

# WEEKDAY WONDERS



Content developed by the  
Tennessee Aquarium  
Education Department



TENNESSEE  
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## *Biodiversity and Me: Day 5*

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 with wild animals, what resources we share, and how we depend upon each other. They will brainstorm how humans can protect biodiversity at home and in their community. Your scientist will learn that biodiversity is the variety of living things found in a particular habitat or ecosystem.

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

**How can humans help animals where we live?**



### Daily Nature Journal

Encourage your young scientists to spend some time outside today completing their daily nature journal. Use the [Guide to Nature Journaling](#) if you need additional help. We hope that this week of considering biodiversity has made your young scientist's time with his/her Nature Journal particularly rewarding. The wild variety of nature is everywhere if we just keep our eyes open.



### Nature Journal

When you send your young scientist outside today, ask him or her to think about all the creatures s/he has seen right at home this week. Have your scientist consider if there are ways your family could provide these animals easier access to the resources they need, such as food, water, or shelter. Ask your young scientist to list or draw their ideas about what your family could do (or not do) to make sure we are all sharing resources. Have him or her include as many ideas as possible, knowing that you may not be able to put all of them in place.



## Habitat Restoration

Remind your scientist that on [Day 1 of this week's Weekday Wonders](#), s/he was stacking parts of a habitat. When a piece was pulled out, part of the habitat fell. While that simulated habitat wasn't gone altogether, it was degraded. That happens to habitat in the real world when we build homes, manicure lawns, and plant non-native plants. In the activity, your scientist could stack the habitat parts back up and start over. We can do that in real life too, starting right now.

With your young scientist, look at the dream list he or she made in the previous activity. Consider the following list as well. Together, choose a change to make to your immediate area. If you don't have a yard, think about a balcony or window sill or a park nearby. Don't forget our tiny wildlife and the ones that come and go. Start with just one thing so it won't be too hard. You can always add to your wildlife habitat later if you and your young scientist like.

Work with your young scientist to make the dream a reality, but let him or her do as much as possible. This should be their idea and implementation.

**Leave a corner wild.** This is the easiest of any of the suggestions on the list! Let your young scientists choose a corner or a patch out of the way in your yard. To make it official, put up a string on stakes, or edging, or a low fence. Put up a sign that says, "[Scientist's Name's] Wildlife Refuge". Now, don't mow, weed, or spray there. Just wait to see what grows. Insects and birds (and maybe other animals) will be attracted to the shelter, flowers, and seeds.

**Provide water.** Any large, shallow container will do. There's no need to buy fancy bird baths. An upside down trash can lid is perfect. A large flower pot saucer works well too. Put it on the ground. A large stick or piece of bark propped from the center to the edge will help smaller animals reach the water. Be sure to dump and refill your water feature at least every two days to avoid breeding mosquitoes.

**Put up a feeder or nest box.** There are many styles available for purchase and instructions online to build your own. Mixed birdseed is not a bargain. Black oil sunflower seed is what most birds will eat and not waste. If you're installing a nest box, be sure to follow package instructions to achieve maximum tenancy and minimum predation. DIY plans can be found on the [Tennessee Watchable Wildlife's website](#).

**Plant flowers that welcome wildlife.** Butterflies and bees are not the only animals that appreciate flowers. Moths, flies, wasps, and beetles will all use your flowers for food and some will raise their babies in the stems. Leave the flowers to go to seed and some types, like thistle and zinnias, will feed birds. The more native plants you can use, the more value they will have for wildlife. Some cultivated plants are useful, but many lure in animals with color and scent and then cheat them out of nectar or even pollen since they were artificially bred and don't use seeds.

**Encourage the three trees that provide food for baby birds.** It doesn't do any good to have birds nesting in your yard if they have nothing to feed their babies. Most baby birds eat insects in one life stage or another. The three groups of trees that support the most insects (moths, beetles, and flies) are oaks, willows, and cherries. If you're planting trees, choose these. If you see seedlings of these trees, help them along.

**Build a brush pile.** Start your pile with really big branches or small diameter logs arranged in a cross-hatched configuration. Now pile on branches and sticks that blow down in your yard (and your neighbors' yards) or that you prune off your shrubs and trees. Put these on in a random pattern. All sorts of small animals will take refuge and maybe even nest here.

**Extensions for older scientists:** The following projects for older scientists to complete and enjoy because they take more patience and self-control to observe safely. Scientists should not climb on these. Logs roll and rocks teeter underfoot and can cause a fall. Once wildlife has established itself in these habitats, walking on them may injure or kill the inhabitants. Scientists should make observations using their eyes first. Then logs should be rolled TOWARD the observer so that if an animal living underneath becomes frightened and flees, it will run away from the observer, not up the observer's pants leg. Rocks should be handled in a similar fashion. Both logs and rocks should be returned gently to their original positions since they are shelter in the habitat.

**Build a rock pile.** Stack rocks loosely to allow for sheltering spaces between, but make sure they won't fall on the animals inside. A rock pile in the sun will attract lizards and snakes to bask. A rock pile in the shade will grow mosses and lichens if it's damp enough. They will invite invertebrates and amphibians to visit. Scoop out a shallow hollow under the bottom rocks to make an inviting hideaway for a toad.

**Build a rotten log patch.** All logs should touch the ground and be lined up side by side. Coniferous and hardwood logs can be put each in their own patch. Each attracts different kinds of beautiful wood boring beetles, so it's easier to tell what you've attracted if you've separated the logs. If you want to stack them up a little to provide cover for larger wildlife, do, but be aware that you'll have to un-stack them to see the decomposers making soil on the bottom row.



## Interpretative Theater

Ask your young scientist to choose an animal from your yard or neighborhood. Then tell your young scientist the following story.

The animal arrives in our neighborhood and can't find a good place to live. There's no water. It's thirsty. There's no food. It's hungry. There's no place to hide from predators. It's afraid. While running away, it comes across the ideal, dream habitat you created during today's Nature Journal time. It drinks and feels better. It eats and feels even better. It finds a place to hide and rest and feels safe.

Ask your young scientist to make up a silent, interpretive play where he or she is acting as the animal to show the whole story. No words are allowed, just movement and animal noises. The scientist may want to construct a set with props out of things around the house. Ask your scientist to rehearse until s/he is confident in performing the story for you. You might want to tell what you see happening during the performance and let your young scientist correct you if necessary. You might like to record and share the performance with family and friends, or prepare it for a live video conference.

For the youngest scientists, you may want to read a sentence or two from the story and allow the scientist to act out just that part. Then read the next sentence or two, continuing in this manner through the story.