

**Property Overview:** The Audubon property consist of 42 forested acres but is part of a larger contiguous forest block of 150 acres. All 42 acres are comprised of northern hardwood species. Audubon’s main objective is to improve forest habitat for birds and other wildlife, forest health, and resiliency. They are also interested in selling timber to help pay for the logger and possibly generating revenue to put towards future forest management.

**Landscape Context:** Recent severe weather events have caused large blowdowns in the surrounding landscape, and 5–10% or more of the landscape surrounding this property is already in a young forest condition.

**Stand Description:** The entire 42 acres is similar in age and species composition, and can be considered one stand. It is around 80-90 years old and dominant tree species include sugar maple, American beech, red maple, and black birch. While beech bark disease is present in American beech in this stand, the mature trees look relatively healthy and produce beech nuts, and root sucker growth is not overwhelming. The stand is well stocked, with AGS making up >50% of the stand. Subcanopy layers (mid and understory) are sparse with the exception of a few areas with Japanese barberry, and the overstory is mostly closed (>90%). Snags of varying sizes and stages of decay are abundant, but coarse woody material is relatively scarce.

**Addressing landscape and stand-level habitat considerations as well as other landowner objectives, please draft a mock silvicultural prescription for this stand:**

**Landscape:** The 5–10% young forest age class goal is met within the surrounding landscape, so improving mature forest habitat may provide the greatest benefit to forest birds.

**Stand prescription:** Conversion to uneven-aged stand using group selection:

- Apply a control treatment to Japanese barberry pre-management, with subsequent treatments likely post-management.
- Create small group cuts 0.25 to 0.75 acres in size, aiming to create canopy gaps. Group cuts should remove all trees from the selected area, and groups should be scattered throughout the stand to mimic openings created by natural disturbances Thinning can occur in between groups. Over time, additional entries will gradually transform the stand into a mosaic of small even-aged openings.
- Some large diameter maple, beech, and birch ( $\geq 18$  inches DBH) should be retained to provide nesting and foraging trees for birds. The most healthy beech trees should be retained as well. These large diameter trees can be cavity trees or UGS as well, helping to provide an important habitat feature for wildlife.
- While sawtimber will be sold to help pay for the management, low quality trees can be left as coarse woody material.

**How does your mock prescription for this stand meet landowner objectives and benefit forest breeding bird species? Please list several forest birds that may benefit from the management you are proposing.**

The lack of understory and midstory layers makes this hardwood stand less favorable to mature forest breeding birds. Creating canopy gaps through periodic group selection will help to stimulate understory regeneration and increase vertical structural diversity over time and multiple entries. Some trees cut can be sold to help pay for the management while others can remain as coarse woody material to further enhance habitat structure for ground foragers and nesters, or for Ruffed Grouse. Birds that will benefit include Wood Thrush, Scarlet Tanager, Ovenbird, Ruffed Grouse, Chestnut-sided Warbler (they will like the small openings), and many more.