

Woodcock Habitat Management

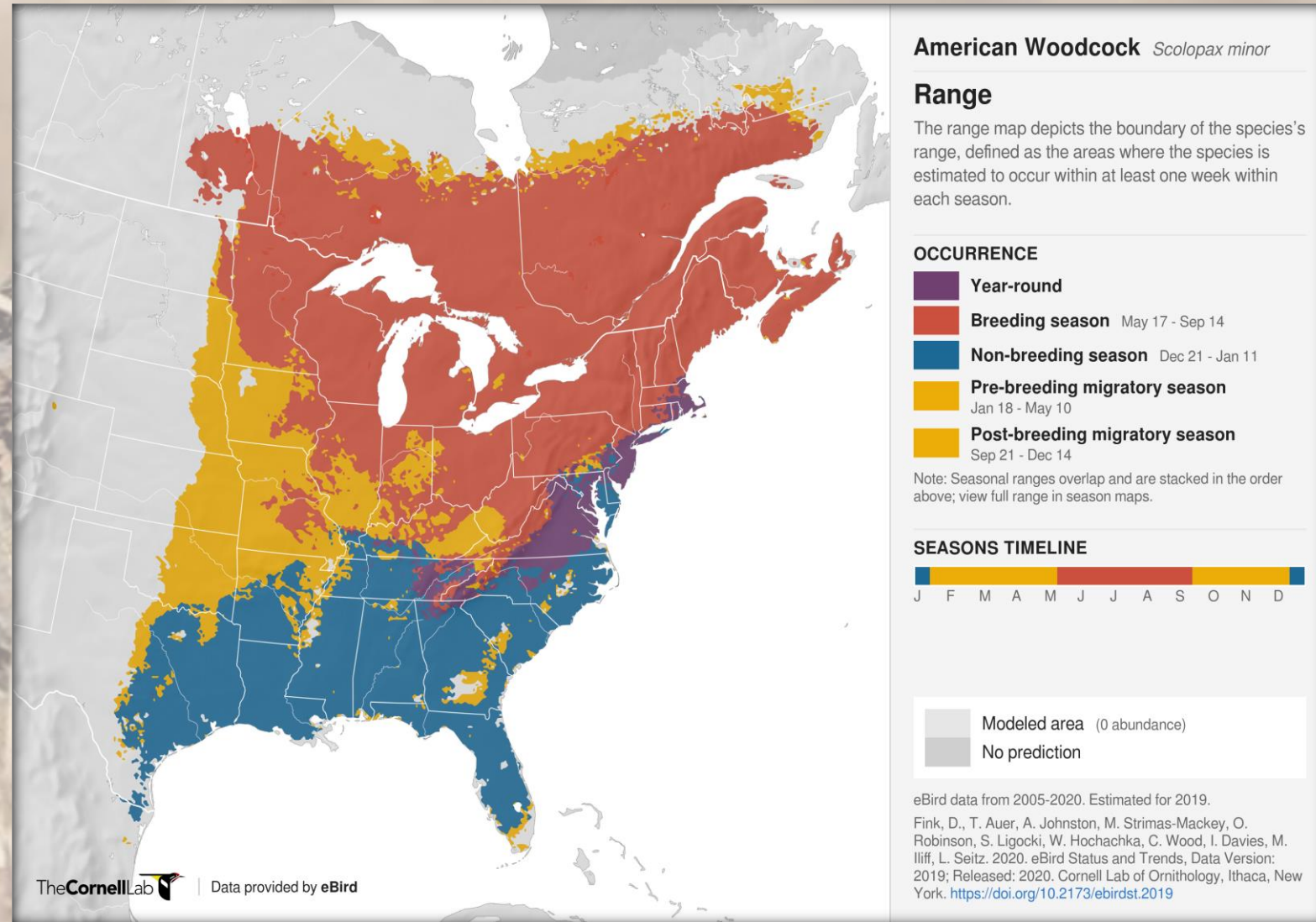
**Bureau of Land Management
Melissa Woerner & Tyler Kinney**



