

## Northern Hardwood Association

• NORTHERN HARDWOODS (BEECH-BIRCH-MAPLE AND VARIANTS)

• ASPEN-BIRCH

Photo: Rob Bryan

**IDENTIFICATION** Hardwood species comprise at least 75% of the stocking, with sugar maple, yellow birch, and American beech as characteristic species and paper birch, aspen, red oak, hemlock, and red spruce as common associates. Beech and red maple may be dominant on poor sites, while sugar maple, ash, and basswood are found on highly enriched sites. Young forest stages may be dominated by aspen (popple) and paper birch. This association currently covers approximately 7 million acres in Maine.

**ECOLOGY** Northern hardwood forests are typically found at middle elevations on moist, medium- to well-drained sites. Over time, late-successional stages of this type form large, relatively stable forests. Under natural conditions, shade-tolerant northern hardwoods are most commonly regenerated in small canopy gaps created by windthrow or mortality caused by insects and disease. This association is known for an abundance of

spring wildflowers. There is often a transition to spruce-fir at high elevations, along drainages, and in less well-drained soils.

WILDLIFE Northern Hardwoods host a great variety of resident and migratory birds and other wildlife (See Table). The *hard mast*, or tree nuts, produced by beech and oak are an important food source for many wildlife species, though trees do not start producing large amounts of mast before age 40. Beechnuts are critical to the reproductive success of black bear in northern Maine.



## Selected Northern Hardwood Habitat Association Species

Association species	
FFMB PRIORITY SPECIES	KEY HABITAT FEATURES
Black-throated Blue Warbler	Dense understory of hobble- bush or other shrubby species
Chestnut-sided Warbler	Gaps with regeneration
Mourning Warbler	Dense regeneration
Ovenbird	Mature forest, abundant leaf litter, little ground cover
Scarlet Tanager	Forest interior, tall trees (especially oaks), closed canopy
Veery	Sapling patches and riparian areas
Wood Thrush	Tall trees, dense leaf litter
Yellow-bellied Sapsucker	Snags, especially Aspen-Birch
SELECTED WILDLIFE SPECIES	KEY HABITAT FEATURES
SPECIES	FEATURES
SPECIES Barred Owl	FEATURES Large cavity trees
SPECIES Barred Owl Broad-winged Hawk	FEATURES Large cavity trees Small gaps
SPECIES Barred Owl Broad-winged Hawk Northern Goshawk	FEATURES Large cavity trees Small gaps Mature trees
SPECIES Barred Owl Broad-winged Hawk Northern Goshawk Pileated Woodpecker	FEATURES Large cavity trees Small gaps Mature trees Large decaying trees or snags Dense hardwood
SPECIES Barred Owl Broad-winged Hawk Northern Goshawk Pileated Woodpecker Rose-breasted Grosbeak	FEATURES   Large cavity trees   Small gaps   Mature trees   Large decaying trees or snags   Dense hardwood   thickets/sapling stands
SPECIES Barred Owl Broad-winged Hawk Northern Goshawk Pileated Woodpecker Rose-breasted Grosbeak Black Bear	FEATURES   Large cavity trees   Small gaps   Mature trees   Large decaying trees or snags   Dense hardwood   thickets/sapling stands   Hard mast, especially beechnuts   Hollow trees and logs, dense



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