Audubon | NEW MEXICO

Home Activity Workbook

Backyard Habitat Explorer

Name: _____

Date: _____

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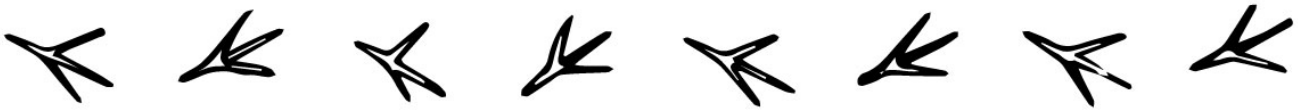
What is a habitat?

A plant or animal's **habitat** is a place that provides everything they need to survive like **food, clean water, shelter, and space** to move around. Just like your home or neighborhood, an animal's habitat has all the basic things that it needs to live and grow.



Activity #1 (Beginner): Habitat Investigation

Challenge: Look out your window or take a walk in your neighborhood to investigate the local habitat. First, collect your habitat's background information below. This information is important to understand the big picture. You can either estimate things like temperature or look it up online. Second, look for the different parts of a habitat and record your findings in the table on the next page.

Date: _____ **Time:** _____ **Temperature:** _____

Weather Conditions: _____

Name of the Habitat *(e.g., My backyard, Frenchy's Field, my neighborhood arroyo):*

_____

General Description of the Area *(what does this place look like? Tall trees along a street? One bush next to the front door?):*

_____

_____

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Task: Look around carefully for signs of animals and plants. What types of wildlife live here? Do you see tracks, scat (poop), feathers, nests, or dens/holes? What kinds of food, water, or shelter are available for the plants and animals that live here?
Write a list or draw all the things that you find and write them in the correct box.

Sources of Food	Sources of Water
Places to Shelter/Hide	**Evidence of Wildlife**

Activity #2 (Intermediate): Habitat Mapping

Challenge: Draw a map of an animal's habitat. Your drawing should include food, water, and shelter for whichever animal you choose. You can pick an animal who lives in your neighborhood, your favorite animal, or a different species that lives in New Mexico. You can also draw the habitat around your yard, balcony, or out your window.

Map-making tips: *You can draw your map as a landscape (like you're looking out at a picture) or from above (like a bird's or drone's perspective). Think about the size of the objects you are drawing compared to each other. Is your animal the same size as a building, half as big, or smaller?*

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Activity #3 (Advanced): Habitat Hero

Challenge: Choose an animal that might live in your neighborhood or could survive in that habitat. Look at your habitat map in Activity #2. Is there anything missing that would make it a better home for your animal? **What are 3 things you could add to your map, or the habitat outside your home, to make it better for wildlife?** Add your ideas to your Activity #2 drawing, or write them down below:

My animal is a(n) _____

Improvement #1:

Improvement #2:

Improvement #3:

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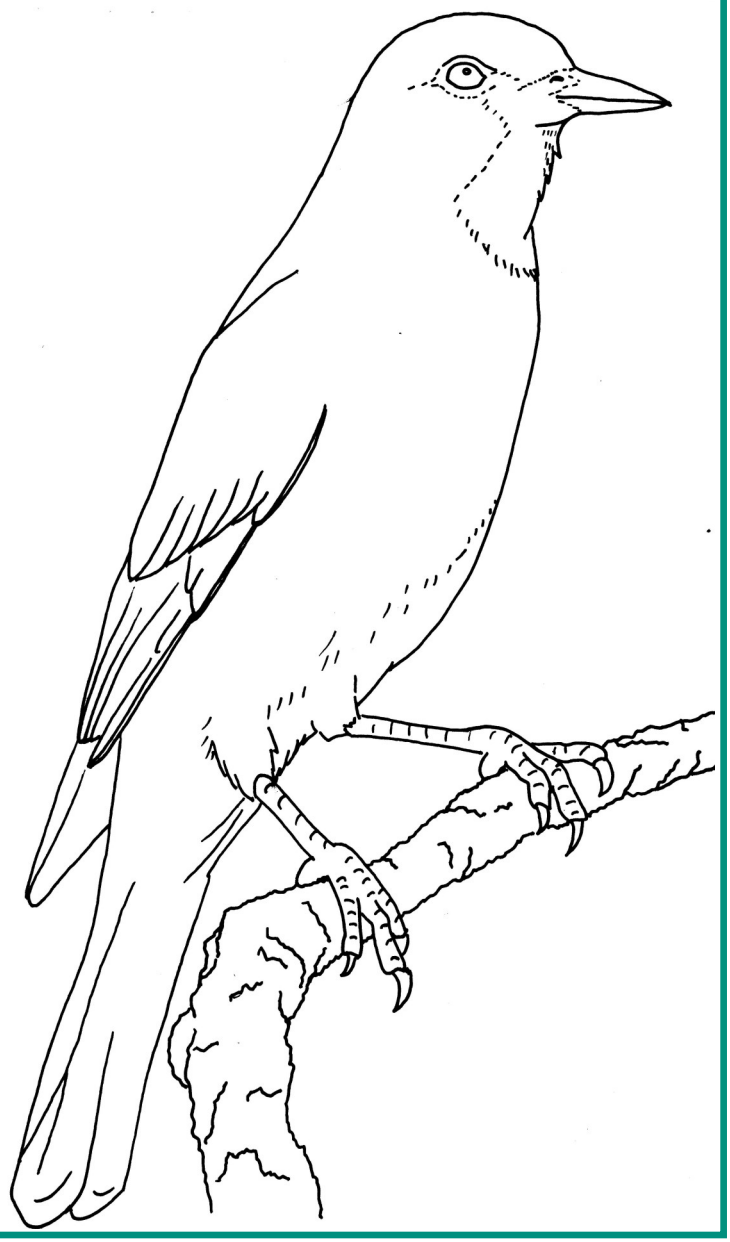
The Story of the Pinyon Jay

