



ME Private Lands Program

Joseph Roy, AWB[®]

Private Lands Wildlife Biologists

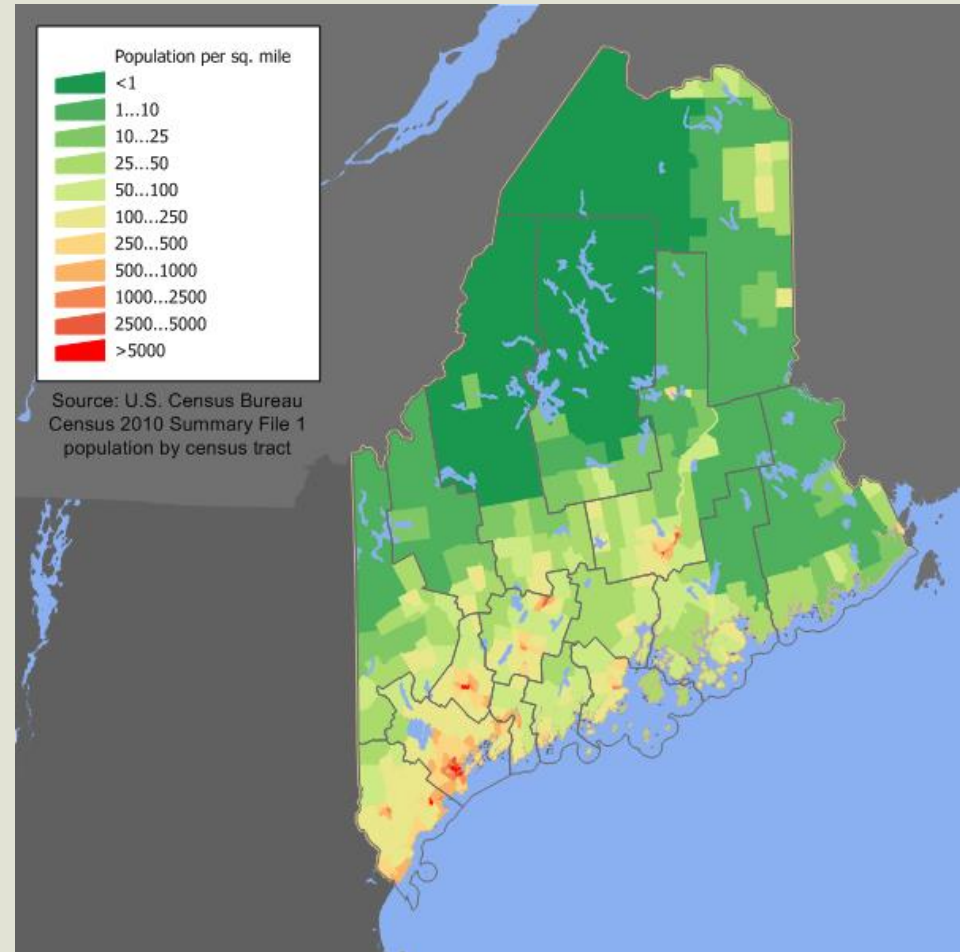
Intro



About Maine



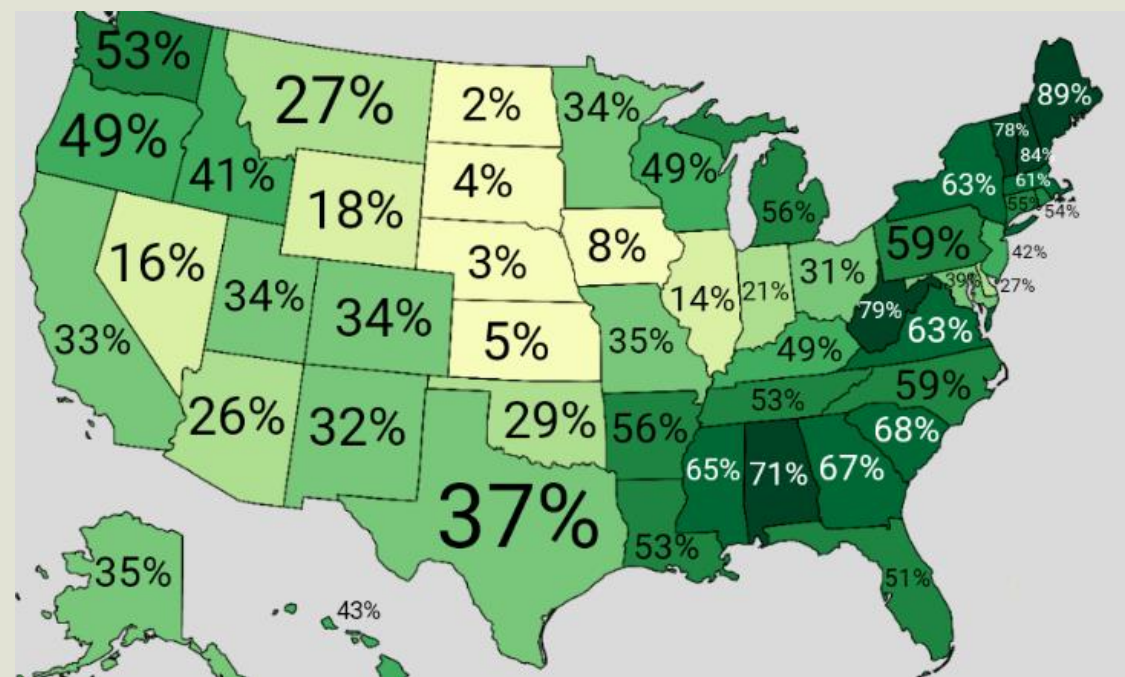
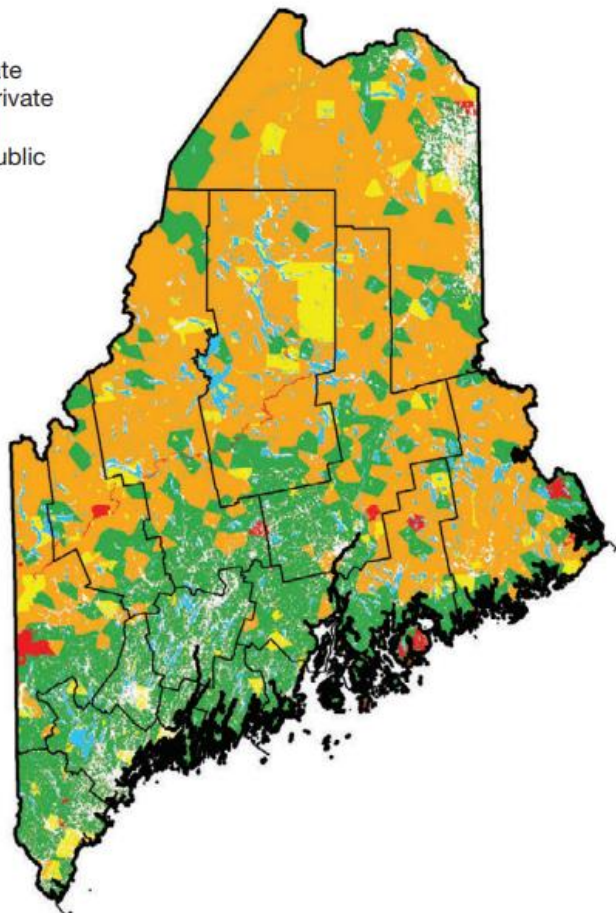
- 23 Million acres
- 1.3 million residents
- Largest industries
 - Forest Products
 - Life Sciences
 - Marine/Aquiculture
 - Food/Agriculture
 - Outdoor Recreation



