

Naturalist Activity Badge

- Learning Objectives** As a result of this training session, participants should be able to teach the following activities for the Naturalist activity badge:
- Know how to set up an insect zoo (insect cage).
 - Identify outdoor hazards such as poisonous plants and venomous reptiles found in your area.
 - Explain what an ecosystem is and what is meant by “the balance of nature.”
 - Learn about birds in your area.
- Trainer Preparation**
- Study the training outline.
 - Review the information on the Naturalist activity badge in the *Webelos Handbook* and the *Webelos Leader Guide*.
 - Know where to find animal tracks for the plaster casts activity.
 - Gather displays such as those suggested below.
 - Practice and time your presentation in advance to help you stay within the time limit.
- Materials**
- 33452, *Webelos Handbook*, Naturalist activity badge
33853A, *Webelos Leader Guide*, Naturalist activity badge
- Materials to make plaster casts:
- Dry plaster of paris in small plastic bags (about one cup per bag)—one per person
 - Water (from canteens)
 - 11" x 1" lengths of lightweight cardboard
 - Paper clips
- Binoculars (several pairs)
Field guides on birds and insects
- Handout** United States map—one per person
- Display Ideas**
- Examples of birdhouses and insect cages
 - Posters or pictures of venomous snakes and poisonous plants found in your area
 - Posters of animal tracks and bird tracks
- Before You Begin** The four activity badge sessions—Naturalist, Geologist, Forester, and Outdoorsman—can be presented as a round-robin for up to four training dens by setting them up as stations in close proximity to each other. The dens could then rotate from station to station every 20 minutes for a small-group learning experience. For five dens, Health and Safety can be added as a station. Up to 10 training dens can be accommodated by having pairs of dens travel together.
- Time** 20 minutes. Start on time. End on time.
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Activity Badge Requirements

Activity Badge Requirements Briefly review the requirements for the Naturalist activity badge.

Bird Identification

Watching birds in your backyard is a great hobby year-round. Bird feeders can attract many types of birds. Different seeds and different styles of feeders attract different birds. Many people have "life lists" of birds they have seen in the wild.

Use binoculars to look at birds and field guides to help you identify them. Many clues will help you identify a bird.

- **Shape.** Does the bird have a long or a short tail? Is the tail divided? Does the bird have a tuft on the top of its head? Are the wings pointed or rounded?
- **Color.** The placement of various colors helps to identify a bird. Are the wings striped? Does the bird have a black streak across its face? What colors are its wings, breast, legs, beak?
- **Bill.** Is the bill short and heavy for cracking seeds? Or long, and possibly curved, for digging for insects?
- **Toes.** Most birds have four toes, three pointing forward and one backward. Woodpeckers and nuthatches have two pointing in each direction. This enables them to walk down a tree head first!
- **Flight pattern.** Does the bird soar and hover? Does it dip up and down? Does it hop short distances, or does it always fly from place to place?
- **Feeding pattern.** Does the bird eat from the ground only or does it visit a feeder? Does it take whole nuts (such as peanuts), sunflower seeds, or small seeds or grain? Does it like suet? Different birds have their own special diets.
- **Song.** Each species has its own song pattern. A cardinal chirps constantly while feeding. With a little practice and observation you can identify the type of bird by its song, even if you don't see it.

Remind participants that it is against federal law to possess a songbird's feather, so even if one is found on the ground, leave it. The only feathers you can use in crafts are those from domestic birds (ducks, turkeys, chickens, etc.).

Flyways

Distribute a United States map to each participant. Many birds migrate, some over great distances. Most birds that migrate follow paths called flyways. Generally these flyways follow major rivers or other major landmarks. Show how to mark the maps. (You may want to have a laminated copy of the map so you can mark the flyways during each training session.)

Many field guides to birds will give you the summer and winter homes for each species. Some birds that come south still winter in the northern parts of the United States. A junco, for example, lives in the far northern reaches of Canada in the summer but comes into the northern United States for the winter. Other birds such as robins usually migrate to the South, but they can be found in the North in winter if there is sufficient food and shelter available. Robins frequently can be found in apple orchards in the winter.

Outdoor Hazards

Show a poster (or set of posters) of some of the outdoor hazards found in your area. These might include poisonous plants (poison ivy, poison oak, and poison sumac) and venomous snakes (rattlesnakes, coral snakes, water moccasins) and the like. Learning to identify these outdoor hazards will help protect the boys as well as their parents and other adults.

Insect Cages

Show an example of an insect cage and what the insect needs for nourishment and living in a cage. Stress that insects should be released after they have been studied.

Animal Tracks

It is fun to try to identify animals by their tracks. Sometimes we can't see an animal, but we can find out where it has been by the tracks it leaves. Muddy areas, possibly near streambeds, are good places to look for tracks.

Make a plaster cast of a track.

Take a short hike to a place where you can find animal tracks. (If that would take too long, make tracks in a bed of wet sand in your training area.) Each participant should have a small plastic bag with about one cup of plaster of paris. Have each person slowly add water, a teaspoon or two at a time to the bag of plaster, kneading it until it is smooth and liquid enough to pour (but not watery). Very little water is needed.

When the plaster is ready, have each person use a strip of lightweight cardboard to make a circle. Fasten with a paper clip. Place the circle on the ground around the track. Now pour the plaster into the track. Let the plaster harden. Let participants know they can come back for the casts later when they have hardened.

Summary

An ecosystem is a community of plants and animals living in an environment that supplies what they need for life. Forests, deserts, and wetlands have different ecosystems. Each has its own combination of plants, animals, soil, and water resources.

When an ecosystem is balanced, all living things within it have the ability to grow and reproduce. If any part of the food chain is disturbed or eliminated, the rest of the ecosystem may collapse.

Whether you live in the country or the city, you can help preserve the balance of nature around you. Learn to enjoy the birds, animals, and plants that inhabit your area. Even those pesky mosquitos are important in the food chain!