Lesson 1.5
Investigating Animal Habitats
Lesson Overview

Students learn about the unique relationship between animals and the food resources available in their habitats. First, students view a series of habitat images and decide which habitats are best suited for particular animals. Then, partners use the reference book, *Handbook of Plants*, to look for animals that live in certain habitats. Students move to different habitat stations in the classroom in order to find the habitat that is best suited for a particular animal, concluding that animals can only live in a place that provides the food they need for survival. They are also introduced to an Explanation Language Frame to help them articulate the relationship between the food an animal eats and the habitat where that animal lives. The teacher adds new information to the What Scientists Do chart, supporting students as they reflect on how they are working as scientists. The purpose of this lesson is to further students’ understanding of the relationship between an animal and the habitat in which it lives.

**Anchor Phenomenon:** There are no monarch caterpillars in the Mariposa Grove community garden since a vegetable garden was planted.

**Investigative Phenomenon:** Animals live in different habitats.

**Students learn:**

- Animals can only live in a place that has the food they need.
- Different animals eat different food, so they live in different places.
- Scientists read to find out more information and answer their questions.
Introducing the Reference Book

The teacher introduces the reference book, and then students explore the habitats shown in it to find what eats pine bark and water lilies.

Instructional Guide

1. Invite ideas for how to learn about forest animals. Project the image of the forest used in the previous activity.

We observed many trees in this habitat. Many of you thought that an animal that eats the bark of pine trees might live here because it would have food to eat.

Do you observe any other plants in this forest habitat? [The green plants on the ground or in the water.]
These plants are floating in the water. They are called water lilies. I wonder if an animal that eats water lilies might also live here. How could we find out what kinds of animals eat pine trees or water lilies?

[Observe animals in the forest or around the pond. Read a book about animals in the forest.]

2. Display the front cover of *Handbook of Plants* big book.

To answer their questions, sometimes scientists read books. Today, we will read a book to help us figure out why an animal can live where it does.

This book is different from other books we have read together. It is a reference book. Instead of reading the book from beginning to end, you can read parts of the book to find out about something you want to learn.

Read the reference book title aloud.

*Handbook of Plants*. What kind of information do you think we can gather from this book?

[What plants look like and what colors they are. We can learn more about plants.]

3. Revisit setting a purpose.

Remember that scientists set a purpose before reading to help them think about what they want to find out when reading something. Our purpose is to look for animals that eat the plants that grow in the forest habitat—pine trees and water lilies.

Project the image of pine trees and water lilies. Leave this image up for the rest of the activity.

I am going to leave this picture of the pine trees and water lilies up so you can remember what they look like.

4. Model how students will find an animal that eats a specific plant. Flip through several pages of the book.
In this book, I notice that there are many different plants. Each page has a picture of the plant and a picture of an animal that eats the plant.

Turn to the barrel cactus entry on pages 14 and 15. Point to the pictures of the cactus and the squirrel on these pages.

On this page, I see a squirrel eating the cactus fruit. If I wanted to find out what animals eat cactus, I would want to read this page more carefully.

5. Lead the picture walk. Let students know you will turn through the pages of the book so they can see the pictures.

Our purpose is to look for animals that eat plants that grow in the forest habitat with pine trees and water lilies. When you find the page about pine trees or water lilies, raise your hand.

Starting at page 15, slowly turn through the pages one by one. When students raise their hands at page 22, acknowledge they found the pine tree, and continue flipping until page 29, acknowledging they found the water lily.

6. Turn back to page 23 of Handbook of Plants big book. Read aloud the text below the animal picture on the bottom-right section of the page. Repeat the process for the animal caption on page 29.

7. Reflect on what animals might live in the forest habitat.

Our purpose for reading was to look for animals that eat pine trees and water lilies. What did we learn from reading Handbook of Plants?
[Beavers eat pine tree bark. Moose eat water lilies.]

Point to the projected image of pine trees and water lilies.

The information in this book lets us figure out that beavers and moose can live in this forest habitat because the food that they eat grows there.
Teacher Support

Background

Literacy Note: About Reference Books
Reference books provide in-depth information about specific topics and are typically read for particular purposes. For this reason, students do not read every section in reference books, nor do they read reference books from beginning to end. Rather, they search for the information they need and then read the relevant sections carefully. In this lesson, students will be introduced to the table of contents, introduction, and glossary and will be given the opportunity to explore the book. This will prepare students to use the reference book in later lessons in this unit, as a scientist might, and it encourages students to read complex text both purposefully and carefully.