Maine by the numbers



Forest Ownership
Corporate
Other private
Federal
Other public

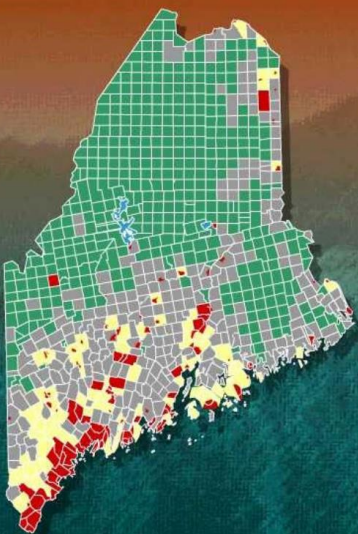


Changes on the landscape



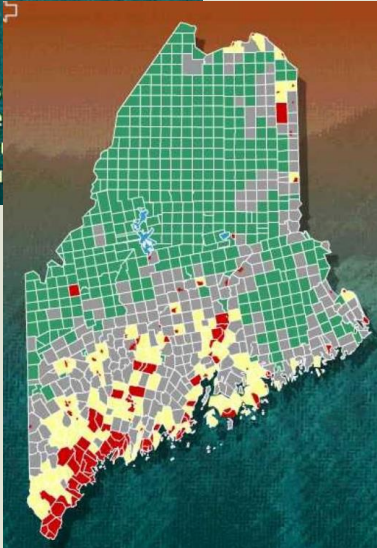
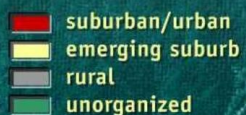
Expansion of Development

1990



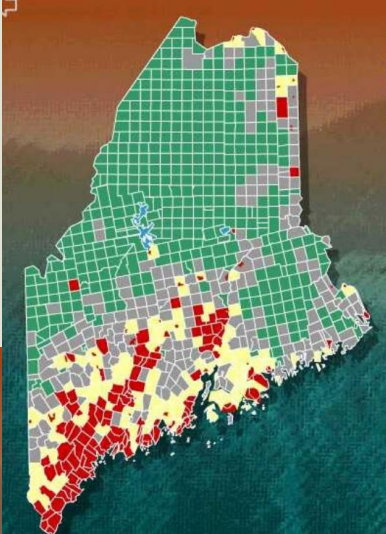
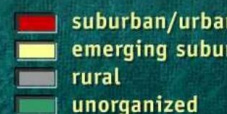
Expansion of Development (projected)

2000



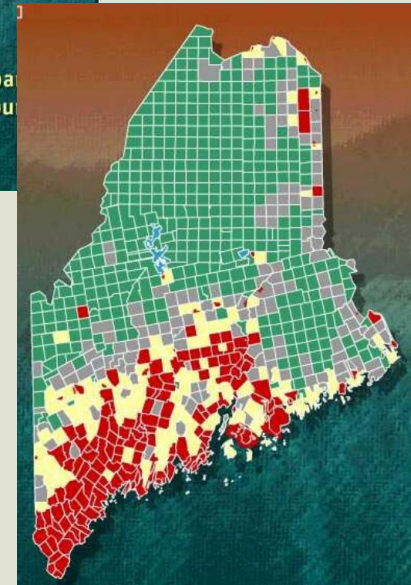
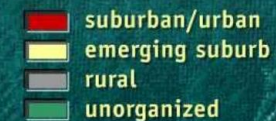
Expansion of Development (projected)

2020



Expansion of Development (projected)

