



# Audubon

# ADventures<sup>®</sup>

## Ohio Series

## Ohio's Forests— Then and Now

**H**ave you ever wondered what Ohio looked like long ago? Imagine a land of endless forest. Enormous old trees shade the ground. Clean rivers full of fish wind through the thick forest. Wild animals and birds are plentiful.

It may be hard to imagine today, but this is what Ohio once looked like. The first European explorers to visit the Ohio territory were amazed. They had never seen such grand forests and big trees. After many days of traveling under the thick forest, they thought they would never see the sky again. They were thankful when they finally came to an opening in the forest.

As European settlers moved west, many came to Ohio to farm. Forests were cut to make way for farming. Some of the wood was used to build houses, barns, and furniture. The rest was simply burned to remove it. When railroads arrived a few years later, wood became very valuable. Forests that had not

yet been cleared for farming were cut for wood. The wood was used for railroad ties and as fuel for steam engines and iron factories.

In the rush to develop the state, nearly every tree was cut. Cities, highways, and farm fields took the place of forests in many areas. In other places, the forest was allowed to grow back but was cut again and again for wood.

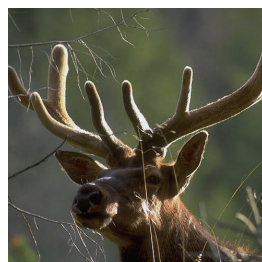
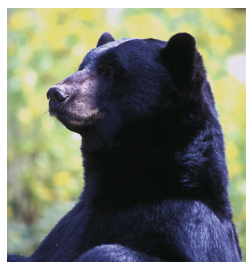
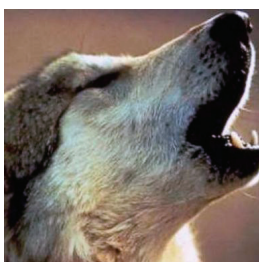
Much has changed in the past two hundred years. There are still a few big trees, but not many like the giants that once grew here. Very few old forests remain. Today, southeast Ohio is mostly forested. But some parts of Ohio have almost no forests. Some of our rivers now run muddy. Some plants and animals that once lived in the forest

have disappeared.

Even so, there are still some very beautiful forests in Ohio. There are places where you can imagine what the land used to look like. Next time you are in the woods, think about it. Can you imagine the towering trees, the clear rivers, and the abundant wildlife? What was life like for the Native Americans who lived here? Listen to the birds, feel the cool shade, and enjoy this special place.



### Animals from Ohio's Past



**B**elieve it or not, mountain lions, timber wolves, black bears, elk, and woodland bison were once common in Ohio's forests. As Ohio's forests were cut, these animals could no longer survive.

Enough forest is growing back in Ohio to support a few black bears. Some people claim to see mountain lions from time to time. But some forest animals have disappeared completely from our state. The timber wolf, elk, and woodland bison are gone, but animals that can live in the open have done well.



# What's In An Ohio Forest?

Many plants and animals live in Ohio's forests.



**Flying Squirrel** – This small squirrel has a layer of loose skin between its hind and front legs. When it stretches its legs, the skin acts like a sail. The squirrel can use it to glide between trees.



## What Good Is A Dead Tree?

Dead trees are a very important part of the forest. They provide homes for many kinds of animals. When a tree dies it begins to decompose. Bacteria, fungus, and insects all begin to break the dead tree apart. Woodpeckers make holes in the wood to get the insect larvae. These holes make great nesting spots for flying squirrels, mice, and birds. As the tree bark begins to peel, bats may rest underneath. Lizards and small snakes feed on the many insects living under the bark.

When the tree finally falls to the ground, insects, mice, and squirrels continue to use it. Bacteria continues to “munch” away at the dead wood and mushrooms grow on the rotting log. If the log becomes hollow, skunks, opossums, and foxes may make their home inside. When the tree finally rots out completely, it becomes a part of the soil. Many new plants will grow on this rich soil.



