

Resources

Visit www.timberdoodle.org to learn more about woodcock, woodcock habitat, and the regional initiatives that support them.

To learn more about young forest best management practices and habitat demonstration areas near you, visit www.youngforest.org.

If you own property in northern Wisconsin, you can go to www.youngforest.org/wi to learn more about the Wisconsin Young Forest Partnership. WYFP can provide technical assistance on how to managing your property for wildlife. There are programs available to fully or partially fund these activities.

The *Young Forest Guide* includes advice on how to create habitat for woodcock and other young forest wildlife, along with landowner success stories, including several from Wisconsin. Download the guide at www.youngforest.org/resource/young-forest-guide.



Cover image and woodcock feather accents: Randee Smith

Managing Your Land for Woodcock

About Woodcock

The spiraling spring courtship flights, forest-dwelling habits, and striking appearance of the American woodcock make it one of the most readily recognizable upland birds in the eastern United States. Besides providing recreation for thousands of hunters each year, woodcock also appeal to nature enthusiasts. Those spiraling courtship flights are fun for the whole family to go watch! A keen ear may be needed to listen for the male woodcock's *peent* call to locate him, since this migratory bird can be difficult to spot with its stocky body and camouflage coloration. Woodcock also have a long prehensile bill used to probe moist soils for earthworms, its main food source. Most woodcock activity, including feeding, takes place in the dim light of dawn and dusk.



Dan Eklund

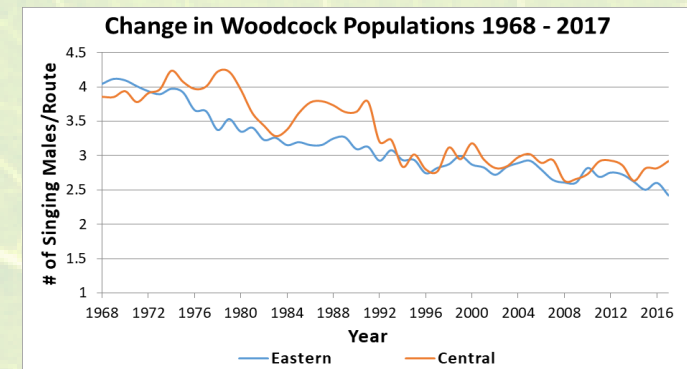
Charles Fergus

Hen camouflaged while sitting on her nest; Chick top right

Woodcock need forested habitats—specifically, young or “early successional” forests. As forests mature, their value to woodcock declines. In the Upper Great Lakes region, most regenerating forested habitats are suitable for woodcock only during the first 20 years following a timber harvest. Therefore, to manage landscapes for woodcock, young forests must be continually regenerated to produce woodcock. Woodcock require several distinct habitat components within their territories: roosting fields, singing grounds, feeding areas, and nesting and brood-rearing cover.

A Falling Population

Unfortunately, woodcock populations have been declining over the past 40 years due to the loss of young forest habitat. Prior to European settlement, young forests were created solely from natural events such as wind, fire, flooding, disease, and/or pests. Human suppression on some of these natural events has all but eliminated the creation of this vital habitat. Without people actively managing these habitats, existing young forests eventually become too old to benefit woodcock and other associated species.



Seamans, M.E., and R.D. Rau. 2017. American woodcock population status, 2017. U.S. Fish and Wildlife Service, Laurel, Maryland

Woodcock can be considered an “umbrella species”—a representative of all the animals that use young forest during part or all of their life cycles. By creating woodcock habitat, we can halt and reverse the decline in woodcock numbers while at the same time benefiting more than 60 species of at-risk wildlife and game species such as deer, bear, and ruffed grouse.



Wood turtles, bobcats, and golden-winged warblers are only three of the many species that benefit from young forest habitat

Habitat Management

Woodcock require a mix of small, scattered openings and dense stands of shrubs and young deciduous trees. Two young forest species that are commonly managed as woodcock habitat are aspen and alder.