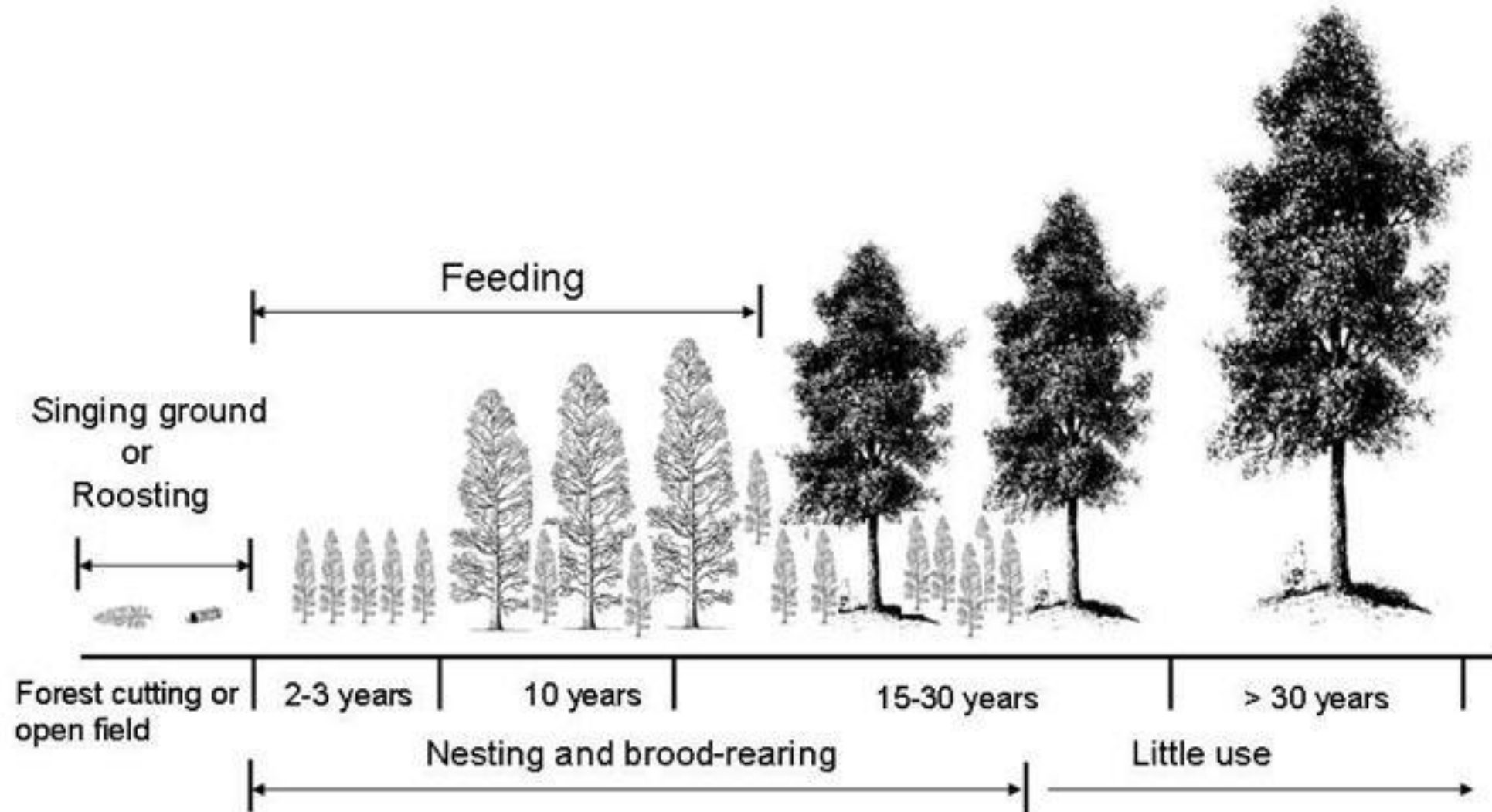
Woodcock Habitat

- Woodcock habitat in New Jersey varies depending on the time of year and activity.
- Breeding Season Habitat Selection:
 - Moist, nutrient rich soils that host an abundance of earth worms.
 - Stands of young forests or scrub-shrub habitat with dense woody vegetation to provide cover for nests.
 - Very close proximity to roosting fields, and singing grounds (agricultural & fallow fields, pastures)
- Migratory Season Habitat Selection:
 - Closed canopy swamps dominated by coniferous tree species.
 - Agricultural & fallow fields, pastures (may act as a visual “beacon” during migration)
- Non-breeding Season (over-wintering):
 - More selective than migratory counterparts.
 - Preference for close canopy deciduous swamps in very close proximity to roosting fields.
- **Roosting fields, moist soil types, and early succession habitat** are the primary needs for Woodcock in New Jersey.

Allen, B. B., D. G. McAuley, and E. J. Blomberg (2020). Data from: Migratory status determines resource selection by American Woodcock at an important fall stopover, Cape May, New Jersey. The Condor: Ornithological Applications 122:1–16.



Key habitat components required by woodcock in relation to forest succession



Southern Region

Planting & Mowing Operations

- Fields are planted on a 3-year rotation, adaptive management may be necessary.
