Conservationist

YOUNG FORESIS



In this issue: Learn all about young forest and why it is an important habitat for many species of wildlife, as well as what we are doing to create more!

Just like people, wildlife needs several basic things to survive—food, water, shelter and space to live and to raise their young. Some animals require large amounts of land, while others can get by in smaller areas. The area where an animal finds the things it needs for survival is called **habitat**. Different kinds of animals need different kinds of habitats, and there are many types available. This range of animal and plant types is known as **biodiversity**. Learn more about biodiversity and why it is important in the fall 2013 issue of *Conservationist for Kids*, available online at **http://www.dec.ny.gov/** education/100637.html.

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Featured on the cover is an eastern cottontail by Thomas D. Lindsay



What is Young Forest?

Forests are a type

of habitat, and this issue focuses specifically on young forest. Forest habitat ranges from tropical rainforests to northern hardwood forests. Young forests are just what the name implies: new forests that are either developing from grassland and shrubby habitat or becoming forest again after a disturbance that cleared the land. Young forests are made of tree saplings and seedlings which grow, over time, into mature trees. The trees and other plants found in young forest habitats are often sun-loving species. As they grow, they provide food and shelter for many different types of wildlife.

Because the landscape in the Northeast has a greater amount of mature forests, active management is needed to ensure there is enough habitat for species that depend on young forests. Mature forest is an important habitat type, but more than 60 species in New York State need young forest. Some species are declining because there is not enough of the habitat they need. These include the golden-winged warbler, American woodcock, ruffed grouse, snowshoe hare, New England cottontail and whip-poor-will.



Other species will also benefit from more young forest. While they may be able to use multiple types of habitat, they still need young forest during certain times, such as when raising young or looking for food. These species include bobcat, turkey, deer, black bear, moose, and birds that nest in mature forests. Flowering trees and shrubs in young forests are also good for **pollinators** such as bees and butterflies. To help species that depend on young forest, we need to provide and maintain more of it.

Learn much more about habitat in the spring 2012 issue of *Conservationist for Kids*, available online at http://www.dec.ny.gov/education/100637.html New York State Conservationist, December 2014

For several reasons, young forest habitat is in decline. One reason is because some areas that were once young forests have since grown into mature forests. Without human intervention, they will remain mature forest habitat. Another reason is due to

clearing for development. Farms, homes, factories and shopping centers are all important to our lives but can adversely affect wildlife that needs specific habitat. Also, over the years, natural **disturbances** like wildfires, flooding, and insect outbreaks have been controlled. This has enabled mature forests to thrive while preventing new areas from becoming young forest.

MEET THE ANIMALS OF THE YOUNG FOREST

Examples of species that depend on young forests are shown here. They include birds like indigo buntings and American woodcock, reptiles such as box turtles and smooth green snakes, and mammals like the New England cottontail and bobcat.



Smooth Green Snake



Bobcat

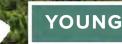


Golden-winged Warbler



New England Cottontail was once found across much of New England and east of the Hudson River in New York State but is now only in one-fifth of its original range. It can be very hard to tell the New England cottontail apart from the eastern cottontail.

Short-tailed Weasel (ermine)



GRASSLAND

Some species, such as meadowlarks and bobolinks, are important grassland species and require this habitat type to survive.

Gray Catbird



American Woodcock looks as if it should live near the seashore but is found in thick young forest habitat. Having eyes high up and toward the back of its head enables American woodcock to see danger from all sides.



FOREST

Box Turtle

Snowshoe Hare turns white in winter to help it hide from predators. Its large back feet act like "snowshoes," helping it

get through deep snow.

Indigo Bunting

Wood Turtle

Ruffed Grouse

MATURE FOREST

Mature forests are home to many different species as well, such as the scarlet tanager and wood thrush.

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Through a natural process known as **succession**, open areas like grassland or disturbed areas can start to grow shrubs and other woody vegetation and develop into young forest habitat. However, young forest does not stay young forever. It will become a more mature forest within 10 to 20 years if left alone. As the forest matures, larger trees will block sunlight from reaching the forest floor, and shade-loving species will populate the area. While this is beneficial to some animal species, many that depend on young forest habitat won't do well. Without periodic disturbances like floods caused by beavers, tree loss due to forest pests (such as insects), wildfires, or cutting down trees, young forest habitat can eventually disappear and cause a decline in the animal species that need it.



