



Critter Characteristics & Habitats

Outdoor Classroom Field Journal Activity Lesson Plans & Resources

Online Lesson Plans & Resources available on the Alabama Wildlife Federation website

Students look for a bird, insect, amphibian, reptile or mammal in the outdoor classroom, record its features, and then describe its habitat. Afterwards, they discuss how and why different animals were found in different places in the outdoor classroom.

Materials: Copies of the “Critter Characteristics & Habitats” Field Journal Activity Page, Clipboards, Pencils and Magnifying Glasses *Optional: specimen containers (such as petri dishes, glass vials, or Ziploc bags) or cameras/lpads to photograph the animals*

Duration: Intro Discussion – 30 min. Outdoor Exploration – 20 min. Indoor Research & Wrap-up – 30 min.

STEP 1: Engage through Discussion

The background information and questions below can be used to help introduce the topic, engage the students, and build a foundation to discuss the topic:

Background Information (online as a PDF)

There are many different types of living things on Earth including nearly one million different animals that have been identified and over 200,000 plants that have been identified according to the website ScienceDaily.com. Different plants and animals are sorted or classified into groups based on their features and characteristics. For instance, animals are divided into two main categories: **vertebrates** are those animals that have a spine or backbone and **invertebrates** are those without a spine or backbone. Then the vertebrates are divided into five main categories including **birds, mammals, reptiles, amphibians** and **fish**. Animals that have feathers and lay eggs are classified as birds, and animals with fur that have live birth are mammals. Reptiles have dry, scaly skin and give birth to eggs on land, while amphibians have smooth, moist skin and lay their eggs in water. Insects have 3 body parts, six legs and often hatch from tiny eggs. Each type of animal has different needs for its survival and can only live in habitat (*an animal's natural home*) that provides the food, water and shelter that it needs to grow, reproduce and survive. Those habitats can vary from forests to meadows to deserts or from streams to lakes to oceans. Your school's outdoor classroom site should provide habitat for a wide variety of animals.

Example Discussion Questions & Answers (online as a PowerPoint or PDF)

Q: What are living things?

A: *Things that breathe, eat, grow and reproduce (such as plants and animals).*

Q: What are the different types of animals? How do we classify or categorize them?

A: *To categorize or classify animals you need to think about the characteristics that they share and how they are different. Example characteristics that can be used to classify or categorize animals include spines, skin coverings, how they breathe, how they give birth, number of legs, number of eyes, wings, size, etc.*

Q: Do all animals live in the same habitat? What is different about the habitats (homes) where these animals live?



A: No, different animals live in different types of habitat. Fish like bream and bass live in aquatic habitats like freshwater lakes or rivers, marine fish like red snapper live in saltwater oceans, hawks and owls live in or near woodlands or fields, butterflies and bees are found around nectar-producing flowers, frogs and salamanders live around freshwater creeks or ponds, and lizards and snakes can be found near woodlands and rock outcroppings where they can bask in the sun.

Q: What types of wildlife could we see in our outdoor classroom? Insects? Birds? Reptiles? Amphibians? Mammals? Fish? Other Invertebrates?

A: Insects may be butterflies, beetles, bees, etc. Birds could include songbirds, hawks, owls, etc. Reptiles include turtles, snakes and lizards. Amphibians may include frogs, toads or salamanders. Fish could be freshwater fish such as bream. Mammals could include squirrels, bats, rabbits, etc. Other invertebrates could include worms, millipedes, centipedes, spiders, etc.

STEP 2: Explore with Literature

These books can be used to further explore the topic with your students:

- *Animal Homes (Ranger Rick: Animal Fun for Young Children)* by Jennifer Bové (ISBN: 978-1630762247)
- *One Small Square: Backyard* by Donald M. Silver (ISBN: 9780070579309)
- *One Small Square: Pond* by Donald M. Silver (ISBN: 9780070579323)
- *One Small Square: Woods* by Donald M. Silver (ISBN: 9780070579330)
- *One Small Square: Swamp* by Donald M. Silver (ISBN: 9780070579262)
- *Animal Habitats (My Science Library, Levels 1-2)* by Julie K. Lundgren (ISBN: 9781617419348)
- *Backyard Habitats (Introducing Habitats)* by Kelley Macaulay (ISBN: 978-0778729853)

STEP 3: Explain using Technology

This videos can be used to further explain the topic to your students

- “Animal Classification” YouTube Video (6:51 min) <https://www.youtube.com/watch?v=mRidGna-V4E>
- “Animal Classification” Brain Pop Jr. Video (5:48 min) <https://jr.brainpop.com/science/animals/classifyinganimals/>
- What is a Habitat? Video (2:56) <https://www.youtube.com/watch?v=CxrlEajA398>
- “Nature: Animal Homes” PBS Learning Media Video (2:07 min) <https://www.pbslearningmedia.org/resource/nat15.sci.lisci.anihome/habitat-animal-homes/#.W3R81ehKg2w>

Optional: Use an iPad, smartphone or camera to take photos of animal found in the outdoor classroom.

STEP 4: Elaborate with a Field Investigation in the Outdoor Classroom

The Outdoor Classroom Field Journal Activity Observation Page(s) allow students to apply what they have learned as they investigate and record their real-world observations in their field journals. Before you go outside, don't forget to review the activity tips and instructions and the Outdoor Classroom Rules below.

Outdoor Classroom Activity Tip

Before taking the students outdoors to explore the outdoor classroom, consider splitting them into groups of three and ask each group to look for a specific type of animal (bird, mammal, amphibian, reptile, fish, insect, worm or other invertebrate). This will help ensure that your students observe a wide variety of animals and not just insects (which will be the easiest type of animal to find). Also, by dividing your students in groups of three, one child can hold the clipboard and record the observations on the Field



Journal page, one child can hold the magnifying glass to view the details of the animal, and one child can collect and hold the specimen in the container (a petri dish, glass vial or Ziploc bag). Once the students have recorded their observations, they can then release the animal back into its original habitat.

Activity Instructions

(for Critter Characteristics & Habitats Activity Pages)

Have students explore your outdoor classroom and look for an animal (wildlife). Complete the questions to help you describe what type of animal it is and its habitat needs. Use field identification guides like the *National Audubon Society Guide to the Southeastern States* or safe internet sites like the Alabama Department of Conservation and Natural Resources' Watchable Wildlife to help you answer the questions, if needed.

Example Outdoor Classroom Rules

The outdoor classroom is not a playground, so do not run and do not climb on anything. Remember that the outdoor classroom provides habitat (a home) for local wildlife, and you should not damage the local wildlife habitat. Therefore, do not pick up wildlife, plants, flowers or rocks. Also, do not feed wildlife.

STEP 5: Review and Assess

Review and assess the students' observations and answers on their observation pages. Another extension might be give students a photo of an organisms you might find in the outdoor classroom and have them complete the field journal based on this organism.



Alabama Course of Study Standards for 2nd Grade

Language Arts (2016)

- 1.) Ask & answer questions as who, what, where, when, why and how to demonstrate understanding of key details in a text.
- 12.) Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.
- 16.) Explain how specific images (e.g., a key in a field identification guide) contribute to and clarify a text.
- 19.) Read & comprehend informational text, including science and technical texts, in the Grades 2-3 text complexity band.

Science (2015)

- 7.) *Obtain information from literature and other media to illustrate that there are many different kinds of living things and that they exist in different places on land and in water (e.g., woodland, tundra, desert, rainforest, ocean, river).*

