



Bundling:

HOW NEW ENGLAND COTTONTAILS, **GOLDEN-WINGED WARBLERS** AND OTHER NON-GAME SPECIES ARE HELPING UPLAND BIRDS

Photo provided by Mike Freeman

Photo by Laurie Johnson

By MIKE FREEMAN

By now, nearly all grouse and woodcock hunters can catechize the chronology: What happened when the colonists arrived? They razed the forests. What happened as settlement pushed west? Farms were abandoned, most around 1900. What happened to plots that weren't developed? The forests regenerated, providing premium upland bird cover from 1950 to 1990, Maine to Minnesota. What's happened since? The forests matured, trending grouse and woodcock populations down.



ny hunter over 40, then, remembers the heyday, when it appeared nearly every hillside and bottomland sported dense secondary growth along with an apple copse marking the forsaken farm that tended it. Grouse adore such places, woodcock too, and it seemed the good times would never end.

Things, though, have changed. Hardwoods that scarcely crowned the apples when hunters were young now strangle dying orchards, while beneath

the ensuing canopy little undergrowth survives. This leaves upland birds open to predation as well as with diminished food choices, particularly for young-of-the-year who miss the bug-rich herbaceous growth in the vanished understory.

During the 1990s things deteriorated apace. Rhode Island has closed grouse season, while Connecticut and Massachusetts feel pressure to do the same. Even Pennsylvania, whose state bird is the ruffed grouse and where drumming cocks were once as common a spring rite as baseball, has slipped, with even-aged

timber stands having succeeded the preferred habitat of previous decades. If things seem dire, however, good news has been percolating for a generation, for grouse and woodcock are far from the only suffering species, and hunters in no way the only interest with a stake.

American conservation has evolved considerably. Begun in 1646 when Portsmouth, Rhode Island, responded to a deer herd crash, management largely remained the province of hunters and trappers, who for the next two-and-a-half centuries struggled to recover species



Photo by Kelly Boland

This photo shows the post-management progress on a habitat site by the USFWS in Maine for New England cottontails that also benefit a wide array of other wildlife species.



Photo by Jeremy Holtz

These forest treatments in Wisconsin for golden-winged warbler habitat provide favorable responses to many bird species including ruffed grouse and American woodcock.

from their own prowess. Sometimes they succeeded, as with deer, beaver, turkeys and bison, while in others they failed, as with Eastern elk, passenger pigeons and Eskimo curlews.

Though less proactive, a related ethos paralleled these efforts, starting with Henry Thoreau through to John Muir. These were people who saw in decimated wildlife ranks and their blitzed habitats a looming American calamity. While the conservation enacted by hunters didn't often mesh with these softer urgings, William Faulkner spoke for all in 1942's *The Bear*, indelibly engraving what spiritual desolation lay ahead should the wilderness continue to be destroyed. Since that time, these two movements have increasingly conjoined to the benefit of everything – ruffed grouse, American woodcock and the people who hunt them included.

“I've certainly seen better coordination,” said Michigan Tech Research Biologist Amber Roth, “both over my career and my lifetime.”

Citing ongoing cooperation by organizations formerly leery of one another, Roth offers just one of countless collaborative efforts to boost habitat not just for targeted species but the entire young forest suite:

“Recently, the Wisconsin Young Forest Partnership received strong commitments from the Ruffed Grouse Society, American Bird Conservancy and Wisconsin Bird Conservation Initiative. Many ‘nongame-oriented’ organizations are now seeing how young forest habitat benefits many high priority species as well as

the importance of a diverse forest landscape that satisfies needs throughout a bird's lifecycle for a broad range of forest-dependent species.”

Roth says much here. One of the more effective marketing trends of late has been ‘bundling’, or packaging several services and products into a single offering. While conservationists currently don't use the term, they prefigured the strategy a generation ago, bundling interests, funds, and nongame and game species alike in restoration efforts. This is happy news not just for hunters but anyone harboring even the slightest appreciation of nature.

