

NEARBY NATURE – INVESTIGATING ROCK DOVES

Grade 2, Science & Technology, Language Arts

Source: Adapted from *Nearby Nature Study* by Jessica Pelow, B.A., B.Ed, M.E.S, Faculty of Environmental Studies, York University

DESCRIPTION

This lesson will introduce students to the world of birds by exploring physical and behavioural characteristics of rock doves, better known as pigeons. Students will observe them in their natural habitat and participate in hands-on activities, which can be extended for a more in-depth exploration. The activities can be modified and adapted for different grade levels and learning styles.

CURRICULUM LINKS – SCIENCE AND TECHNOLOGY/LANGUAGE ARTS, GRADE 2

Science and Technology, Understanding Life Systems:

Growth and Changes in Animals

Overall Expectations: 2, 3

Specific Expectations: 2.2, 2.5, 2.6, 2.7, 2.8, 3.1, 3.2, 3.3

Language Arts, Writing

Overall Expectation: 1

Specific Expectations: 1.1, 1.2, 1.3

PLANNING NOTES

Background Information

The **rock dove** is a common bird well adapted to urban **ecosystems**. While their colours vary, they usually have orange eyes, red feet, blue-gray feathers, white at the base of a short **bill**, and a green or purple neck. They spend the day flying, **preening** (grooming) feathers, calling to one another by '**cooing**', fluffing up feathers to stay warm, and **gleaning** (gathering) food from the ground. Their diet consists of seeds, grains, fruit, and occasionally insects. At night, the birds will **roost** (rest) with the **flock**. When feeling threatened, rock doves may puff out neck feathers, bow, and **strut** in a circle. If startled by a **predator** or passerby, the birds are known to 'grunt' and the entire flock may suddenly take flight. Main predators of the rock doves are hawks, falcons, owls, raccoons, and cats.

Key Terms

The following terms can all be found in bold. They include: rock dove, ecosystems, bills, preening, cooing, gleaning, roost, flock, strut, and predator.

Materials

- Nature study journals - full class set
- Pencils - full class set
- *Bird Photos* (Appendix 1)
- *Rock Dove Behaviour Cards* (Appendix 2)

Learning Skills & Work Habits

Independent work, collaboration, observation, critical thinking, creative thinking

Recommended Class Time

3-5 periods

TEACHING/LEARNING STRATEGIES

Indoor/Ignite

- 1. Whole Class:** Ask students if there are birds near their school and/or home. What do they know about these birds? What do these birds look and sound like? Ask students to describe their behaviour and anything special that they noticed.
- 2. Whole Class:** Introduce the term 'ecosystem' and discuss how birds help keep our ecosystem healthy. Ask students to think about why birds are important to their lives and share their ideas with a partner. To further the discussion, ask students how birds help plants grow and if they provide food for other animals.
- 3. Pair Share:** Show the students photos of three different birds (Appendix 1) and with a partner, ask them to identify common features (i.e., bill, feathers, feet, tail, wings, eyes, etc.). Invite students to share their findings with the class. Then, ask if they can identify bird #3 (rock dove/pigeon) and reveal that they will be getting to know this bird throughout the week.
- 4. Whole Class:** Create a class Knowledge Wonder Learn (KWL) chart and ask students to contribute what they already know about rock doves and what they would like to know. Students can also keep track of their ideas and questions in nature study journals.

Outdoor/Explore

- 1. Group Work:** Once outside, introduce behaviour traits of rock doves, including gleaning, preening, roosting, calling, flying, fluffing feathers, puffing out neck feathers, and strutting. Divide the class into small groups and give them each one *Rock Dove Behaviour Card* (Appendix 2). Give the groups time to create a short skit, with sounds and actions that demonstrates the behaviour on their card. Ask each group to present while their classmates guess which behaviour they are acting out. Each group will also explain why/when these behaviours occur. (This can also be done indoors.)
- 2. Individual Exploration:** After learning behaviour traits, students will observe rock doves outside and record what they notice in their nature study journals. Discuss guidelines for scientific observation, such as being quiet, careful, and respectful, and emphasize the importance of including the date, time, and weather in each entry. Encourage students to use a combination of pictures and words in their observations.

**Note: If rock doves are not present, invite students to observe another bird species in or near the schoolyard or visit a local park.*

Indoor/Reflect

- 1. Individual Exploration:** Using their observations, new information, and imaginations, ask students to write a short story about a day in the life of a rock dove. Their stories should include some of their new vocabulary, as well as pictures. As they write and develop their story, students can share their ideas and drafts with a partner.