In the mountains above Santa Fe, surrounding the Randall Davey Audubon Center, there is a special type of habitat called a **Pinyon-Juniper Forest**. This habitat is full of Pinyon Pine and Juniper trees that provide all the basic necessities for many types of plants and animals.

One of those animals is a beautiful blue bird called a **Pinyon Jay**. These birds live in big, noisy family groups that can be heard calling and squawking across a canyon or forest. Pinyon Jays rely on the Pinyon Pine trees in many ways: they sleep and build nests in the oldest trees, and, like many New Mexicans, they eat and store the delicious pine nuts (*piñones)* using their sharp beak. The jay's behavior also helps spread seeds throughout the forest, allowing new Pinyon Pines to sprout and grow. The birds and trees need each other to survive.



Several years ago, Santa Fe and most of northern New Mexico suffered a severe **drought,** or a time when there was almost no rain or water. Because the drought weakened the trees, insects were also able to eat and kill many trees throughout the forest.

The combination of the drought and the beetle was very hard for the forest, and many trees died. Pinyon pines were especially hurt, so now there are fewer pines out in the forest. Right now, the Pinyon Jay's habitat is in danger.

What do you think will happen to the jays and other wildlife if nothing changes? What can we do to help and protect them?

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Parent/Caregiver Background Information

From the cold polar regions to the riotous green growth of a tropical rainforest, Earth is quilted with biomes—vast areas shaped by climate, geography, and plant life. The prairie biome, for example, is marked by hot, dry weather and wide-open grasslands. The temperate forest biome is a land of evergreen forests.

Within each biome are environments called habitats—the places where animals and plants of particular species live. North America's forest biome, for example, contains a habitat called pinyon-juniper, home to animals such as Black Bears, Mule Deer, and birds like Pinyon Jays and Juniper Titmice. A habitat offers animals the basics of life: sufficient food, clean water, and shelter. Many animals live in the same habitat year-round, so they also raise their young in it. Other animals migrate to different habitats after their breeding season is over. Some species, such as coyotes, are "generalists" that can make a living in almost any habitat. Most species, however, require certain kinds of habitat in order to survive, let alone thrive (such as Pinyon Jays and other birds). Efforts to conserve and restore wildlife populations go hand-in-hand with conserving and restoring the habitats in which they live.

This workbook is designed to introduce students to the concept of habitats and connections between the natural environment and the wildlife that depends on it. Habitats exist in wild forest, rivers, grasslands, and even our own neighborhoods. Students are encouraged to safely explore the spaces around where they live and think about how they share them with plants and wildlife. Lastly, students should consider ways they can be advocates for conservation and the environment, both in Santa Fe, New Mexico, and around the world.

Materials:

- Pencils, colored pencils, or markers
- Extra paper for map-making (optional)

Digital Resources

- *At Home In A Habitat by Audubon Adventures!* http://netapp.audubon.org/AudubonAdventures/habitat_kids.htm
- Audubon for Kids Website, https://www.audubon.org/get-outside/activities/audubon-for-kids
- This workbook is available as a downloadable PDF in English and Spanish on Audubon NM's website (nm.audubon.org)

Additional Resources

- Storybook: *The Magic School Bus Hops Home: A Book About Animal Habitats, also available as Online story time on YouTube (https://youtu.be/tj_SO2J87Fg)*

Alignment to Next Generation Science Standards

- 3rd-5th Grade: Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem (3-5-ETS1-2).
- 3rd Grade: Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all (3-LS4-3).
- 4th Grade: Construct an argument that plants and animals have internal and external structures that function to support growth, survival, behavior, and reproduction. (4-LS1-1)

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Share with Wildlife

NEW MEXICO GAME & FISH

Created and published by the Education Team at Audubon New Mexico,
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