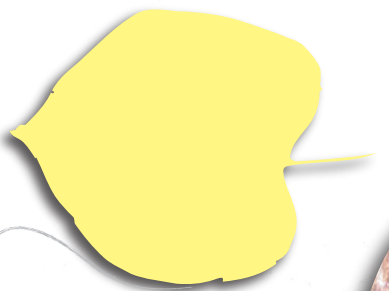
**Great Horned Owl** – This owl gets its name from its large ear tufts (actually feathers) which look like horns. Its loud hoot can be heard up to one mile away.

## Ohio Buckeye

– This is Ohio's state tree. Leaves are made up of five leaflets. It is named for the nuts which settlers compared to the eye of a deer or “buck's eye.”



**Gray Tree Frog** – Small, circular suction-cup toes help this frog hold on to leaves and branches high up in forest trees.



**Gray Fox** – A female gray fox may make her den in a hollow log. Gray foxes are very good at climbing trees. They will climb trees to escape an enemy or just lie in the sun.



**Bark Beetles** - The larvae of these beetles eat the wood of forest trees. Woodpeckers feed on the larvae and help to control beetle populations.



**White Oak** – Leaves of this tree have between 5 and 9 finger-like lobes. A white oak tree can live to be over 1,000 years old. Many animals eat its acorns.



**Katydid** – Katydids are large insects related to grasshoppers. Their wings look like leaves, making it easy to hide in the forest. The males make a lot of noise at night.



**Black Rat Snake** – This beautiful snake is an excellent tree climber. Prey includes mice, baby rabbits, and bird nestlings.

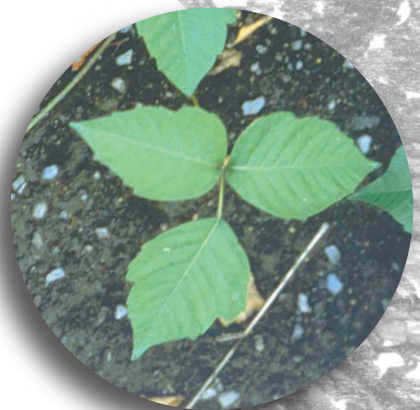


## Change In The Forest

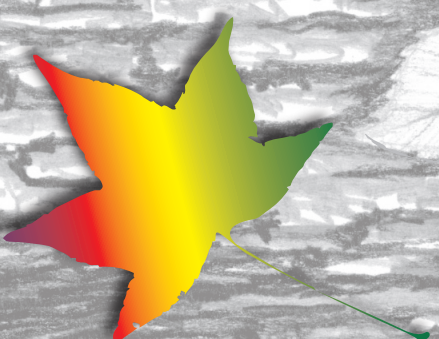
After a forest is cut or burned by fire, it begins to grow again. As it grows, it goes through changes in the kinds of plants and animals found there. These changes are called succession. If you were to visit a young forest every year for many years, you would see some of these changes.

The first plants to grow are those that like bright sun. As pioneer tree species grow, like wild black cherry, other trees grow in their shade. These trees grow much more slowly and live longer. These are called the dominant species because they will take over the forest. Dominant trees like oaks and maples take over as the pioneer trees die. They will continue to rule until the forest is cut or burned. Then succession begins again.

Other plants and animals also change as a forest ages. Some birds and wildlife do well in young forests. Some depend upon old forests with plenty of big trees. It can take over 150 years for a forest to be considered old growth again after being cut. Very few Ohio forests reach this stage because they are cut for lumber.



**Poison Ivy** – This plant often grows as a vine, usually climbing tree trunks. Touching it can give you a nasty skin rash. Its leaves have three leaflets. Remember the wise saying, “leaflets three – leave it be.”



**Jack-in-the-Pulpit** – This spring wildflower was named because it resembles a preacher standing at the pulpit. The flowers were an important food to Native Americans. It is sometimes called Indian turnip.



**Trillium** – Three large leaves make this plant easy to recognize. It is becoming quite rare and should not be picked. This is Ohio's state wildflower.





