Fact Sheet: Zoar Valley Demonstration Site

Hooded Warbler. Photo: Jesse Gordon/Audubon Photography Awards

Audubon, through our Connecticut and New York regional program, is collaborating with NYS Department of Environmental Conservation (DEC) at the Zoar Valley Multiple Use Area to plan a public, educational forest demonstration site. Below are some frequently asked questions we have received. We are happy to answer more if you have them.

Why are some trees marked with paint in some areas of Zoar Valley Multiple Use Area?
Trees have been marked at the Zoar Valley Multiple Use Area to indicate forest improvement treatments planned by the National Audubon Society through its Connecticut and New York regional program, and the New York State Department of Environmental Conservation (DEC).

These treatments are planned to improve the health, habitat value for wildlife, and resilience of the forests of the Zoar Valley Multiple Use Area as well as to serve as a public, educational demonstration site where others can learn about these forest improvement techniques.

Are you removing some or all trees across the 92-acre site?
At this 92-acre demonstration site, we plan to remove only certain trees in order to promote the new growth of a varied mix of trees – by size, age, and species. This work will help reduce invasive plants, create wildlife habitat, and improve forest health and resiliency.

The majority of the management proposed will leave tall canopy trees remaining, meaning no clearcuts are planned for this site. Forest management activities include removing individual and small groups of trees to create small gaps in the canopy to let sunlight reach the forest floor and regenerate trees.

How will removing certain trees create climate resiliency and other benefits?

The proposed management will create the old-growth characteristics which this area of Zoar currently lacks, including large trees, many age classes of trees, and downed woody debris. Management will create these conditions faster than if we left the woods in their current state, which will make them more climate-resilient, and increase species and habitat diversity.

"Young" or newly regenerating forest is greatly lacking from the greater forested landscape of the northeast, including within Zoar Valley Multiple Use Area. Young forest increases carbon sequestration, improves water filtration, reduces flooding, and is essential habitat for birds and other wildlife.

To create the conditions to regenerate new species, we will conduct a small number of shelterwood and seed tree harvests, removing certain canopy trees to maximize sunlight reaching the forest floor. This will help regenerate tree species that require abundant light conditions to grow, like black cherry, oaks, walnut, and aspen.

Diverse forests are more resilient, meaning they are better equipped to withstand stressors from climate change and forest pests and pathogens, such as spongy moth.

New growth behind a deer fence is highly visible in our demonstration forest at Rheinstrom Hill Audubon Center.

Are you cutting old growth or ancient trees?

No. This project is located within the Zoar Valley Multiple Use Area and not the Zoar Valley Unique Area, the latter being home to old growth trees and Cattaraugus Creek. This project will not cut old growth trees. Recent land use history indicates the site of this demonstration forest was cleared and used for agriculture as recently as 60 years ago, which is far below the age commonly considered old growth.

The proposed demonstration forest will create diverse and climate resilient forest conditions that will enhance carbon capture and support NYS Species of Greatest Conservation Need, and aligns with the goals of the NYS 30x30 initiative.

How will the proposed forest management help birds?

A number of New York's forest-dependent birds are experiencing drastic population declines, so the quality of their breeding habitat is a conservation priority to help their populations grow. Forest breeding birds in New York have varying nesting and brood-rearing habitat needs. Forest birds like Black-throated Blue, Hooded, and Mourning Warblers, and Ovenbirds require small trees and shrubs in the understory for nesting – these species build their nests directly on the ground or in vegetation that is only a few feet high. Other species need young or newly regenerating forest to nest within, like Indigo Buntings, Eastern Towhees, Chestnut-sided Warblers, and Common Yellowthroats.

Further, many birds that nest within mature forest move to areas of young forest with their newly fledged nestlings. This is because the dense young forest conditions offer protective cover habitat and plentiful food resources, like insects, fruits, and seeds. These habitat conditions are critical to ensuring the fledglings are eating well and are fit and healthy ahead of their long and arduous fall migration to their wintering grounds.

At the Zoar Valley Multiple Use Area, there is little-to-no forest habitat diversity, leaving forest breeding birds without the conditions necessary to successfully nest and raise young. The science-based forest management we hope to apply will create diverse forest conditions to benefit dozens of forest breeding birds.

With an estimated three billion birds lost across North America since 1970, habitat restoration projects like this are essential. Both Audubon and DEC have experience in other parts of New York implementing forest habitat improvement projects like this and we have seen impressive responses by forest-nesting birds.

Additional Resources

Niagara Frontier Unit Management Plan
https://extapps.dec.ny.gov/docs/lands_forests_pdf/niagarafrontierdraftump.pdf

Managing Forests for Birds: A Landowners Guide
https://ny.audubon.org/sites/default/files/free_guide_landowners_manage_forest_for_birds_new_york.pdf

Audubon New York Forest Resource Center
https://ny.audubon.org/working-lands/forest-resources

NYSDEC State Wildlife Action Plan
https://extapps.dec.ny.gov/docs/wildlife_pdf/swapfinaldraft2015.pdf

NYSDEC Forest Action Plan
https://extapps.dec.ny.gov/docs/lands_forests_pdf/nysfap.pdf

3 billion birds lost report and research paper
https://www.birds.cornell.edu/home/bring-birds-back/

Securing Northeast Forest Carbon
https://www.northeastforestcarbon.org/