- Many fields are planted in sections and incorporate hedgerows with dense woody vegetation to support woodcock nesting habitat.
- Mowing pathways or boarders in fields creates singing grounds for males looking to attract a mate.
- Spring Planting
 - 66% Sorghum/33% Buckwheat Spring Mix
 - 957 acres planted since Spring 2019
 - Mesic/Dry Pollinator Mix
 - 95 acres planted since Spring 2019
- Fall Planting
 - Winter Rye
 - 367 acres planted since Fall 2019



Southern Region

Field Creation & Reclamation

- In Fall 2019, two (2) 4-acre fields with access roads were created in Winslow Wildlife Management Area (WMA).
- In Spring 2021, 22 acres of fields were reclaimed on the Holly Farm tract of Menantico WMA.
 - Trees & invasive woody vegetation were uprooted with excavator.
 - Remaining root systems root raked, followed by a pass with a Rome disc.
 - 22 acres of buckwheat planted.
- Eight (8) acres of Autumn Olive (*Elaeagnus umbellata*) removed from Marmora tract of Tuckahoe WMA.
 - Identified as a priority Woodcock migratory stopover site, field planted to create roosting habitat.
 - Evidence suggests a **negative relationship between invasive vegetation and Woodcock**.

Allen, B. B., D. G. McAuley, and E. J. Blomberg (2020). Data from: Migratory status determines resource selection by American Woodcock at an important fall stopover, Cape May, New Jersey. The Condor: Ornithological Applications 122:1–16.