2050

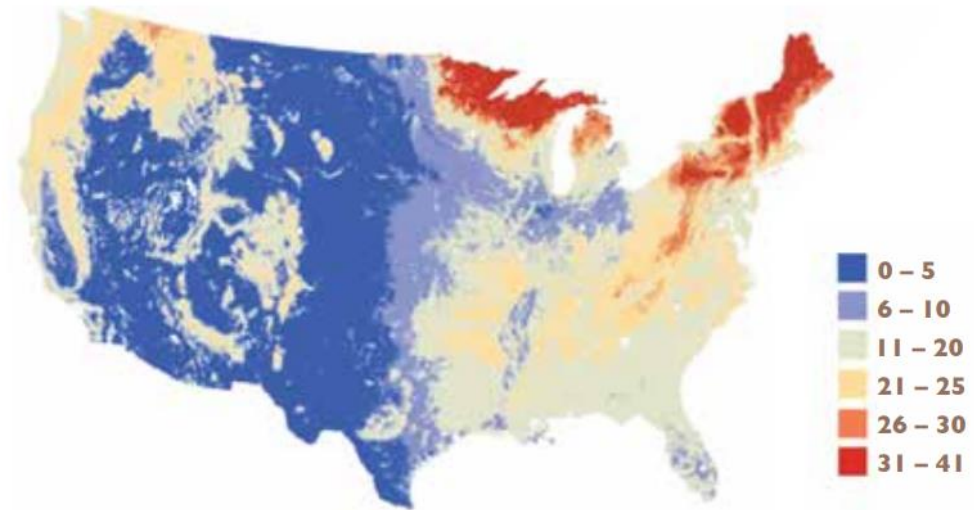


Birds in Maine



- 475 species recorded in Maine
- 233 species breeding in Maine
- 130 Species of Greatest Conservation Need
- Important habitat for breeding and migration

Figure 1. Species richness, or the average number of forest species per route, modeled from Breeding Bird Survey data (2004–2006). Reproduced with permission from Goetz et al. 2014.