Consider providing students with the following questions:

- How do you think rock doves start their day?
- What is it like to fly?
- How does it feel to fly during strong wind or in the rain?
- How do rock doves stay warm at night?
- Where is their favourite place to roost in our neighbourhood?
- What is their favourite food? Why?
- What predators do rock doves watch out for?

- 2. Class Reflection:** As a class, complete the KWL chart with the information students learned from observing rock doves and writing about them. Consider adding another W column for what students still want to know. Students can continue adding to their nature study journals as they discover more and regular observation periods can be incorporated into class and outdoor time.

DIFFERENTIATED INSTRUCTION

This learning activity can be adapted to meet a variety of learning styles and specific needs. The story may be done in pictures only and then explained orally or as a 'fill-in-the-blanks' assignment.

ASSESSMENT OPPORTUNITIES

Anecdotal evidence can be collected throughout the learning activity to identify gaps in knowledge or misconceptions to ensure they are addressed. Student understanding can also be assessed by examining the content of their observations and/or rock dove stories.

EXTENSIONS

Build Bird Houses: Construct birdhouses from recycled materials to hang in the schoolyard. Spend time observing birds visiting the feeder, particularly in winter months. Use nature study journals to record observations.

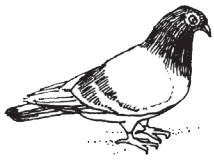
Rock Dove Storybook: Compile 'day-in-the-life of a rock dove' stories from students and create a rock dove storybook. Consider putting the book on display in the school library.

Birding Field Trip: Walk or take public transit to a local forest or wetland habitat to observe different bird species. Invite students to explore the habitat by listening and looking in trees or on the ground for birds as well as signs of their presence (i.e., nests, feathers, eggs, scat, etc.).

APPENDICES

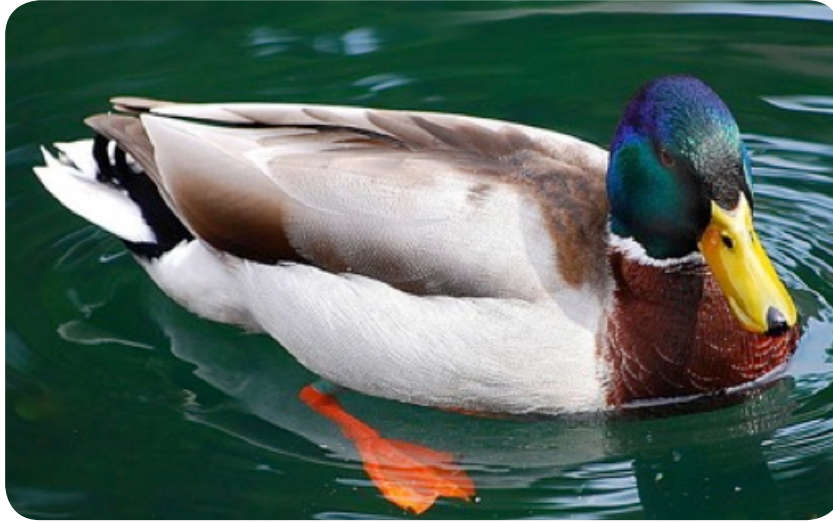
Appendix 1 - *Bird Photos*

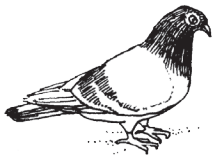
Appendix 2 - *Rock Dove Behaviour Cards*



APPENDIX 1
NEARBY NATURE - INVESTIGATING ROCK DOVES
BIRD PHOTOS

Photo Sources: WikiCommons - commons.wikimedia.org





APPENDIX 2
NEARBY NATURE - INVESTIGATING ROCK DOVES
ROCK DOVE BEHAVIOUR CARDS

Photo Sources: WikiCommons - commons.wikimedia.org

Gleaning

Definition: Getting food from the ground with their bills.

Reason: Like humans, rock doves need food for energy!



Preening

Definition: Taking care of feathers using their bills.

Reason: Helps them fly and keeps them clean.



Roosting

Definition: Resting.

Reason: Gives them energy for activities like flying, eating, and preening.

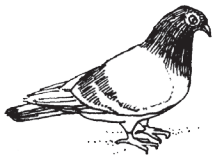


Fluffing Feathers

Definition: Puffing out their feathers.

Reason: Keeps rock doves warm in winter.





Flying

Definition: Moving in the air.

Reason: Way to move around.



Calling

Definition: Sound a rock dove makes.

Reason: To talk to each other and with other animals.



Strutting

Definition: Walking, moving the head back and forth.

Reason: Helps rock doves see better when moving.



Puffing out Neck Feathers

Definition: Fluffing up neck feathers.

Reason: Can happen when scared to look bigger.



Photo: Mike Pennington