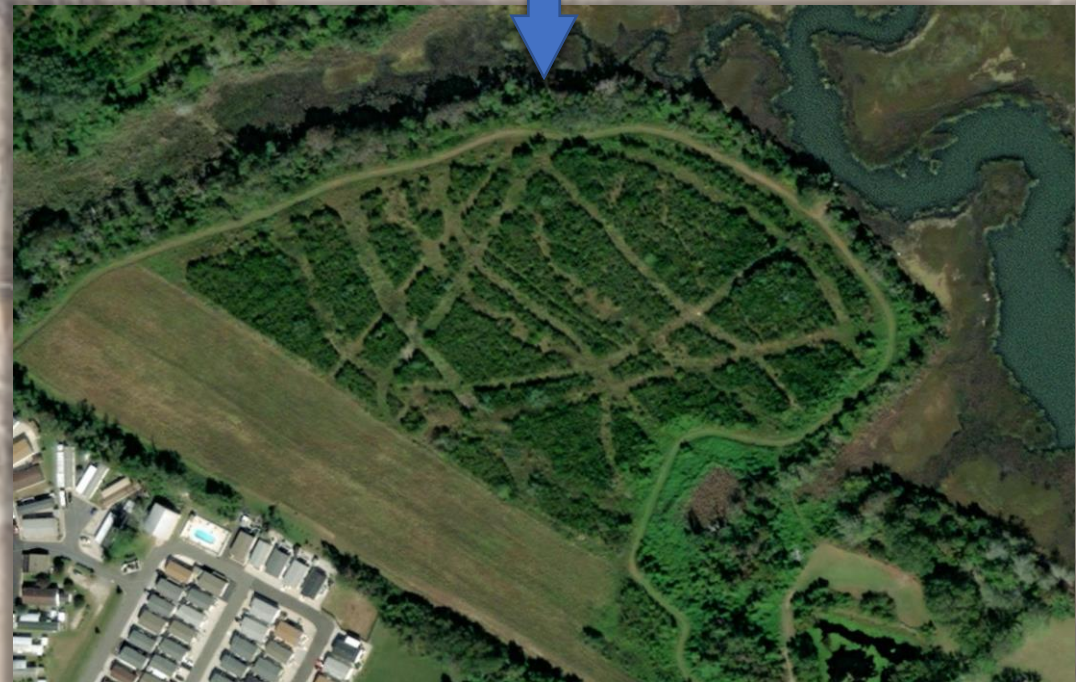
Miller, H. E. and Jordan M. J. 2011. Relationship between exotic invasive shrubs and American Woodcock (*Scolopax minor*) nest success and habitat selection. Journal of the Pennsylvania Academy of Science. 85(4): 132-139, 2011.



Southern Region

Forestry Mowing Operations

- In 2019 a forestry mower (hydroax) was used to create additional early succession habitat in Cape Island WMA, targeting woodcock.
 - Adjacent field planted with pollinator mix to create roost site.
 - Habitat to be maintained on a forestry mowing rotation.
- Potential to expand forestry mowing management to other WMA's, including:
 - Gumtree Corner
 - Holly Farm Tract, Menantico WMA
 - Salem River WMA
- Partnership with the Ruffed Grouse Society to identify priority sites where data is currently not available.



