



**Learning Objectives-after this lesson, students will be able to:**

- Define the four components of habitat (food, water, shelter and space)
- Give examples of animals that use wetland habitat

**Vocabulary Words**

Snags

Habitat

Forbs

## **WETLANDS AND WILDLIFE**

Animals need food, water, shelter, and space to survive; therefore, they search out habitats that will fulfill these basic needs. A suitable habitat will provide the physical (shelter, space) and biological (food, water) requirements for continued existence. In a forested wetland such as the one at the WaterLife Center, wildlife populations are dynamic because the forest is always changing through succession (discussed in the next section), and other natural and manmade occurrences. Loss of habitat is one of the primary threats to animal survival. If habitat is destroyed or degraded, animals cannot continue to get what they need to survive.

### **Wetlands Plants**

Wet soil has less oxygen, so plants living in it must have special adaptations. Some, like reeds and sedges, are hollow so oxygen travels more quickly through the plant, and others, such as lilies, dangle their roots into water to absorb oxygen directly from the water. Similar adaptations allow plants to get the proper nutrients and sunlight.

### **Wetlands Animals**

Wetlands provide important habitat for a wide variety of wildlife – mammals (e.g., muskrat, otter, and raccoon), birds (e.g., herons, blackbirds, geese, and ducks), reptiles (e.g., garter snakes), amphibians (e.g., frogs and salamanders), fish (e.g., sunfish, bluegills, bass) and invertebrates (e.g., dragonflies, mosquitoes, and many, many, others). Some animals live their whole lives in wetlands while others may use wetland habitats specifically for breeding or other essential parts of their life cycle.

### **Wildlife Habitat**

Many game species such as bear, deer, and elk use wetlands as travel corridors, hiding and resting cover, and forage on the wide variety of plants. Predatory species take advantage of the abundant prey species foraging in the wetlands.

The plentiful supply of algae and small invertebrates provide forage for birds and reptiles that make nests in the downed logs and branches. Many wetland plant species provides food (seeds, fruits) for a variety of primary consumers such as deer, muskrat, mice and voles. Cavity nesters like woodpeckers, chickadees, owls

and flying squirrels, utilize dead trees (snags) for nesting. Woodpeckers use snags as well as stumps and downed logs to forage for insects. Dead and dying trees with loose bark and fissured trunks provide excellent roosting places for bats. Bats can eat up to 420 insects, such as mosquitoes, in one hour, making wetlands a premier habitat for them.

### **At the WaterLife Center**

A forested wetland is home to and frequented by a variety of wildlife species. Listen and you may hear varied thrushes and hermit thrushes. Great horned owls can be found sitting on large branches in trees watchful for an unsuspecting shrew or vole to scurry along the ground.

Owls will often use the same perch and owl pellets can be found on the ground under these trees. Breaking apart these pellets will reveal what the owl has been eating.

Bats use the loose bark on trees for roosting at night. Larger animals such as deer frequent the trail for a travel corridor and to get a drink of water. They also use the dense vegetation for security cover.



## Suggested Activities

### **Sound Map**

Making a sound map is one way to record different sounds you hear over a period of time. If sound maps are created in a variety of different habitats, you can determine relative species abundance. Sound maps are a quiet, individual listening activity. Children who have a hard time concentrating or are restless will have a difficult time with this activity. A reward for the most sounds heard may help some children focus on the activity.

For children, 5-10 minutes is an appropriate time span for a sound map. Before the children disperse to find their listening area, give them all the directions. Tell them:

1. They will need to find a place to comfortably sit in sight of you, but not with other kids.
2. They will need their journal and pencil.
3. They must be as quiet as possible
4. It does not matter which way they face when they sit.
5. They need to draw a dot in the center of their paper. That dot represents them. Space at the top of their paper represents space in front of them. Space at the bottom of the paper represents space behind them. The right side of the dot represents space to their right and so on.
6. They are to record everything they hear with a symbol. Students can use letters or shapes to represent sounds. Each time they hear a repeated sound, they record it again using the same symbol.

Some students might do better if they close their eyes and wait for a sound, then open their eyes and record the sound on their paper. This activity does not use sight at all.

1. They should continue the activity until you tell them the time is over.
2. They should make a legend after the time is up. It does not matter if they don't know what the sound was.

5-01-04 Picnic Meadow



- ~ Clark's Nutcracker
- ~ pine squirrel chatter
- ~ Kinglet
- ⊙ flicker
- ~ fly buzzing
- ~ bird wings flapping
- Δ raven call
- ⊙ grouse drums
- ~ unknown bird
- ⋮ unknown bird
- ~ wind in conifers
- ~ chickadee
- ⋮ woodpecker
- ~ tree trunk creaking
- ⊙ Sandhill cranes
- Me