Background

About the Book: Handbook of Plants
Handbook of Plants is the reference book for this unit. It includes information about nine different kinds of plants as well as introductory material about plant growth, seeds, leaves getting light, and roots getting water. Students use the book to look up information throughout the unit. First, they use the book to find out what animals and plants can live where, which helps illustrate the concept of habitat. Organisms can only live in a place that has what they need. Specifically, students learn that monarch butterflies can only live in a place that has milkweed. Students use the reference book again, as they are setting up the seeds to grow in their classroom, to learn more about how plants grow. They also look up radishes and their roots. The reference book is used again to discover that plants need light and which plant parts are important for getting that light. Students then look at diverse leaf types depicted in the book. Handbook of Plants is used as a Shared Reading throughout the unit.
Introducing the Reference Book

The teacher introduces the reference book, and then students explore the habitats shown in it to find what eats pine bark and water lilies.

Instructional Guide

1. Invite ideas for how to learn about forest animals. Project the image of the forest used in the previous activity.

- Observamos muchos árboles en este hábitat. Muchos de ustedes pensaron que un animal que come la corteza de los pinos podría vivir aquí, porque tendría comida para comer.

- ¿Observan algunas otras plantas en este hábitat del bosque? [Las plantas verdes sobre la tierra o en el agua].
2. Display the front cover of *Handbook of Plants* big book.

Para responder sus preguntas, a veces los científicos leen libros. Hoy leeremos un libro para ayudarnos a averiguar por qué un animal puede vivir donde vive.

Este libro es diferente a otros libros que hemos leído juntos. Es un libro de referencia. En vez de leer el libro desde el principio hasta el final, pueden leer partes del libro para averiguar sobre algo que quieren aprender.

Read the reference book title aloud.

*Manual de plantas.* ¿Qué tipo de información piensan que podemos reunir de este libro? [Cómo son las plantas y de qué colores son. Podemos aprender más acerca de las plantas].

3. Revisit setting a purpose.

Recuerden que los científicos definen un propósito antes de leer, para ayudarles a pensar acerca de lo que quieren averiguar cuando lean algo. Nuestro propósito es buscar animales que comen las plantas que crecen en el hábitat del bosque: pinos y lirios acuáticos.

Project the image of pine trees and water lilies. Leave this image up for the rest of the activity.

Voy a dejar esta imagen de los pinos y lirios acuáticos puesta para que puedan recordar cómo son.

4. Model how students will find an animal that eats a specific plant. Flip through several pages of the book.
En este libro, noto que hay muchas plantas diferentes. Cada página tiene una imagen de la planta y una imagen de un animal que come la planta.

Turn to the barrel cactus entry on pages 14 and 15. Point to the pictures of the cactus and the squirrel on these pages.

En esta página, veo una ardilla comiendo el fruto del cactus. Si quisiera averiguar qué animales comen cactus, debería leer esta página más detenidamente.

5. **Lead the picture walk.** Let students know you will turn through the pages of the book so they can see the pictures.

Nuestro propósito es buscar animales que comen plantas que crecen en el hábitat del bosque con pinos y lirios acuáticos. Cuando encuentren la página sobre pinos o lirios acuáticos, levanten la mano.

Starting at page 15, slowly turn through the pages one by one. When students raise their hands at page 22, acknowledge they found the pine tree, and continue flipping until page 29, acknowledging they found the water lily.

6. **Turn back to page 23 of *Handbook of Plants* big book.** Read aloud the text below the animal picture on the bottom-right section of the page. Repeat the process for the animal caption on page 29.

7. **Reflect on what animals might live in the forest habitat.**

Nuestro propósito para leer era buscar animales que comen pinos y lirios acuáticos. ¿Qué aprendimos al leer *Manual de plantas*?

[Los castores comen corteza de los pinos. Los alces comen lirios acuáticos].

Point to the projected image of pine trees and water lilies.

**árboles de pino y lirios acuáticos**

La información en este libro nos permite averiguar que los castores y los alces pueden vivir en este hábitat del bosque, porque la comida que ellos comen crece allí.