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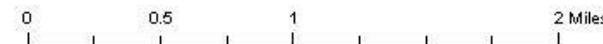
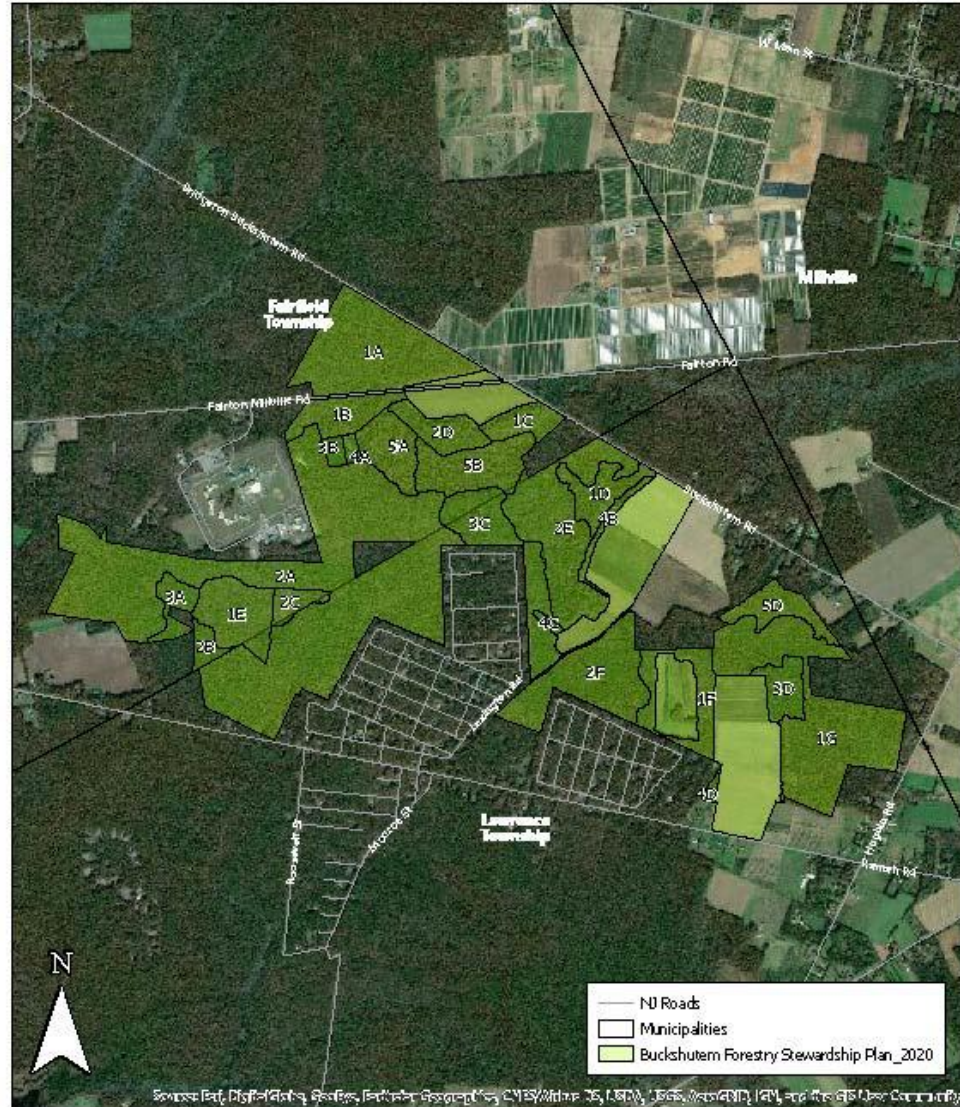


Southern Region

Forest Stewardship Plans

- Forest Stewardship Plans incorporate various forest management techniques that look to accomplish a wide range of habitat goals.
- Written by state certified foresters with input from internal and external stakeholders.
- Relevant to Woodcock as they are the best tool to create young forest habitat.
- Lenape Tract Forest Stewardship Plan
 - Tuckahoe WMA & Maple Lake WMA
 - Management Prescriptions are currently being drafted, based off the recommendations of internal and external stakeholder groups.
- Buckshutem Forest Stewardship Plan
 - Buckshutem WMA
 - Draft management prescriptions are currently complete.
 - Awaiting the completion of the Lenape plan prescriptions to move these plans forward in conjunction.

