



Lesson Plan

Habitat Explorers: Forest Floor & Understory

Summary

1. Subject(s): Looking at the forest floor and our own backyards as habitats
2. Objective: Students will observe different organisms that utilize decaying logs, soil, and understory plants as their habitat. We will discuss the different insects that help the process of decomposition and the important role that they play.

Key Vocabulary

- Habitat - place or environment where a plant or animal naturally or normally lives and grows
- Decomposer - an organism, especially a soil bacterium, fungus, or invertebrate, that decomposes organic material
- Detritivore - heterotrophs that obtain nutrients by consuming detritus (decomposing plant and animal parts as well as faeces).
- Herbivore - animals that feed on plant tissues or plant products.
- Food Chain - network of links in a food web starting from producer organisms and ending at apex predator species, detritivores (like earthworms or woodlice), or decomposer species (such as fungi or bacteria).
- Life Cycle - developmental change in the form or structure of an animal (such as a butterfly or a frog) occurring subsequent to birth or hatching

Activities that you can do at home or in your backyard:

- 50 inch Hike activity, Bug Shake activity, coloring sheets, and a Scavenger Hunt



50 inch “Hike”

This activity allows kids to explore a small area and see what evidence of life they can find. This activity can be done in your backyard, or even on an area of sidewalk near your home. It will allow us to look at habitats on a much smaller scale - 50 inches! For this activity, you will need a string or cord measured out to be 50 inches. This will be your boundary for discovery.

- 1.) Lay the string along any area outside. Where you have placed the string, is where you are exploring.
- 2.) Look at logs, leaves, twigs, cracks and crevices for evidence of organisms. Make sure students do not touch anything (especially ants, spiders, centipedes unless approved by an adult).
- 3.) A magnifying glass allows students to look at everything up close. Or organisms can be placed in bug jars or old tupperware containers for further observation.

Questions for activity wrap up:

What evidence of insects did you find? Chewed leaves? Tracks in the soil? Webs?

What different critters did you find? Could you identify any of them?

Why do you think those bugs are important?

What did the insects remind you of?

What adaptations help these insects survive? Do they have specific coloration or body parts that help them?

Thinking about this 50 inch habitat, what do you think these insects eat?



Bug Shake

While we typically have bushes and shrubs in our backyards and neighborhoods, we often miss out on the insects that utilize these plants for their habitat. For this activity we will use an old white or light colored bed sheet and a bug jar or tupperware container if you have it.

- 1.) Place the white sheet on the ground underneath a bush, shrub or small tree nearby.
- 2.) Gently shake the shrub by the limbs or from the middle
- 3.) Watch insects drop from the leaves and limbs onto the sheet you have on the ground. Leaves may drop on the sheet as well, which can be investigated too!
- 4.) Use insect guides or the Seek App by iNaturalist to help you identify the insects you have found.
- 5.) Optional: Choose one insect to safely place into a container with a lid for further observation. Some of these bugs may include spiders, so please be careful. Most bugs are easier to observe directly on the sheet, without handling.

Questions for activity wrap up:

Did any bugs fall onto the sheet? If so, can you describe them?

Upon closer observation, what new characteristics did you notice about the insects?