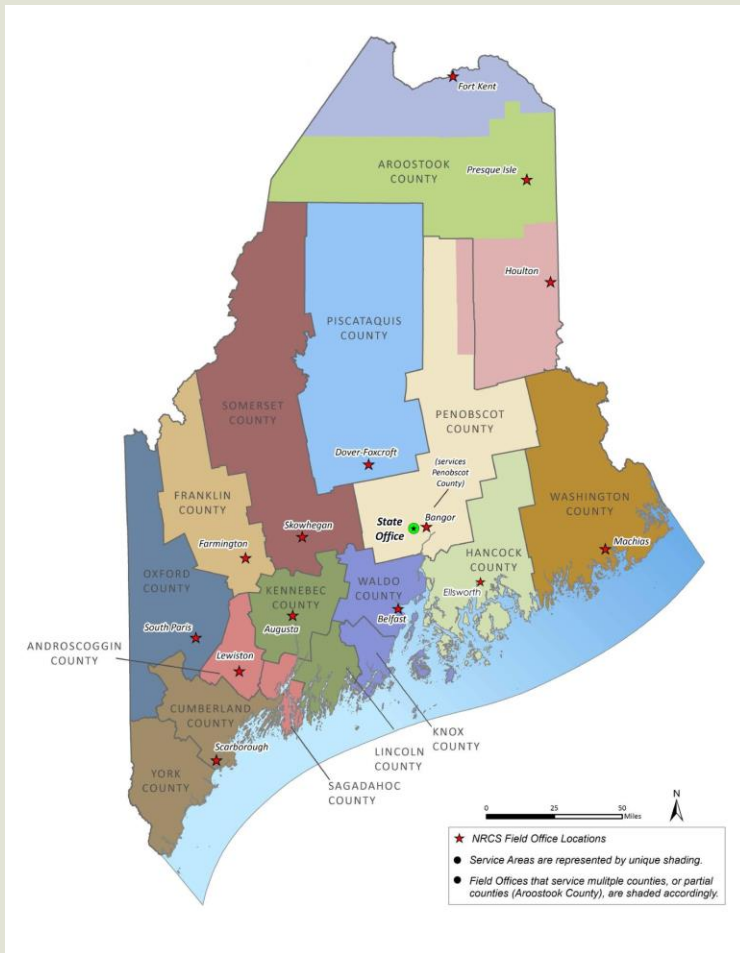


Private Lands Delivery in Maine is a Partnership





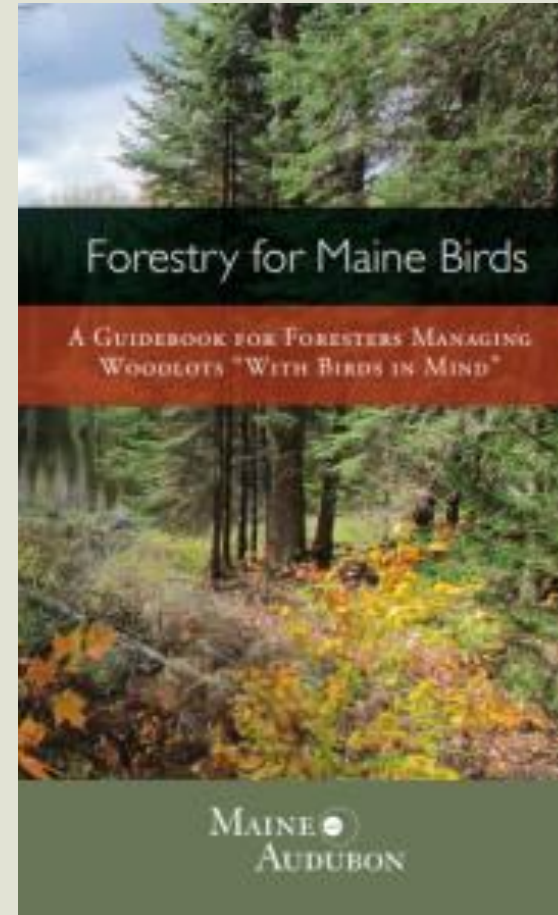
MDIFW Strategies for Private Lands Engagement



- NRCS State Technical Committee
