

How Healthy, Sustainable Forests Help Wildlife and Their Habitats

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Sustainability has been the backbone of the paper industry for decades, and we couldn't do what we do without it. But forests need us just as we need them.

Sustainable forestry is about stewardship and care-care for trees, naturally, but also for smaller plants, soil, wildlife and water. It's a practice that creates a mutually supportive relationship between nature and people, through which we help sustain and renew the very resources on which we depend. Sustainability has been the backbone of the paper industry for decades, and we couldn't do what we do without it. But forests need us just as we need them. A robust and thriving paper industry helps create and maintain more forests. Thanks in large part to our members, which [plant twice as much wood as they harvest](#), one-third of the United States is forested, totaling nearly [766 million acres](#).

Sustainable forestry means conscious and conscientious long-term planning, with an eye toward building what forest scientists call uneven-aged or irregular forests, with trees at different stages of growth-some measured in months, some in decades. Uneven-aged forests don't just help mitigate climate change via carbon sequestration, capturing and storing different amounts of carbon at different speeds. They also promote biodiversity, offering habitats to a variety of wildlife species.

What Makes a Healthy and Sustainable Forest?

Foresters often create forests from scratch, as it were, reclaiming land that was clearcut generations ago for crops or pastureland. These young forests, or early-successional forests, are in a transitional state, defined by their dynamism. Low, open and grassy, they're subject to winds, floods and other disturbances. But their saplings, shrubs, brush and mast (the fruits, nuts and seeds of woody plants) offer ideal cover and habitat for small animals. Songbirds like warblers, small game birds like bobwhite quail and ground-dwellers like American woodcocks need young forests and shrublands for roosting, feeding and nesting. So do small reptiles such as bog turtles and green snakes, along with small mammals like rabbits. Of the [60 mammal species](#) commonly found in the Northeast, 56 thrive in early-successional forests.

When a stand of trees is around 12 years old and 25 feet tall, foresters will carefully assess and painstakingly mark less-robust trees to remove in a process called thinning. Removing slow-growing, diseased or poorly formed trees that would otherwise be lost before the final harvest decreases competition for sunlight, water and nutrients is decreased. High-quality trees are primed for accelerated growth. The philosophy of thinning can be summed up as: Take the rest, leave the best. While thinning makes economic sense, it's also environmentally beneficial, [promoting the health of the entire stand of trees](#) and enhancing food production and quality for wildlife. The woody debris left on the forest floor from thinning also recycles nutrients and creates habitats for small animals and microhabitats for [fungi and moss species](#). And thinned trees, of course, [don't go to waste](#)-most are used to make wood pulp and fuel in the form of wood chips.

Forests reach the [mid-successional growth stage](#) at 12 to 20 years old. In that period, just like people their age, they experience rapid growth, reaching a 40-foot height and a foot-wide diameter. Mid-size animals such as wild turkeys, foxes, raccoons and skunks thrive in these forests, whose middle-aged trees have outgrown weaker ones. Birds like band-tailed pigeons and Cooper's hawks take up residence in their canopies.

Depending on the region, risks, data and local regulations, foresters might do a controlled burn on the forest floor of a middle-aged forest. This intervention reduces [competing vegetation, fire hazards and the likelihood that diseases](#) will spread quickly and have catastrophic effects. It's also good for wildlife, [creating an open forest structure](#) that increases the sunlight reaching the forest floor and that certain animals-grouses and quails, [salamanders and tree frogs](#), and rabbits-prefer.

After 20 to 25 years of growth, forests enter the late-successional stage. With large trees, abundant understories and large snags (standing dead trees), these mature forests provide myriad habitats for wildlife. Birds like [Vaux's swifts and purple martins](#) live in the snags, while nesting birds like wood ducks and western screech owls take advantage of the mature trees' knotty cavities. Beneath these trees lives a vibrant array of megafauna, from white-tailed deer to bears.

Healthy Forest Ecosystems

Sustainable forestry also means considering how many animals benefit from forests older and younger than the specific successional stages of their natural habitats. Black bears, for instance, live in mature forests, but they use young forests as feeding areas, eating [berries and apples](#). Out West, northern spotted owls nest in [older, multi-layered forests](#), but they find food in the low, open fields of young forests.

No matter a forest's age, each species that inhabits it plays an important role in its ecosystem. When squirrels bury acorns for food, the ones they do not return for grow into a new generation of oak trees, while birds such as [blue jays distribute the acorns](#) across wide distances, furthering forest regeneration.

Continued forest health requires a symbiotic relationship between people and all the living things that make up a forest, from the smallest rodents to the tallest trees. By practicing sustainable forestry, our industry can ensure that different generations of trees can provide habitats for diverse wildlife and simultaneously benefit people-landowners, foresters, recreation seekers and more-for generations to come.

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