

On the Backs of Bog Suckers

Creating woodcock habitat allows many species to thrive.

By Biologists Lisa Williams and Eric Miller

PEENT. The nasal sound erupting in the gloom of twilight from the dark, boggy thicket sets your hair on end.

What on earth is it? Insect? Frog? Bog monster? *Peent*.

Approaching too close to the mysterious sound, you're startled by a rush of twittering wings hurtling through the dense brush.

With a yelp you jump sideways into the squishy muck beneath your feet. What is going on here?

You have just encountered the American woodcock, the bog sucker, the mudbat, the timberdoodle.

Many Pennsylvanians are completely unaware of this bird's existence, owing to its inclination to haunt wet thickets

in dense brush avoided by most people, and its twilight call that tricks the novice ear into dismissing it as a bug, frog or toad.

Even for those setting out to observe the beautiful bird in its lair, dense hawthorn, autumn olive, barberry or multiflora rose often block the way.

Braving the clawing thorns, the bloodied observer might still be thwarted: The woodcock boasts supreme camouflage and is willing to sit tight and watch you battle face-slapping branches as you pass by.

The woodcock's secretive nature was nearly its downfall. Although populations have been declining steadily since the 1960s, few people took notice. Woodcock hunters,



Hal Korber



Goldenrod is an important component of quality woodcock habitat and provides vital nesting cover.

intrepid individuals who brave dense thickets with eager pointing dogs and small-gauge shotguns, sounded the alarm decades ago. But only recently have others concurred: The dense shrubby thickets and sapling stands required by woodcock have been disappearing for decades, and with them an entire wildlife community is in peril.

In 2006, the American Bird Conservancy named its list of Top 20 Most-Threatened Bird Habitats. “Early Successional Forests of Eastern Deciduous Forests” was among the unlucky habitat types to be included. “Early successional forests” is science-speak for the shrub thickets and young saplings that woodcock require. No other habitat in the eastern United States even made the list; an indicator of just how dire the situation has become.

Declining wildlife of this “young forest” habitat type include ruffed grouse, eastern box and spotted turtles, Appalachian cottontail, snowshoe hare, northern bobwhite, the golden-winged and blue-winged warblers, yellow-breasted chat, whip-poor-will, brown

thrasher, prairie warbler, common yellowthroat and indigo bunting.

In all, more than 30 species associated with young forests are included in the Pennsylvania Wildlife Action Plan because of concerns about their population trends.

Game species such as deer, bears, bobcats and wild turkeys also make use of these young forest patches, because they provide excellent cover, and are so rich in food abundance and diversity.

Biologists suspect that the reduced availability of thick nesting habitat may be at least partially to blame for observed declines in turkey productivity and populations across much of the Northeast in the past decade. Even birds of the mature forest, such as scarlet tanagers, wood thrushes, worm-eating warblers and ovenbirds use these young patches within the forest. The abundant insects and fruits of summer and fall fuel the growth of juveniles and improve body condition prior to fall migration.

The Game Commission is actively involved with a variety of partners to improve the plight of these declining species. Large-scale initiatives are underway with public and private partners, with fellow resource management agencies, and with landowners across the state.

WOODCOCK HABITAT MANAGEMENT

As with any wildlife species undergoing a population decline, the true way to halt the decline and reverse it is to implement landscape-scale

habitat creation or improvement.

Early successional habitat is in short supply across Pennsylvania, and most historical woodcock habitat has either naturally grown to forest or been invaded by exotic invasive vegetation.

The good news is that Pennsylvania hasn't lost forest land, rather the habitats used by woodcock have reached an age deterring their use.

With this in mind, simply cutting the old forest may not produce woodcock habitat. There are several factors to consider that can make a site more attractive to woodcock.

TOPOGRAPHY

Land managers should first look at the topography when determining if areas are suitable for woodcock habitat.

Soils and vegetation are typically different on slopes than on flatter terrain, and subsequently woodcock are rarely found on slopes greater than 15 percent incline.

Gradual, gradient slopes less than 15 percent adjacent to watercourses make excellent sites for improving or creating woodcock habitat because several habitat components are present.