Good woodcock habitat, such as young forests, are not a permanent feature of the landscape. Without active management, the forest will mature over time until the habitat is simply too old to attract woodcock, which starts to happen after 20 years.



Regenerating aspen

Charles Fergus

Aspen Management

Benefit: Within three to five years, recently harvested aspen (popple) stands will provide excellent feeding areas for woodcock due to dense stems that allow woodcock to feed on earthworms without being exposed to aerial predators.

Logging trails and log landings are also used by woodcock as singing grounds and roosting areas, since they often remain relatively open as the rest of the harvested stand grows thick with young trees.

Regeneration: When a mature aspen stand is clear-cut, the aspen will regenerate by sending up thousands of root suckers on every acre. Aspen is "shade-intolerant," which means it reproduces best in

full sunlight. Therefore, if too many live trees are left standing, they will cast shade on the young aspen sprouts and other species may outcompete the aspen, converting the stand to another forest type that may not attract woodcock.



Dan Eklund

Aspen responds vigorously to cutting and provides excellent cover

Cutting: Aspen sprouts best if the mature stand is cut during the trees' dormant season (October through March). Professional foresters can mark mature aspen for harvest and oversee logging operations.

Size: Cut aspen in 10- to 15-acre patches.

Age: Aspen is mature and can be harvested when it's between 30 and 50 years old. If a stand is 10 to 15 years old and larger than 20 acres, it can be cut to break up the stand.

Frequency: Not all mature timber should be harvested at once. If practical on your site, cut a portion about every 10 years to ensure a continual supply of suitable woodcock habitat, while maintaining older forests that are valuable to other kinds of wildlife.



Charles Fergus

Mature aspen ready to be harvested

Alder Management

Benefit: Abandoned agricultural fields that have been invaded by alder, dogwood, hazel, willow and other deciduous shrubs are important to woodcock for singing, nesting, and brood-rearing cover.

Stands of alder along streams and other low spots are used as woodcock feeding areas. Woodcock prefer sites that are moist and contain small, broad-leaved ground plants. Woodcock avoid wet sites with a dense grass understory because they have difficulty probing for food and moving around.



Scot J. Williamson

Three years after strip cutting, alder stem density is again high enough to provide excellent feeding cover

Regeneration: When alder is cut, it will send up multiple shoots from the stump, so leave at least 6 inches of stump for optimum regeneration. Alder, like aspen, is shade-intolerant and will not grow well in the shade of taller trees.

Cutting: Cut during the dormant season (October through March) to promote regrowth during the next growing season. Alder can be cut by hand, sheared off with a bulldozer, or cut with a hydro-ax brush-cutter. Cut stems can be left to decompose.

Size: Alder stands should be cut in 5-acre patches. If the alder grows next to a stream, cut strips—approximately 60 to 80 feet wide—perpendicular to the stream. This helps create a variety of soil moisture conditions within the regrowing stand.

Age: Cut stands of alder when they are 15 to 20 years old. Signs of "old age" include stems starting to break off or bend horizontally.



Randee Smith

Mature tag alder stems start growing horizontally

Frequency: Do not cut all the alder in a stand at one time. Cutting a portion of a stand about every 5 years will ensure a continual supply of suitable woodcock habitat and provide different ages of alder in the same general area.



DNR Photo

Strip cutting in alder is the preferred method of regeneration to regain the stem density preferred by woodcock

Habitat Components Woodcock Need

Roosting Fields

Use: These fields are where woodcock spend the night resting on the ground in summer and early fall.

Composition: Bare ground with scattered knee-high herbaceous vegetation that protects woodcock from both land and aerial predators.

Examples: Abandoned farm fields, newly logged woods, utility rights-of-way, sedge meadows, and weedy fields.



Weedy fields with young forest nearby

Scot J. Williamson



Recently harvested forest with sparse cover

Scot J. Williamson

Size: At least 5 acres.

Frequency: 1 roosting field per 100-acre management unit.