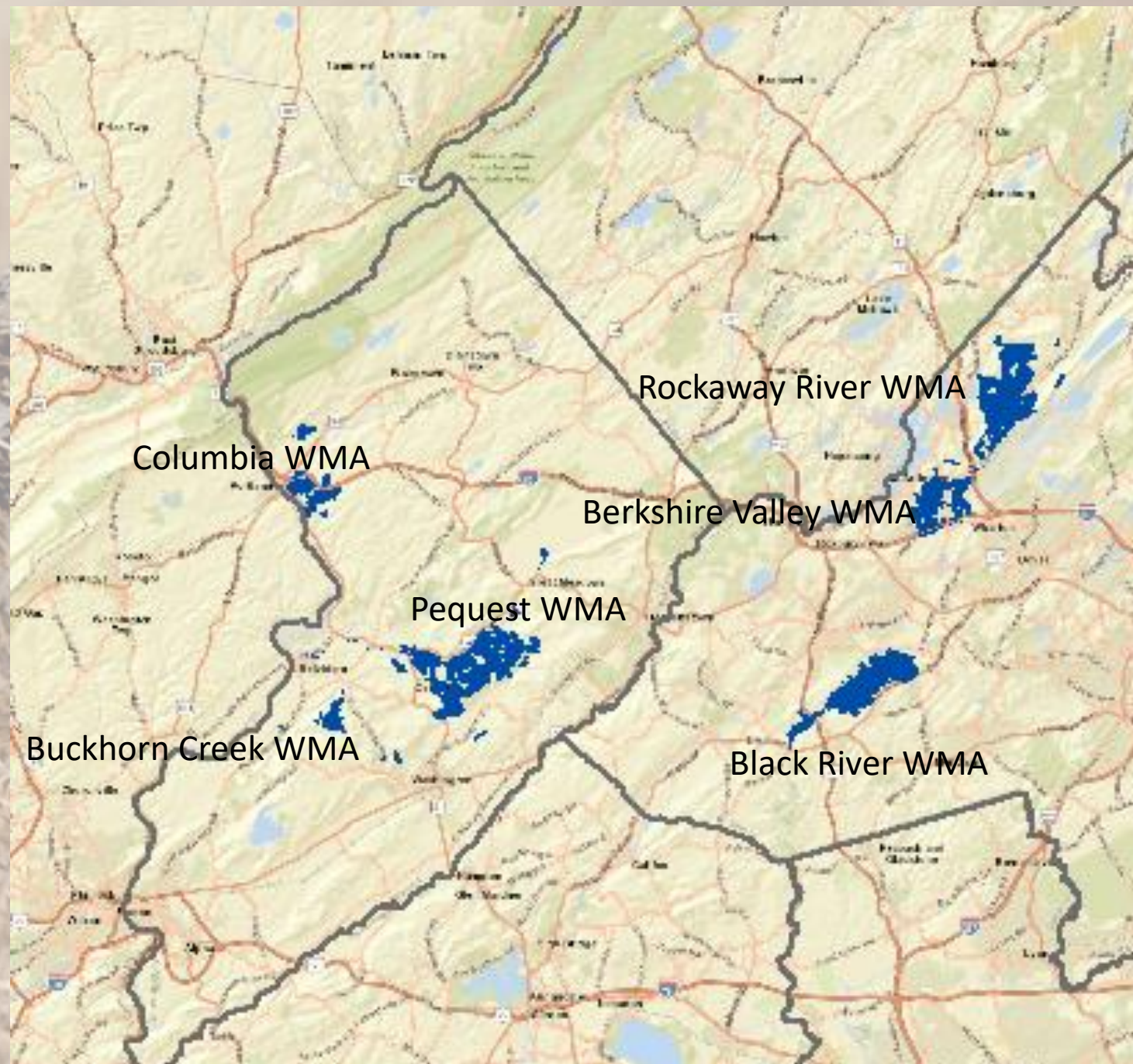
Forest Stewardship Plan - Buckshutem Wildlife Management Area



Northern Region

Mowing Operations

- Creating and maintaining open strips near wetlands, swamps, and thickets
- Northern WMAs with woodcock strips:
 - Buckhorn WMA
 - Columbia WMA
 - Black River WMA
 - Berkshire Valley WMA
 - Rockaway River WMA
 - Pequest WMA
- More woodcock strips will be created this month









Central Region

Prospectown Lake WMA

- Partnership project with American Woodcock Society/Ruffed Grouse Society
- Fall of 2020 – tenant farmer planted a 1-acre field with winter rye in preparation for woodcock habitat management
- Spring 2021 – NJDFW staff and volunteers planted 134 alder trees around the edge of the field to provide food and cover for woodcocks

