

Biodiversity and Me: Day 3

This week, Weekday Wonders will help young scientists explore and appreciate the variety of living things in our world. To do this, they will discover and think about the relationship of humans to wild animals. They will delve into what resources we share, how we depend upon each other and how humans can protect biodiversity at home and away.

These curated activities are listed in a suggested sequence but may be done in the order that works best for you and your young scientists. Learn more about this series in the [Introduction to Weekday Wonders](#).



Question of the Day

Why is it important for people to share resources with other living things?



Daily Nature Journal

Ask your young scientists to spend some time outside completing their daily nature journal. Use the [Guide to Nature Journaling](#) to support your scientist in this activity each day. This week's Weekday Wonders content, in particular, can benefit from young scientists journaling as it helps them learn more about the wild neighbors around them.



Nature Journal

Have your young scientist choose five living things. At least three of those should live near you. For the others, they can be plants or animals that live near your or that are favorite living things. Then have him or her add a 6th living thing—a human.

For each living thing, make a list of the things that it needs to live. Try to be specific about the kind of food it eats, where it lives, and the type of materials it might gather for shelter. You may wish to have your young scientists do some research. Once your scientist has made lists for each living thing, ask him or her to circle any resources that humans and at least one other living thing both use. Put a star next to any resource that 3 or more living things use.



It's Puzzling

Print and cut out the puzzle on page 5, then cut the pieces along the lines. Have your scientist choose three pieces to try to put the puzzle together.

Tell your scientist that they are going to investigate whether 4 animals have enough resources to live in the habitat the way it is. To do this, have your scientist draw a data table like the one below.

Animal	Does the animal have access to water?	Does the animal have access to shelter?	Does the animal have access to food?
Hawk		Builds a nest in a tree or on a cliff	Eats raccoons, snakes, and mice
Raccoon		Lives in the forest or in bushes	Eats snakes
Garter snake		Lives in a grassy area close to water	Eats mice
Mouse		Burrows underground	Fruits, seeds, insects

You may need to help your scientist get started. Have him or her look at the three puzzle pieces to determine if there is water in the habitat that your scientist has so far. If yes, he or she should put a check in the second column for each animal. If not, your scientist should leave it blank.

Next, your scientist should look at the picture and decide if each animal has access to the type of place it would make a shelter. For example, if the three pieces only show water and grasses, a hawk would not be able to make a home there. Have your scientist check off which animals would be able to live if the habitat only had the three pieces.

Finally, have your scientist look at the final column. If you would like to give your scientist a hint, tell him or her it will be easiest to start with the mouse. Your scientist should consider whether the mouse would have food with the areas pictured on the puzzle pieces he or she drew. If the mouse has all three boxes checked, then that means that there are mice for the garter snake. Have your scientist continue evaluating each animal and whether it has all three requirements available in the habitat with only three puzzle pieces.

It is unlikely that all of the animals will be able to live with the pieces your scientist drew. He or she can try starting over and drawing three new pieces if s/he thinks it was simply because of the specific pieces drawn. If your scientist feels like all of the animals may be able to live with an additional piece of the habitat, have him or her draw an additional piece and go through the exercise again. Continue until there are enough pieces that all the animals can live.

Ask your scientist why a healthy, complete habitat allowed for all the animals to live more easily than three pieces. He or she should be able to explain that it was only when most of the parts of the habitat or ecosystem were in the picture could all the animals live because they needed the food, water, and shelter. Then discuss with your scientist what would happen if humans cut down all the trees or used all the water before it reached that stream. You may also wish to extend this activity by having your scientist consider a food chain and habitat for a cow, pig, or other animal that humans eat. By the end of the activity, your scientist should see that all the parts of an ecosystem are connected and that all living things, including humans, must have the different resources to live.



Litter Hunt

Tell your young scientist that one way we can help protect resources is by reducing, reusing, and recycling materials rather than throwing them away. Have your young scientist do a scavenger hunt around your house to look for items that are no longer being used. You may also wish to have them keep track of the items that people in your house are throwing away to look for the following items.

Have your young scientist find items with the following descriptions. Remind them that these should be things that are in the trash or that are no longer being used by the owner!

- Plastic
- Metal
- Paper
- Round
- Square
- Triangular
- Red
- Blue
- Yellow
- Green

- Shiny
- Multicolored

Once your young scientist has found all the items, have him or her use it to create a piece of artwork that shows an animal in its habitat.

It's Puzzling