There are many ways to create and maintain young forest habitat. Allowing natural succession to take place on grassland habitats is one way. Old fields will slowly grow into shrubby, brushy areas. Sun-loving tree species will start to grow, as will a variety of wildflowers and grasses. In other cases, mature trees are killed by forest pests, flooding, or other natural causes, creating openings in the forest habitat. Light is now able to reach the forest floor, and new trees begin to grow from seeds, saplings, or sprout from old stumps.

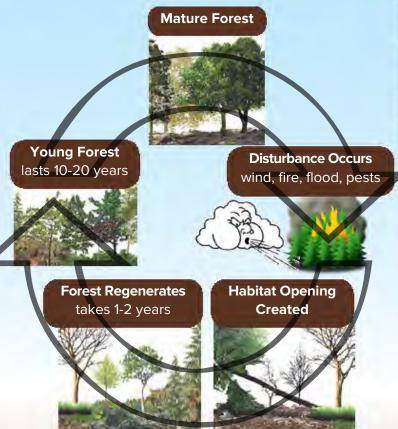
Another way is to create a **disturbance**, such as by cutting trees in an area of mature forest and then letting the area regrow. Many people think that cutting down trees is bad, but when it is done in the right place and at the right time, it can be good. Foresters, biologists and loggers work together to manage forest habitat. Having a variety of habitats—open meadows, young forests and mature forests—is beneficial for wildlife. A diversity of habitats leads to a diversity of wildlife, and a careful balance must be maintained to ensure that a diversity of habitats exist.



FOREST CREATED?

Small areas can be cut in patches, or larger areas may be clear-cut to create an opening. As long as large cuts are not made in sensitive areas, such as on steep slopes, or without considering how the species living there will be affected, they can be a good way to manage habitat. Mature forest should be left nearby to provide food and shelter for wildlife while the cut area is growing back.

Natural Cycle of Disturbance and Succession



Forest images: Ben Novak, Revive & Restore



Proper forest management can lead to a healthy forest **ecosystem**, one that has a variety of ages and types of trees and other vegetation. An ecosystem is the group of plants and animals found in a particular location. Besides being important wildlife habitat, healthy forests also benefit people. They help the environment with improved air quality and production of oxygen; nutrient cycling; and improved water quality through slowing runoff. They provide a place to enjoy activities such as hiking, photography, and watching wildlife. Healthy forests also provide many jobs and are an important part of the overall economy, providing products made from wood, such as paper, lumber, and furniture.

What Is DEC Doing for Young Forests and Wildlife?

For decades, the New York State Department of Environmental Conservation (DEC) has been managing state lands for wildlife habitat, watershed protection, open space preservation, timber production, and outdoor recreation. DEC is working to benefit young forest wildlife as part of a larger effort occurring throughout the northeastern United States—the Young Forest Project. Learn more about the project at **http://youngforest.org/**.

DEC is helping young forest wildlife by creating more of the habitat on 90 DEC-owned Wildlife Management Areas (WMAs) across the state. A minimum of 10% of the forested areas on these WMAs will be managed as young forest. Learn more about DEC's Young Forest Initiative at **www.dec.ny.gov/outdoor/104218.html**.





Exploring Your Own Environment

Where to Visit & Activities

Visit state lands to see young forests and the wildlife that live there. You can enjoy hiking, birdwatching, photography and, when you are older, hunting. Visit DEC's "Places to Go" webpage at http://www.dec.ny.gov/ outdoor/82098.html to learn more about DEC lands to visit, and http://nysparks.com for information about New York's state parks.





While many New York State public lands are always free for everyone, through the Every Kid in a Park program you can also visit state parks and

federal lands for free as a 4th grader. Learn more at **http://everykidinapark.org** and **http://discovertheforest.org**. The spring 2016 issue of *Conservationist for Kids* is devoted to this topic as well.

When you are visiting parks and other public lands, keep track of the types of wildlife you see. Are there different animals in grasslands vs. forests? How about in young forests vs. mature forests? Can you spot any of the young forest species mentioned in this issue? When possible, take photos of the animals you see and the habitats you visit. Share what you discover with your class and with your family and friends.

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CONSERVATIONIST FOR KIDS

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Supplement for Classroom Teachers

Young Forests (Fall 2016)

Why Learn about Young Forests?