Nearby Components: Feeding habitat less than a half mile away.

Maintenance: Keep these areas open by mowing or burning every 3 to 5 years.

Singing Grounds

Use: Also known as courtship areas, singing grounds are occupied by males in early spring at dawn and dusk from which they call and make flights to attract females.

Composition: Open habitat components with sparse ground cover.

Examples: Woodland clearings, old fields, pasture edges, log landings, road edges, and utility rights-of-way.



Utility rights-of-way

Randee Smith



Males sing on trails with alder nearby for feeding

Randee Smith

Size: At least 0.5 acres, but can be larger— such as fields, bogs, peatland, etc.

Frequency: 8 singing grounds per 100-acre management unit.

Nearby Components: Often near dense shrubs or young forest stands, which provide feeding and nesting habitats.

Maintenance: Keep these areas open by mowing or burning every 3 to 5 years.

Feeding Areas

Use: Adults and chicks spend their days feeding in these areas.

Composition: These habitats are stocked with young regrowing trees whose high woody stem densities protect the birds from predators; rich, moist soils often found in such areas support abundant earthworms for feeding.

Examples: Abandoned farmland, old orchards, stands of dense young alder, and clear-cuts 2 to 10 years old that are densely regenerating with aspen, birch, maple, softwoods, and other trees and shrubs.



Riparian areas provide a consistent source of earthworms

Scot J. Williamson

Size: 5 acres for alder or 10 to 15 acres for aspen.

Age: 2 to 10 years old.

Frequency: 80 percent or more of a 100-acre management unit should be feeding and nesting/ brood-rearing cover.

Nearby Components: Roosting fields less than a half mile away and singing grounds nearby.

Maintenance: Schedule timber harvests/cutting so that there is always forest in the 2- to 10-year-old age class with the recommended composition.

Nesting/Brood-Rearing Cover

Use: After mating, hens seek out these areas for nesting cover and to raise their chicks.

Composition: Dense and often brushy mixed-age woodlands where pole-sized trees stand above a shrub layer. In general, nesting cover is somewhat drier than typical daytime feeding areas, but the two are often one and the same.

Examples: Dense young aspen or alder, brushy woods, hawthorn and crabapple thickets.



Dense aspen provides excellent cover for raising young

Randee Smith

Size: 5 acres for alder or 10 to 15 acres for aspen.

Age: 10 to 20 years old.

Frequency: 80 percent or more of a 100-acre management unit should be feeding and nesting/ brood-rearing cover.

Nearby Components: Usually within 150 yards of singing grounds.

Maintenance: Schedule timber harvests/cutting so that there is always forest in the 10- to 20-year-old age class with the recommended composition.