Earlier, when hunters scrambled to recoup imperiled species, not much thought was given to other wildlife or even habitat. Focus concentrated on bag limits, closures and stocking programs. Now, however, with wildlife biology having flourished since James Audubon's shooting of passerines for portraiture, much more is known of previously little-known species such as box turtles, prairie warblers and olive-sided flycatchers. This has translated into rapidly escalating efforts to set back forest succession and stabilize the welter of species affected by it. While most early successional obligates are considered, two in particular currently drive forest management projects from the Great Lakes and New England down through the Mid-Atlantic and

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Photo by Jeff Larkin

Grouse drum and nest near woody areas of golden-winged warbler treatments in Pennsylvania.



Photo by Jeff Larkin

Appalachia, where to varying degrees grouse and woodcock struggle to maintain viability.

Any upland hunter, then, currently indifferent to the plights of golden-winged warblers and New England cottontails might reconsider that stance, for grouse and woodcock are being bundled into projects designed to keep these other organisms off the endangered species list. As wildlife managers have learned, efforts to prevent a federal listing are far cheaper than de-listing strategies. Subsequently, while both New England cottontails and golden-winged warblers have suffered mightily, pains are underway to stabilize populations before they're termed endangered. Fortunately for grouse and woodcock, each species is young forest dependent.

A smaller cousin of the more common Eastern cottontail, the New England variety needs at least 20 acres of contiguous shrub habitat to thrive. In and around Wells, Maine, U.S. Fish and Wildlife Service biologist Kelly Boland oversees forest treatments funded for these rabbits on federal and private land. This is coastal New England, historically rich in young forest due to fire and storm activity.

Through development and fire prevention, however, coasts from Connecticut to Nova Scotia have experienced significant habitat loss, tumbling cottontail numbers alongside those of grouse and woodcock. Though officially targeting rabbits, Boland's work aids many creatures:

"We haven't performed woodcock and grouse surveys in our cottontail habitats, but there are nice looking courtship, feeding and nesting areas being created. Our cuts are as small as a wide 'feathered edge' or 20-plus acres. We've mowed areas to restart mature alders and cut mixed forest where poplar stands sprout

overhead in a season. I flush woodcock during my field visits and found a nest at the Wells Reserve. I can't say what precise impact we've had on the population but will say that we're creating habitat either adjacent to or expanding upon existing covers. Sometimes we add a missing habitat component, often creating thick re-growth next to fields, giving woodcock ideal nesting cover next to a singing ground. On two occasions I observed ruffed grouse in sapling birch and once along an abandoned railroad bed near a fresh 18-acre cut. As that habitat develops it will provide food and cover that grouse should utilize."

Hunters know that where you find cottontails you often find grouse and woodcock, with all three requiring dense cover. As Boland indicated, clear-cutting for cottontails allows new growth. Softwoods like poplar take a year to provide adequate cover, whereas hardwood treatments might take several. These latter are common in southern New England, where oak, hickory and maple thrive, while poplar stands are more prevalent in Maine and New Hampshire. Either way, upland birds find what they need alongside the rabbits.

In those first years, heavy sunlight promotes forb and herb growth within the tree regeneration, plants that opportunist grouse exploit. This additionally attracts invertebrate life critical to juvenile bird diets. Equally important, the bunched sapling growth – what foresters term high stem density – provides cover that mature forests do not. As anyone who's cursed shrub-browsing deer or has had beavers flood their driveway knows, conservation successes come with irony. Concerning grouse, forest reclamation, while wholly welcome, has created huge tracts of accipiter habitat, the hawk class that preys on birds.

Cooper's Hawks in particular, which prefer canopy cover, have



Photo by Kelly Boland

This sign shows the partners involved in a New England cottontail project in Maine with a positive message about regrowth.