Young forest is an important habitat type for many different species of plants and animals. In New York, more than 60 species of animals depend on this habitat, and others use it for at least part of their life cycle. Many of the dependent species are decreasing, and, unless more of this habitat is created, they are at risk of disappearing. For much of the public, cutting down trees seems bad, but in this issue of Conservationist for Kids, we try to show how it is an important tool to help manage habitat for wildlife. This issue also discusses the topic of succession and how it transforms grassland into young forest and eventually mature forest. All of these habitat types are crucial for lots of different species, and careful planning and management must be done to ensure that the proper balance of habitat types exists.

"Outside Page"

The "Outside Page" in this issue of Conservationist for Kids encourages students and their families to visit natural areas and compare the types of wildlife they see in different habitat types like fields vs. forests and young forest vs mature forest. It is suggested that students take photos when possible and share their findings with their class. Students are also reminded about the availability of free passes to visit state and national parks through the Every Kid in a Park Program. Finally, there is a young forest word search, which students can do either in the classroom or at home with their families.

Teacher Workshops

DEC offers a variety of teacher workshops such as **Project WILD** and **Project Learning Tree**, which can complement this and other topics explored in Conservationist for Kids. Visit www.dec.ny.gov/education/1913.html for information about workshops and how to obtain curriculum and activity guides.

Supplemental Activities for the Classroom

Visit a Natural Area

Plan a visit to a local natural area as a class so that students can learn more about different habitat types and succession. Some local nature centers may offer lessons or guided tours, while others may offer opportunities for classes to explore on their own. Depending on where in NYS you live, you might be able to visit a DEC environmental education center, a state park or a DEC day-use facility, or even a national wildlife refuge or national park. For suggestions on where to visit, check DEC's nature center list at www.dec.ny.gov/outdoor/1826.html. To learn more about DEC's environmental education centers and regional environmental education programs, visit www.dec.ny.gov/education/74.html. You can find a list of DEC's Wildlife Management Areas (WMAs) on our website at

www.dec.ny.gov/outdoor/7768.html. Several of them serve as demonstration areas. These include:



- Cranberry Mountain WMA, Patterson, Putnam County
- Partridge Run WMA, Berne, Albany County
- Upper and Lower Lakes WMA, Canton, St. Lawrence County
- Connecticut Hill WMA, (in five towns and two counties), Schuyler/Tompkins counties
- Erwin WMA, Erwin, Steuben County
- Hanging Bog WMA, New Hudson, Allegany County

To contact a DEC biologist and find out about tours of demonstration areas or other WMAs, please email: <u>yfwildlife@dec.ny.gov</u>.

Also, in the Albany area you can visit the Albany Pine Bush Preserve to see habitat management in action. In addition to selective cutting, the Pine Bush Preserve uses fire as a management tool. Visit their website at <u>www.albanypinebush.org</u> to learn more.

Watch a Video about Young Forests

The Young Forest Project website has a list of additional resources, including several videos that discuss young forests and the overall project. Visit <u>http://youngforest.org/documents</u> for the full list. Prior to watching any videos, have a short discussion with your students to get an overall idea of their knowledge on the topic and their reactions to such things as forest fires and cutting down trees. Once you have watched a video or videos, have another short discussion with your students to see whether any of their views have changed as a result of what they watched. This also could be turned into a writing project, having students write down their thoughts and feelings, both before and after learning more about young forests and how they are managed.

Online Resources

DEC's Private Forest Management webpage <u>www.dec.ny.gov/lands/4972.html</u> DEC's Young Forest Initiative on Wildlife Management Areas webpage <u>www.dec.ny.gov/outdoor/104218.html</u>

American Forest Foundation www.forestfoundation.org Atlantic Coast Young Forest Initiative webpage http://timberdoodle.org/atlanticCoast Appalachian Mountains Young Forest Initiative webpage http://timberdoodle.org/appalachian Audubon New York http://ny.audubon.org/ Great Thicket National Wildlife Refuge website www.fws.gov/northeast/refuges/planning/lpp/greatthicketLPP.html Golden-winged Warbler Conservation Initiative website http://www.gwwa.org/ Lower Great Lakes Young Forest Initiative webpage http://timberdoodle.org/lowerGreatLakes National Fish and Wildlife Foundation www.nfwf.org National Wild Turkey Federation www.nwtf.org/ Northern Young Forest Initiative webpage http://timberdoodle.org/northernForestInitiative Open Space Institute www.osiny.org Ruffed Grouse Society www.ruffedgrousesociety.org/ The Woodcock Management Plan website http://timberdoodle.org/ The Young Forest Project website http://youngforest.org/ Wildlife Management Institute www.wildlifemanagementinstitute.org/ Working Together for the New England Cottontail website http://newenglandcottontail.org/

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