birds nest and then leave their eggs for another bird to incubate and rear; the different beaks and feet of birds; why some male birds are brightly coloured but the females are not; the way in which different species of birds build their nests, etc.</p> <p>Discuss the different habitats birds live in and the different types of food they eat. Bring out the straw, tweezers, nutcracker, sieve, braai tongs and kebab skewer. Use these to demonstrate the different types of beaks that are adapted to the different types of food birds eat. For example the seed eating birds such as the house sparrow has a beak like a tweezer as it picks up seed from the ground; the flamingo has a beak like a sieve as it filters the water for tiny organisms by swaying it beak from side to side in the water; the braai tongs represent a ducks bill which is flat but rough on the inside to grip its food, etc.</p> <p>Learners can draw the different shape beaks and write nest to each beak what that bird would eat.</p>	

Lesson 2: Discuss with learners what would happen if the habitat the birds usually live in becomes affected by changes such as weather patterns or temperature changes. For example if a bird needs a wetland environment to survive and the wetland gradually dries up as temperatures continue to rise and the rainy season is shortened. What would happen to the food supply for birds if their habitat changes. Some birds migrate for the reason of finding food, would it mean that more birds would start migrating if their habitats are severely affected by climate change. Learners must write down some of the possibilities that could occur to birds as a result of climate change.

Lesson 3: Learners are given the bird poster (Appendix A) to colour in and name the birds correctly. Learners are also given copies of bird identification books for them to identify the birds correctly and to colour them correctly. Learners then review the poster and refer to their findings from lesson 2 write down how some of these birds may be affected by climate change.

Assessment Method: Teacher assessment of posters and notes made by learners as to what affects climate change can have on some of these bird species
Teacher assesses the learner on ability to investigate and collect information from the bird identification book

BLACK-HEADED ORIOLE

I whistle from the tops of trees in forested areas and eat insects and wild berries.

FISCAL SHRIKE

I like to store my prey on sharp thorns or twigs.

CAPE SPARROW (Male)

I am very tame and love breadcrumbs and grain, but I also eat insects.

CAPE ROBIN

I love to bathe my bright chest in the bird-bath.

CAPE WHITE-EYE

Spot my white eye-ring. I eat aphids, nectar and fruit.