# Ohio Forest Careers

*Do you know what you want to be when you grow up? Have you ever thought about working with forests? Many people in Ohio have jobs working with forests. Let us introduce you to a few of them.*

**Wildlife Biologist** - Esperanza is a wildlife biologist with the Wayne National Forest in southern Ohio. She studies the animals that live in the forest. First she must find out what animals live in the forest and how they are doing. One summer, Esperanza got permission to set traps to catch bats. She wanted to learn what parts of the forest they like best. She counted the bats and then carefully let them go. In the spring, Esperanza visits wet areas of the forest at night to count frogs and toads. To give birds a place to nest, Esperanza puts up birdhouses.



**Forest Products Specialist** - Chris gathers and sells products from a forest he owns in Athens county, Ohio. He hunts for wild mushrooms and grows many kinds of mushrooms on dead logs. He also grows wild ginger root, ginseng, and other forest plants to sell to local restaurants and other buyers. He harvests the bark of the black cherry tree for tea. He also gathers and sells the delicious fruit of the paw paw tree. Chris's goal is to show that you can make a living from a forest without cutting it.



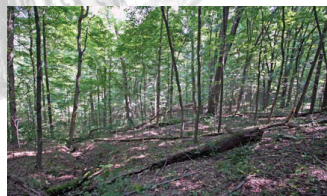
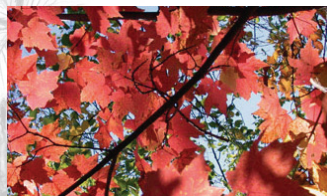
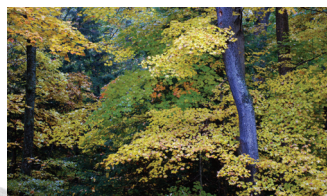
**Professional Forester** - Stan is a professional forester from Cleveland, Ohio. People hire Stan to tell them about their forests and the trees that grow there. He can help them get what they want out of their forests. This can include lumber, wildlife habitat, and recreation.



When someone wants to cut trees for lumber, Stan lets them know which trees to take and which to leave. He always makes sure that there are enough young trees to replace the ones that are cut. These trees will provide lumber and wildlife habitat for the future.

## What Good Is A Forest?

- Forests are very beautiful places.
- They are great places to camp, hike, hunt, watch birds, take pictures, and relax.
- The forest provides a home to many plants and animals that cannot live any other place.
- The roots of forest trees hold the soil in place and keep it from washing away.
- Forest trees shade the ground and make it much cooler and wetter than open fields.
- A forest the size of a football field produces enough oxygen each year for 18 people to breathe.
- Forests provide us with wood. Wood is used to build many things and is also used to make paper.
- Forests also produce mushrooms, berries, and other natural materials we use.



## Birdbrain says ...

Most of the trees cut today are used in making paper. Making paper takes a lot of energy and causes a lot of pollution. Waste paper also takes up a lot of space in landfills. You can help the environment by not wasting paper. You can also recycle paper. Fewer trees are cut to make recycled paper. Does your school collect paper to be recycled? Is your town's newspaper printed on recycled paper?

This paper you are reading is recycled. Buying recycled paper and notebooks also helps to save trees.

So remember:

- Reduce – don't waste paper;
  - Reuse – use both sides of a piece of paper; and
  - Recycle – whenever possible--even this document.
- You can help save our forests.



## An Ohio Important Bird Area (IBA)

In 1995 the National Audubon Society started to recognize and help protect Important Bird Areas (IBAs) across the United States. IBAs are places that birds need. An IBA might be a place where birds stop, rest, and feed while on migration. It may also be a place where rare or endangered birds nest and raise their young.

Ohio has over 60 Important Bird Areas. Look on an Ohio road map and see if you can find the following IBA located in a forest:

Hocking Hills IBA, Crane Hollow

Located near Nelsonville, Ohio, in Hocking county

How many miles is it from where you live? How long would it take you to get there if you were traveling 55 miles per hour? Contact Audubon Ohio, [www.audubonohio.org](http://www.audubonohio.org), for more information on this special IBA. After researching information, write a report about the birds that live in this IBA. Are any of them rare or endangered?