- NRCS Wildlife Sub-Committee
- NRCS District offices

- Maine Forest Service landowner outreach coordinator
- Maine Forest service District Fosters

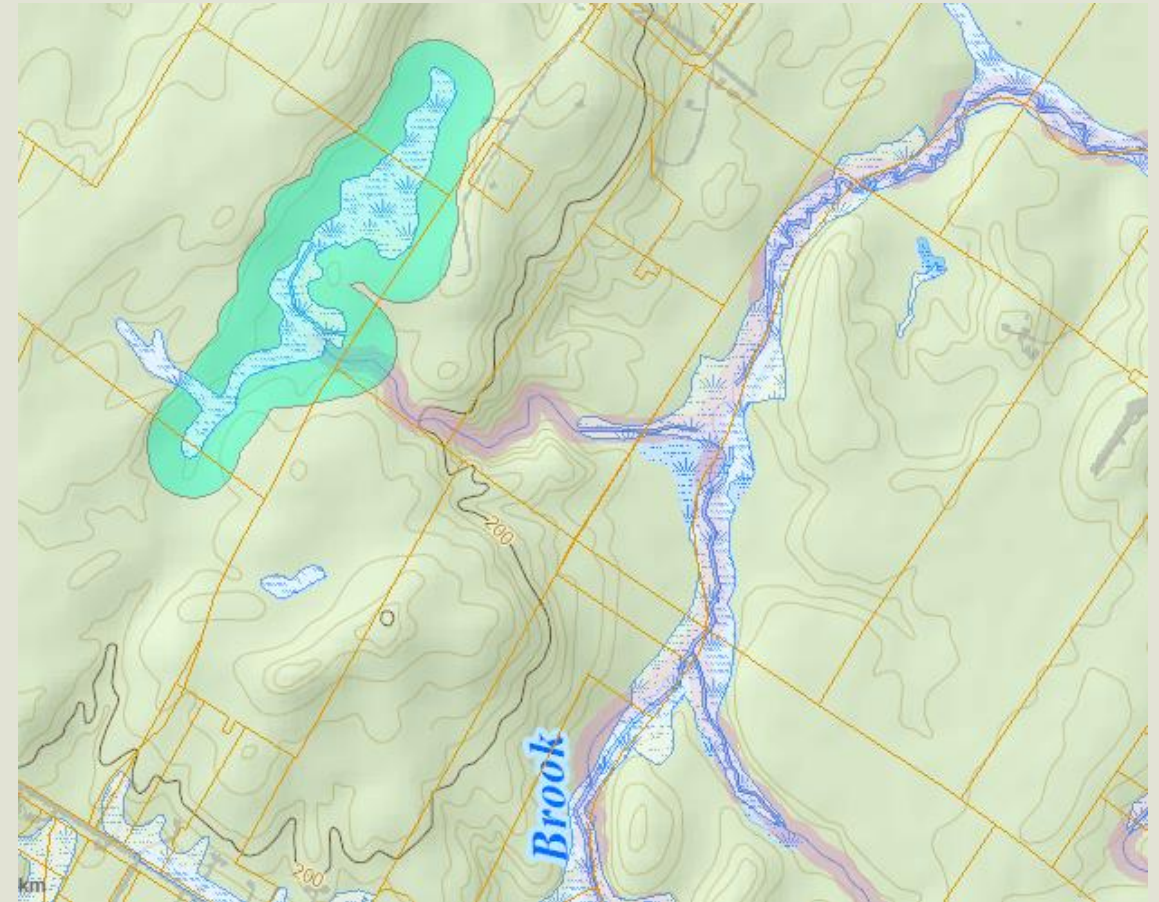
Engaging with Landowner through Forestry