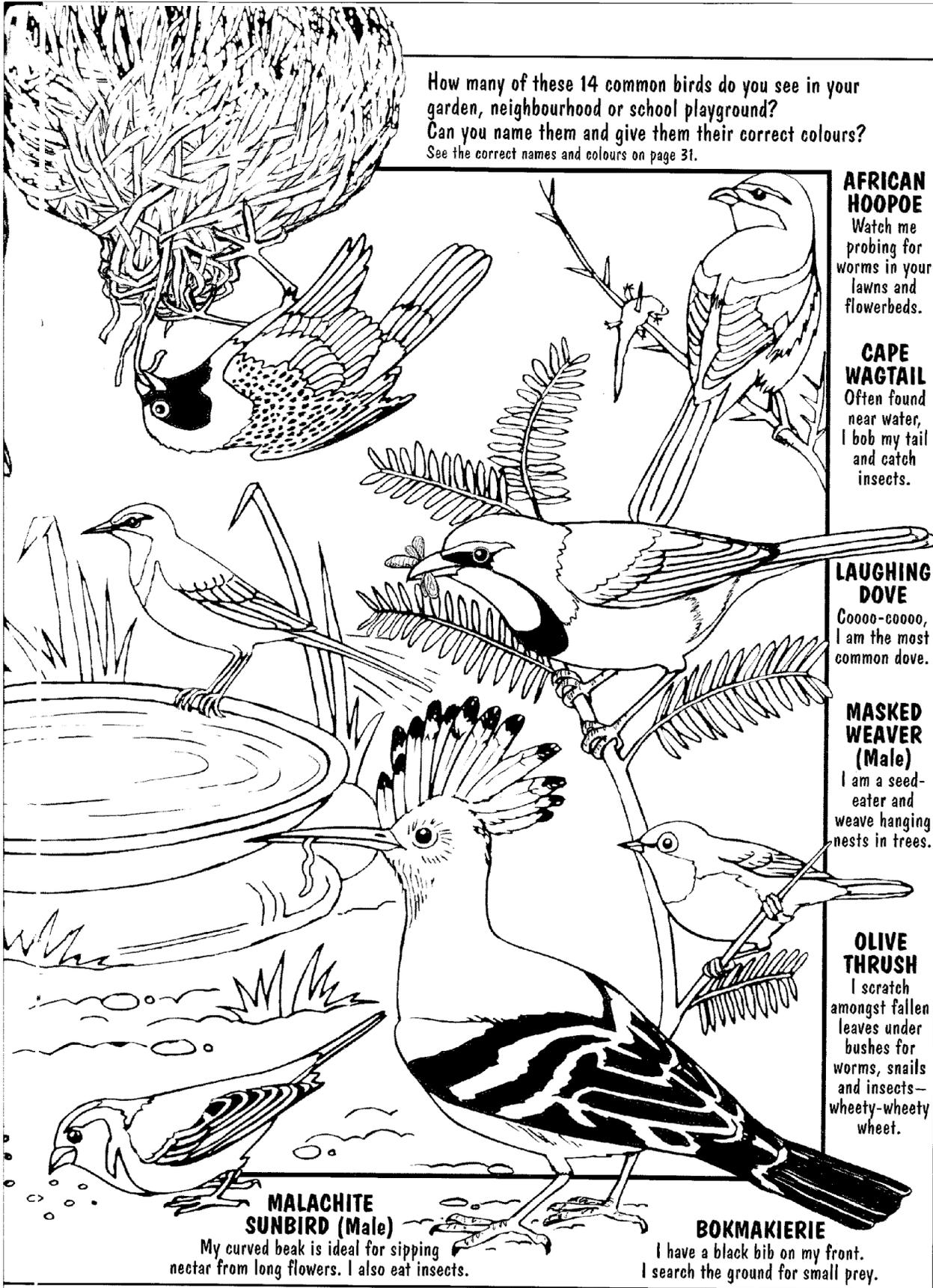
BLACK-COLLARED BARBET

Krrr-krrrr, too-puddly, too-puddly. I love to eat fruit and berries.

PARADISE FLYCATCHER

I perch in large, leafy trees and fly out to catch passing insects.





How many of these 14 common birds do you see in your garden, neighbourhood or school playground?
 Can you name them and give them their correct colours?
 See the correct names and colours on page 31.

AFRICAN HOOPOE
 Watch me probing for worms in your lawns and flowerbeds.

CAPE WAGTAIL
 Often found near water, I bob my tail and catch insects.

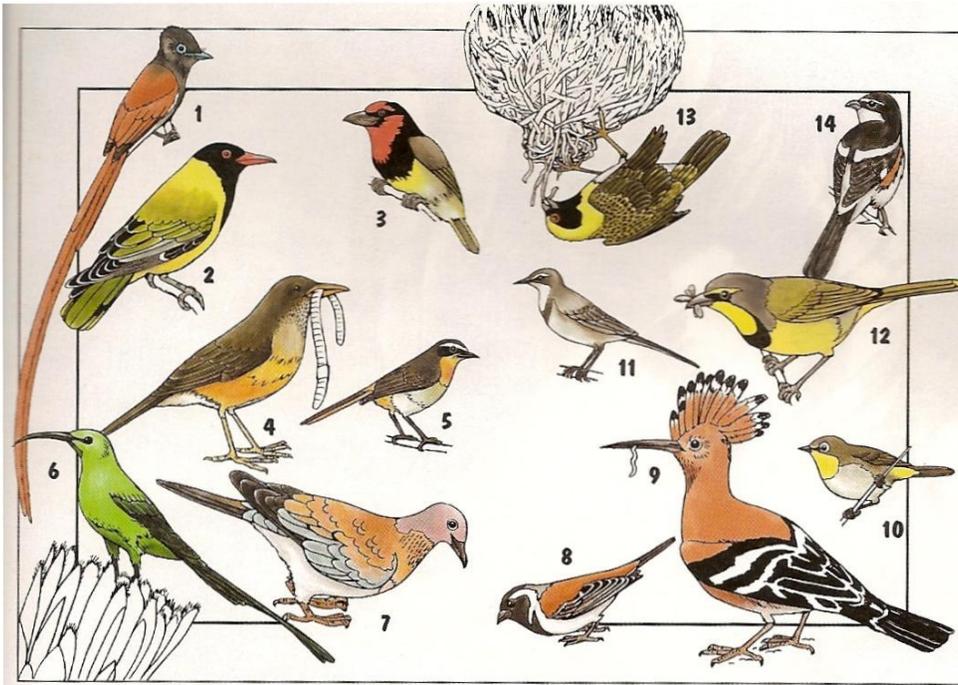
LAUGHING DOVE
 Coooo-coooo, I am the most common dove.

MASKED WEAVER (Male)
 I am a seed-eater and weave hanging nests in trees.

OLIVE THRUSH
 I scratch amongst fallen leaves under bushes for worms, snails and insects—wheety-wheety wheet.

MALACHITE SUNBIRD (Male)
 My curved beak is ideal for sipping nectar from long flowers. I also eat insects.

BOKMAKIERIE
 I have a black bib on my front. I search the ground for small prey.



1. Paradise Flycatcher
2. Black-headed Oriole
3. Black-collared Barbet
4. Olive Thrush
5. Cape Robin
6. Malachite Sunbird
7. Laughing Dove
8. Cape Sparrow (Male)
9. African Hoopoe
10. Cape White-eye
11. Cape Wagtail
12. Bokmakerie
13. Masked Weaver (Male)
14. Fiscal Shrike