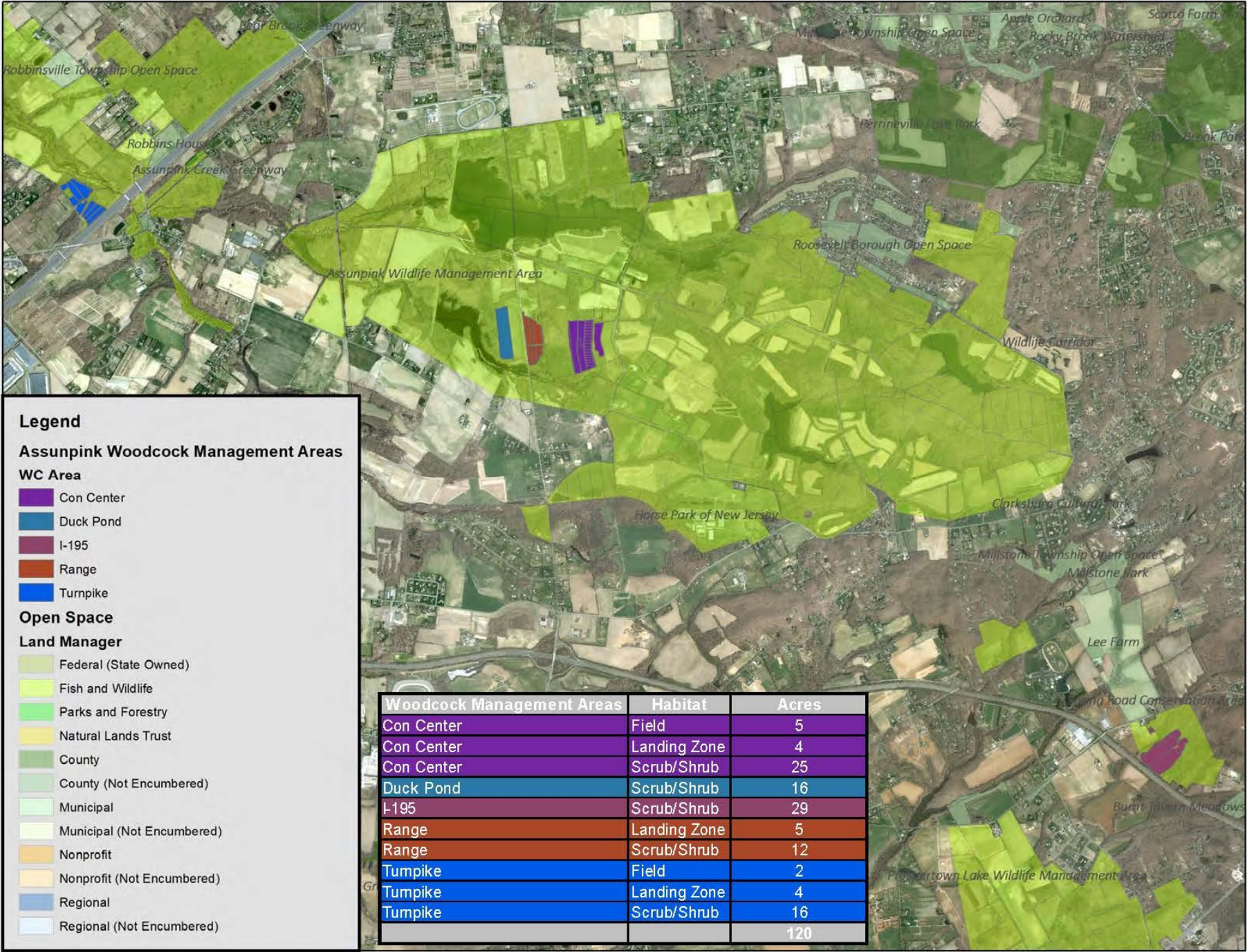




Central Region

Assunpink WMA

- 120 acres in four sections managed for American woodcock habitat













Central Region

Other management activities

- Food plot plantings
- Pollinator plantings
- Greenwood WMA Forest Stewardship Plan
- Stafford Forge WMA field creation



Questions?

Bureau of Land Management

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