Photo by Kelly Boland

rebounded terrifically, and in open forests make life hard for already struggling grouse populations. Regenerating clear-cuts, though, particularly those large enough for New England cottontails, allow grouse and their broods not just cover from being seen, but obstacles when hawks do spot them. Such management is being implemented across the rabbits' range from eastern New York through most of New England, and while results for grouse have been mixed due to Rhode Island and eastern Connecticut where baseline numbers are near zero, woodcock have responded well everywhere. Without the impetus of the rabbits and the additional packaging of other declining early successional species – from brown thrashers to hog-nosed snakes – much of that improvement might never have happened.

In a wider territory, a colorful songbird is driving similar boons.

Golden-winged warblers have traditionally presented high seasonal densities from Vermont through West Virginia, up to Wisconsin and Minnesota. A neo-tropical migrant that prefers nesting at altitude, they're in deep trouble, prompting the same management efforts afforded the New England cottontail, though with different approaches. As Amber Roth points out, unlike the rabbits, these warblers need far less young forest acreage:

“The data indicates these birds use a variety of forest habitats for foraging but prefer young woods and shrublands for nest sites. I suspect they avoid nesting in mature forests that lack a well-developed understory to conceal their nests, which are on or very near the ground. Golden-winged warblers feed their young a wide variety of insects, though, and use older forests to glean.”

Though often smaller, forest treatments funded for these warblers boost most young forest obligates, upland birds included,

something noted by Jeremy Holtz, a wildlife biologist for the Wisconsin Department of Natural Resources.

“With an active paper industry and tax incentives for forest management, Wisconsin and Minnesota don't have the pronounced succession problems of other states, but it's still here, and golden-winged work mitigates that. Our formal surveys and anecdotal observations by field staff have shown favorable responses by many young forest birds, including ruffed grouse and woodcock. In fact, in the first year following an even-aged aspen harvest, woodcock move right in, whereas grouse take longer. They do, though, like the edges of harvest areas for their broods to forage. When the cut thickens in a few years they'll use that too.”

Since golden-winged warblers require smaller patches than cottontails and need – or at least prefer – deep forest nearby, different methods can achieve these gaps. Responding to forest maturation in the Champlain Valley, Vermont Audubon brush-hogs small patches of abandoned farmland to set succession back, with woodcock responding favorably. The Pennsylvania Game Commission has been cutting in the manner done for New England cottontails, though they often shelterwood cut, leaving seed-trees for golden-winged forage sites while 'daylighting' the ground to provide the required nest cover.

“Other species certainly benefit,” said Jeff Larkin, an Indiana University of Pennsylvania biologist. “My observation is that grouse will drum and nest in the woody areas of our golden-winged treatments. They also bring their broods in the herbaceous areas. I took a picture of a female with her kids recently next to one of the harvests.”

Biologists, too, learn more every year, and other species are being bundled into such projects. Deep forest birds, for instance, were always thought to be just that – exclusive to mature woodlands. Recent studies, however, of cerulean warblers and wood thrushes demonstrate that while canopy cover is critical for nesting, fledglings depend on early-successional gaps for identical reasons as grouse – to feed and escape accipiter detection. Such data is garnering advocacy in the birding community for the same forest management techniques championed by upland bird hunters for a generation.

Northern Minnesota provides but one example, where a proposal outlined in part for great gray and hawk owl restoration would be funded by the Minnesota Department of Natural Resources (MN DNR), Audubon, The American Bird Conservancy, and the Ruffed Grouse Society. Michael North, a prior MN DNR forest game bird coordinator, details the bundling effect:

“Apart from the owls, many songbirds including golden-winged warblers will benefit, along with sharp-tailed grouse, ruffed grouse, woodcock, white-tailed deer, snowshoe hares and everything that preys on them, and probably spruce grouse.”

If certain frictions, then, still agitate the bond between hunters and other conservationists, that ire is fading fast, with the resulting pooling of funds, resources and outreach favoring everyone, wildlife most of all. 🌿