Forestry Plan Review



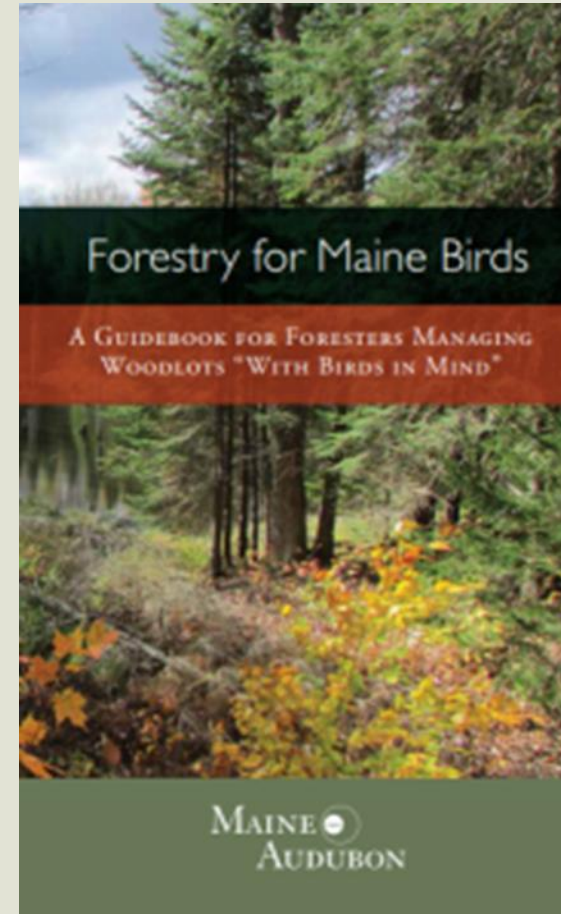
- Review 700 forest management plans annually
- Provide maps on SGCN species and habitats
- Provide technical guidance and recommendations



Forestry For Maine Birds



- Maine Audubon
- 3 targeted guides
- Identified 20 priority Birds species
- Species profiles
- Bird focused forestry inventory metrics
- Forest management recommendations for priority species





Forestry For Maine Birds

- Described and mapped forest types
- Created a list of associated bird species
- Highlights important habitat characteristics



Photo: Stewart DeMeolo

Northern Softwood Association

- SPRUCE-FIR
- SPRUCE-HEMLOCK
- ASPEN-BIRCH (EARLY SUCCESSIONAL)
- NORTHERN WHITE PINE-MIXED CONIFER
- NORTHERN WHITE CEDAR

IDENTIFICATION Softwood species comprise at least 75% of the stocking. Spruce-Fir is the most common forest type within this association. Northern Softwoods are typically characterized by mixtures of red spruce, white spruce, or black spruce and balsam fir in pure stands or with other species. Common associates include yellow birch, paper birch, and other northern hardwood species as well as hemlock, northern white cedar, and white pine. This association currently covers close to 6 million acres in Maine.

ECOLOGY Spruce-Fir and other Northern Softwood forest types frequently share the same landscape as Northern Hardwoods, but are found on cooler sites—notably valley bottoms, high-elevation areas, and along the coast—or where soils are somewhat poorly to poorly drained. Stands dominated by white spruce are common on former agricultural land in northern and eastern Maine as well as in the spray zone on coastal islands.