SOILS

If the topography of the potential site is relatively flat, the next factor to look at is the soil. Woodcock and moist soils are rather synonymous, but sites with drier soils can still be highly used by woodcock. These drier soils typically have pockets of compaction that hold water, providing probing areas. When looking at soils, managers do not need to conduct a soil test, rather look

at the vegetation growing on the site. If forbs such as goldenrod, and shrubs such as dogwood or viburnum, or small trees such as black locust or aspen are present, the area has promise.

VEGETATION

Native vegetation can make identifying potential woodcock habitat fairly easy. Silky dogwood, gray dogwood, southern arrowwood and other viburnums are very attractive to woodcock because of their growth structure. If these shrubs are identified during the site assessment, woodcock habitat is probably already present.

However, due to natural succession, these shrubs can be replaced over time with hardwood species such as white ash or black cherry, so it is important to look for these indicative shrubs persisting in the understory.

Black locust, hornbeam, hawthorn, blackhaw, crabapple and aspen are native trees that are highly used by woodcock, especially when a forb component such as goldenrod is present. These tree complexes provide optimal structure and are very good indicators of woodcock habitat.



Silky and gray dogwood is a great indicator woodcock feeding habitat is readily available.

Exotic invasive vegetation on the other hand can make the determination of potential woodcock habitat more difficult. Vegetation such as bush honeysuckle, multiflora rose, autumn and Russian olive and privet grow under various conditions ranging from slopes to riparian areas to forest understory. When stands of these invasives are encountered, land managers should look to topography and soils to determine whether such a site has potential to become woodcock habitat.

HABITAT COMPONENTS

Woodcock use different habitats at various times of the day and throughout the year. For instance, males use small fields and forest openings at dawn and dusk for singing grounds. Old fields with goldenrod and shrubs are used for nesting, and larger open areas, such as hayfields, are used for ground roosting at night. Should one of these pieces be removed, the likelihood of finding woodcock decreases substantially. Additionally, some often overlooked habitats are easily maintained to contain multiple components and it's important to be able to recognize them.

HABITAT MANAGEMENT

Woodcock habitat management isn't overly complicated. Reverting fields with patchy shrubs and bottomland shrublands are key. Over time, these habitats will advance toward forest as tall-growing trees such as maple, ash, poplar and oak become established and grow.

This doesn't happen all at once. A few scattered trees start showing up, and over time begin shading the shrubs and dropping more tree seed.

YOUNG FOREST HABITAT ON PRIVATE LAND

The creation of quality young forest habitat for woodcock, grouse and many other species, must not be limited to public lands, such as state game lands or state forests.

The majority of Penn's Woods—71 percent—is private land.

To reverse population declines of young forest wildlife species, we must create and protect habitat on private lands, too.

The challenges that face private landowners are varied and many. Private forests often are degraded by poor timber harvesting practices, invasive plant species, gypsy moth or ash borer tree mortality, high deer populations, and other factors. Private landowners, even with the best of intentions, can lack the technical expertise to enhance wildlife habitat on their properties.

Fortunately, excellent resources are available. The Game Commission's Private Landowners Assistance Program (PLAP) provides technical advice to landowners interested in providing habitat for rare or declining wildlife species, including woodcock. The state Department of Conservation and Natural Resources also has a private forest owners program that provides a forester in each county to offer management assistance.

The natural-resources division of Penn State Extension provides a wealth of information through many publications, webinars, workshops and conferences. In addition to providing technical assistance, these entities can link landowners to potential funding sources to implement habitat management actions.

In 2012 and 2013, the Game Commission facilitated creation of 2,427 acres of young forest on private land open to hunting through the Voluntary Public Access and Habitat Improvement Program. Although that funding source has expired, the agency continues to partner with the U.S. Department of Agriculture Natural Resources Conservation Service to create young forest on private property. To date, that program has obligated funding for the creation of an additional 5,700 acres of young forest in Pennsylvania. Assistance through the PLAP does not require that land be open to hunting. If interested, contact your Game Commission region office.