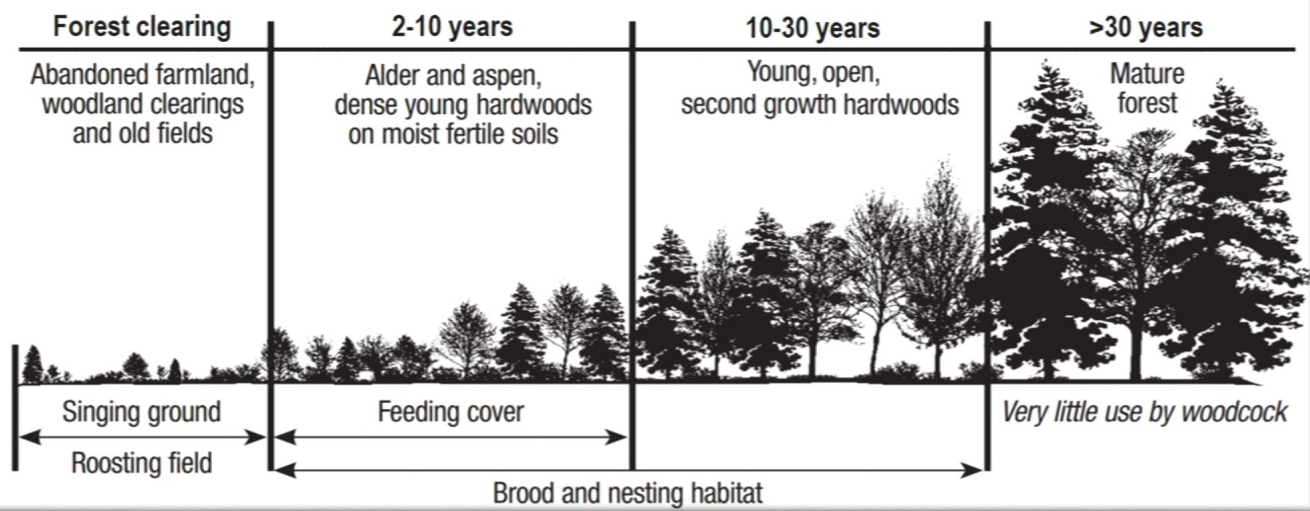
Summary

Young forest is an important habitat for many wildlife species, including more than 60 at-risk species and several important game species like deer, bear, and ruffed grouse. If young forests are not continually managed, they will mature and lose value to wildlife that are dependent on it. Landowners can help woodcock and many other kinds of wildlife by taking management actions to create some young forest on their property.

Woodcock management works best in Wisconsin on land with abundant aspen and birch, mixed with a few old fields, forest openings, and brushy low areas. Forests dominated by maples, oaks, pines, or spruce generally do not provide high-quality woodcock habitat. Landowners might consider managing those lands for other wildlife species.

%	Habitat Component	Age (years)	Size (acres)	Maintenance
20	Roosting	Recent cut	5	Mow or burn every 3-5 years
	Singing	Recent cut	At least 0.5	
80	Feeding	2-10	5 for alder and 10-15 for aspen	Schedule timber harvests to maintain a range of ages
	Nesting/brood-rearing	10-20		

WOODCOCK HABITAT NEEDS



Tips

You can allow gradual takeover of old fields by alder, aspen, hazel, willow or other shrubs and trees—in this way, roosting fields will gradually become woodcock singing grounds, then nesting and brood-rearing cover.

If you have an open area that isn't growing back quickly enough, you can plant native trees and shrubs to help create young forest habitat.

Avoid intensive management activities—such as timber harvest or brush clearing—during times when wildlife are breeding. The nesting period for conservation priority species can range from mid-May to early August. Woodcock begin nesting as early as April in northern areas.

When managing your property, try to create a mosaic of different age classes and species composition. Wildlife will benefit when the landscape provides all ages of a habitat. Remember that your land is not an island. When you plan to do a harvest, look at the neighboring land to see if it lacks a certain age class. If your land is surrounded by mature forest, it would probably be a good idea to do a harvest sooner rather than later if you want to encourage young forest wildlife.

Creating and renewing young forest is an ongoing task that requires planning into the future. Consider developing a forest management plan to lay out future cuttings and management activities.

Getting Help

Even with proper information, it can be a daunting task to manage land effectively for wildlife. Fortunately, there are conservationists and natural resource professionals available to give advice on where to make young forest, how to do it, and how to find funding.

The following can provide assistance:

- USDA Natural Resources Conservation Service
- US Fish and Wildlife Service's Partners for Fish and Wildlife Program
- Wisconsin Department of Natural Resources
- Ruffed Grouse Society/American Woodcock Society
- Pheasants Forever
- National Wild Turkey Federation
- Forestry and wildlife consultants

Many of the organizations listed above provide financial assistance for developing management plans and/or to carry out management activities. Get started by contacting them today to see whether funding is available and to get advice.

Agencies and organizations have joined forces to form the Young Forest Initiative in an effort to make the Midwest's forests healthier and more diverse. Partners pool their resources, efficiently use funds, and devise new and innovative approaches to conservation.

To find a professional contact in your region, go to www.timberdoodle.org/content/contacts www.ruffedgrousesociety.org/Consultants%20List