WILDLIFE Several bird species—including Spruce Grouse, Gray Jay, Black-backed Woodpecker, and Bay-breasted, Magnolia and Cape May Warblers—are found almost exclusively in Spruce-Fir forests. American marten is strongly associated with this forest type, either in pure stands or in Mixed Hardwood Spruce-Fir forests. Younger Spruce-Fir is critical for snowshoe hare, the primary prey of Canada lynx. Relatively mature to mature stands are critical deer wintering areas in northern Maine (See Table).



Occurrence of Northern Softwood

Selected Northern Softwood Habitat Association Species

FFMB PRIORITY SPECIES	KEY HABITAT FEATURES
Bay-breasted Warbler	Dense conifers
Blackburnian Warbler	Tall trees, large hemlocks
Black-backed Woodpecker	Large dead/dying trees
Boreal Chickadee	Snags
Magnolia Warbler	Dense conifer understory regeneration
Northern Parula	Moist forest, bearded lichen
Olive-sided Flycatcher	Gaps and snags
OTHER WILDLIFE SPECIES	KEY HABITAT FEATURES
American Three-toed Woodpecker	Large decaying trees, black spruce stands
Cape May Warbler	Tall stands of spruce, budworm specialist
Spruce Grouse	Dense conifers with low branches
White-throated Sparrow	Open forest with brushy clearings
Merlin	Open forest, old crow nests or cavities
American Marten	Hollow trees and logs, dense regenerating softwoods
Northern Flying Squirrel	Cavity trees
Snowshoe Hare	Dense hardwood or softwood regeneration
Moose	Wetlands
White-tailed Deer	Adequate winter browse, conifer cover to reduce snowpack



Information from *Forestry for Maine Birds: A Guidebook for Foresters Managing Woodlots "With Birds in Mind."* Maine Audubon 2017. Available at maineaudubon.org/ffmb.

Forestry for Maine Birds



- 20 specie profiles
- Includes cover type preferences
- Successional preferences
- Nest location within stand
- Preferred stand features

Blackburnian Warbler



Photo: Sue Barth

IDENTIFICATION AND SONG Black and white with vivid orange throat, crown patch, and eyebrow, large white wing patch, and boldly striped back. Song thin and wiry, increasing in speed and rising to the limit of hearing, sleet-sleet-sleet-sleet-sleetee-sleece. Found statewide.

NEST Well-concealed open cup in conifer. Placed on limb away from trunk, sometimes near end of branch, often >30' above forest floor.

FOOD Insectivorous; often spiders, beetles, and moth larvae.

TERRITORY SIZE 1–3 acres, smaller in softwoods.

FOREST CONDITION Older softwood or mixedwood forests with high canopy cover (>80%) and tall trees (>40'). Especially sensitive to removal of large conifers. Uses topmost part of tall trees (especially tallest trees that emerge above the main canopy) for feeding, nesting, and singing. Requires fairly dense vegetation in midstory. Prefers forests interiors.

FOREST HABITAT ASSOCIATION Prefers *Northern Mixedwood* and *Northern Softwood*, but will use Oak Pine forest.

HABITAT AGE CLASS Prefers *older* forest (dominant trees 70–100 years old, and 10–16" diameter), but will use *intermediate* forest (dominant trees 20–70 years old and 5–10" diameter).

HABITAT FEATURES



← BIRD Layer where bird typically seen and/or where male typically sings
← NEST Typical nest type and height

LAYERS Light gray lines divide overstory (>30'), midstory (6–30'), and understory (<6'), and are not to scale

Generalized graphic depicting forest type, age, layer, and any special features where the bird and nest are typically found.

MANAGEMENT NOTES Maintain large conifers and larger forest blocks (>250 acres). Uses bearded lichen.



Information from *Forestry for Maine Birds: A Guidebook for Foresters Managing Woodlots "With Birds in Mind."* Maine Audubon 2017. Available at maineaudubon.org/fimb.

Ag Allies



- Locally developed and lead program
- One of Cornell's Land Trust Conservation Collaboratives
- Agriculture and grassland bird focused



Ag Allies



- Technical Assistance
- Financial Assistance
- Field Surveys
- Education and Training



Ag Allies



- 125+ Sites annually
- 12,794 Farm Acres
- 3,694 Field Acres
- 2,289 acres of nesting habitat
- 605 Pairs of Bobolink



Questions?



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