The simplest way to perpetuate a shrubland is to cut the invading trees early on when they reach 4 to 6 feet tall (overtopping the shrubs). A somewhat longer-term solution that prevents resprouting is to apply herbicide after cutting or using a basal herbicide application without cutting. Without question, exotic invasive plants present a problem when attempting woodcock habitat work. Multiflora rose, autumn olive and bush honeysuckle have become rather common in Pennsylvania, and are a serious threat because they out-compete native shrubs. Invasive shrubs also tend to spread rapidly due to seed dispersal by animals. Early leaf-out of invasive shrubs further hampers native plant growth. Recent research found that woodcock nesting success decreased in areas dominated by invasive shrubs, but woodcock will tolerate scattered invasives if native plants are also present. Keeping the scale tipped in favor of native vegetation is all that is needed. Often, spot treating invasive shrubs will do the trick. In more extreme cases, a shrubland dominated by “old growth” invasives will need to be mechanically mowed, and then sprayed with herbicide. We have been pleasantly surprised many times by the native shrub response following these treatments. In addition to typical shrubland management, other opportunities exist to provide excellent habitat for woodcock.

STRIP MINES

Strip mines are not really thought of as prime woodcock habitat, but reclamation efforts often use black



Apple orchards with a forb understory are highly attractive to woodcock.

locust because of its ability to grow on many different site conditions. Also, the alleopathic (the suppression of growth of one plant species by another due to the release of toxic substances) properties of locust creates ideal woodcock structure by deterring many non-desirable vegetation species and allowing beneficial species such as goldenrod to thrive. Other important tree species such as aspen are commonly found on strip mines.

Through the reclamation process, areas of compacted soil often hold moisture and provide woodcock with foraging areas. With this in mind, the habitat structure on strip mines provides excellent diurnal, nesting/ brood-rearing and roosting cover, and woodcock can travel significant distances daily to foraging areas.

Many strip mines will be in an arrested state, so minimal maintenance of invasive vegetation is all that is required.

ORCHARDS

Much has been theorized as to why orchards attract woodcock, because these birds are unable to feed on the fruit. The most likely explanation is

that the decaying fruit on the ground attracts earthworms. The reason is not necessarily as important as is proper maintenance. The goal for maintaining orchards is to allow forbs and other vegetation to grow in the understory. As with other stands, goldenrod is common in these covers and should be promoted.

HORNBEAM

American hornbeam, in itself isn't vital to woodcock, but the places it prefers to grow is.

Blue beech or musclewood, as it also is known, grows on moist sites often adjacent to streams. Hornbeam stands often contain a layer of goldenrod in the understory. But this tree species grows slow, is capable of growing to taller heights and can grow out of the age preferred by woodcock.

Much like other covers, hornbeam provides excellent structure that offers quality diurnal, feeding, nesting and brood-rearing cover. Maintenance of hornbeam stands requires the removal of invasive shrubs, promotion of a goldenrod understory and periodic regeneration. Hornbeam will "root sucker," or bud from its base or roots, to a lesser extent than aspen. But it does well after a regeneration cut.

SUMMARY

Habitat management for woodcock should give special consideration to the different habitat types used by woodcock. Because each habitat type provides a separate niche of the daily necessities for woodcock, it is important to manage all of them equally. Moist shrublands that provide feeding cover are just as important as strip-mine locust and aspen stands

The entire young-forest community benefits.

that offer daytime resting, nesting and brood-rearing cover. Maintaining the proper structure of shrubs and trees with a goldenrod understory, while deterring the growth of invasive vegetation, should be the goal. The most difficult aspect of managing woodcock habitat is recognizing when to take a minimal management approach. Often, simply maintaining the current structure and treating individual invasive shrubs or over-topping trees is all that might be necessary. When unsure, err on the side of caution.

However, when a once high-quality shrubland has been overtaken by invasive shrubs, a complete stand treatment might be necessary.

Woodcock habitat management is not always easy due to the presence of invasive vegetation, but by following through with your treatments, the woodcock will let you know how you're doing.

Work undertaken to improve woodcock populations has far-reaching consequences.

Increasing the availability of young-forest patches, and improving the condition of those patches currently on the landscape will improve habitat conditions for multiple species, regardless of whether they're covered in scales, fur or feathers, or whether they are hunted or not.

Thousands of acres of habitat are being improved for woodcock, grouse, golden-winged warblers, and the entire young forest community benefits.

In a sense, the future of many species is being lifted "on the backs of bog-suckers." 