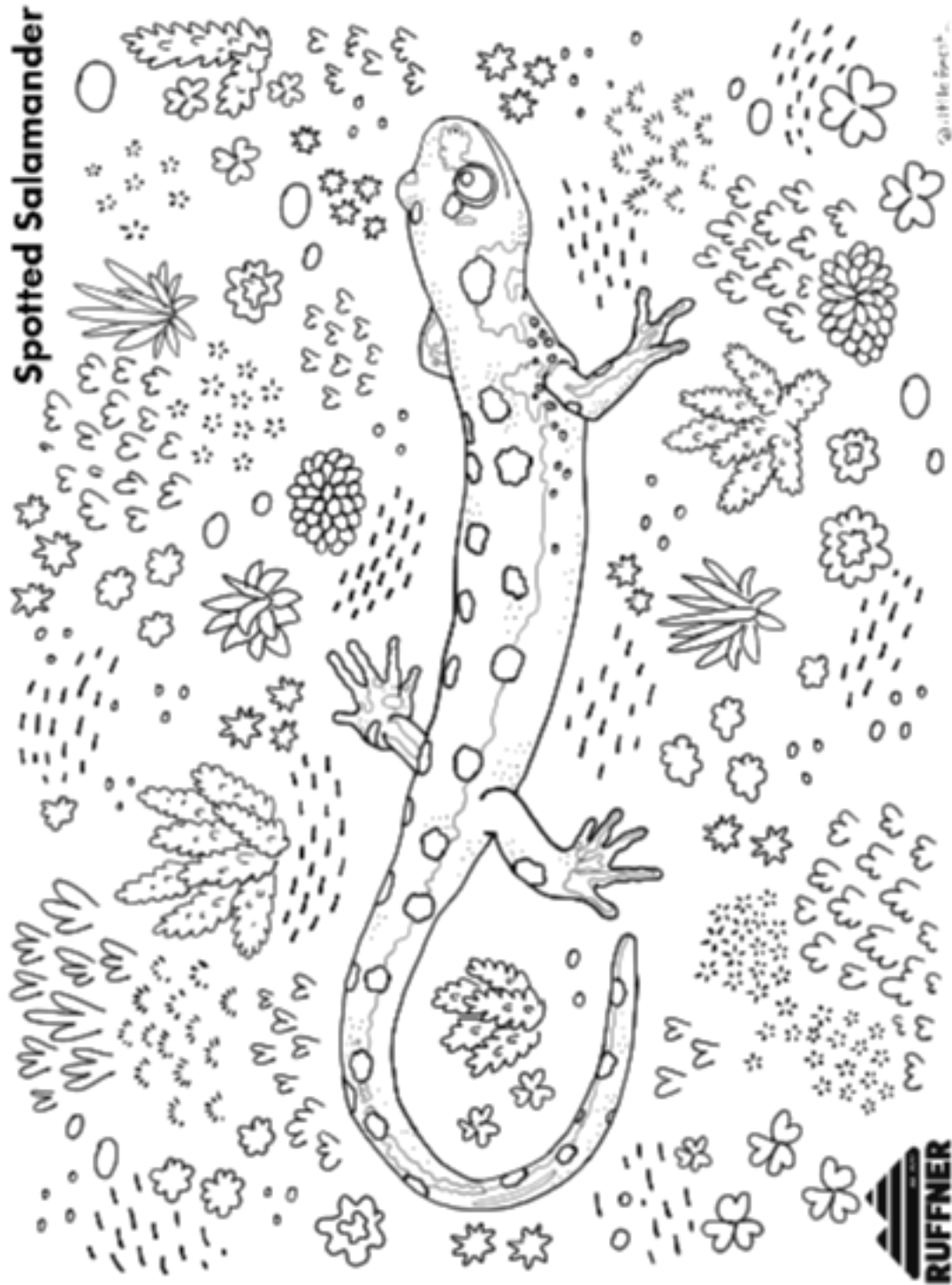
How would you categorize these insects? Decomposers, herbivores, predators?

Why do you think those bugs are important and what role do they play in the habitat?



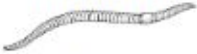







Now, think about the plants that you used for the “Bug Shake.” What did this plant provide for the insect? How many other similar plants are nearby? How might different plants serve as a habitat for different types of insects.



Coloring Page





Fungi/Mushroom 	
Hollow Tree 	
Earth worm 	
Wildflower 	
Spider Web 	
Nut 	
Snail 	
Bird 	
Signs of Insects 	
Rocks 	

Use this scavenger hunt to make discoveries in your own backyard! You can use the second column to either check off the items you see or use tally marks to see how many of each you can find.

Things to remember:

- This is a great activity to observe nature and investigate things that you find. Please ask an adult before touching anything you find and return everything to its habitat after observation.

- All of these are commonly found in a forest habitat - a place or environment where a plant or animal naturally lives and grows.

- If you do not find everything on the list, that is ok! You can save your list and come back to it another day. Some things may be hard to find depending on the time of year. Spring is a great time to observe nature.

- If you find something you are curious about, use resources to help you with identification. Seek website by iNaturalist.org, is a great kid-friendly resource.



Ant Restaurant

Have you ever had a picnic lunch, only to have been met by ants wanting to steal your food? In this activity we will explore the world of ants!

Materials: Paper plate, food scraps

Save a variety of food scraps from your house to place on a paper plate. You could use household food items such as honey, salt, sugar, and spices, or also use lunch items such as crackers, candy, fruit, and vegetables. Students make hypotheses regarding which food will attract the insects. Rank the food items that they predict to be most popular to least popular. Place your food items on the plate in clusters. Leave the plate outside on the ground for an extended amount of time (but not overnight). Be sure to place rocks or a paper weight on the plate if it is a windy day. Observe if your plate attracts any ants.

Questions for activity:

If so, what food type attracted the most ants and why?

How do you think the ants (or other insects) were able to find the food?

Where are they carrying the food to?