Black Ash Swamp

State Rank S4

Community Description
This northern forested wetland type is characterized by a hardwood or mixed overstory and lush understory on shallow peat or muck soils. While black ash is characteristic in these small-patch communities, Black Ash Swamps often occur within or adjacent to larger expanses of Northern White Cedar Swamps or Red Maple Swamps and may be transitional between the two. Tree cover ranges from 25-80%. Common plants of forested wetlands are often dominant in the understory, including sensitive fern, royal fern, marsh fern, tussock sedge, fowl mannagrass, and spotted touch-me-not, as well as a scattering of rich-site wetland herbs including purple avens, Robbins’ ragwort, foamflower, small enchanter’s nightshade, and white turtlehead. Mosses and liverworts are usually abundant and may form a continuous carpet.

Similar Types
Northern White Cedar Swamps and Cedar-Spruce Seepage Forests each have more conifer than hardwood cover in the canopy. Red Maple Swamps have more red maple than black ash in the canopy.

Soil and Site Characteristics
Black Ash Swamps occupy broad basins or seepage sites on lower gentle slopes, often in association with larger areas of cedar or red maple swamp. They typically occur in rolling to low terrain in central and northern regions of the state where higher pH soils or groundwater discharge occur. Saturated soils of well decomposed organic matter (peat or muck) are typical and surface rivulets and springs are occasional.

Diagnostics
Black ash is dominant or co-dominant (at least 40% cover) with northern white cedar or red maple in a wetland setting. Sensitive fern and royal fern each form more cover than cinnamon fern.

Conservation, Wildlife, and Management Considerations
Wind is apparently the primary form of natural disturbance in these swamps, as black ash is shallow-rooted. Although black ash does not grow as fast as other species, its ability to stump sprout may be an important reproductive strategy in response to disturbance. Black ash is fairly long lived (>250 years). Beavers have altered many black ash swamps, converting them into open or shrub-dominated wetlands.

Breeding birds found in black ash swamps may include great-crested flycatcher, brown creeper, veery, and northern waterthrush. Wood ducks may also breed in these swamps if there is open water available.

Distribution
New England - Adirondack Province and Laurentian Mixed Forest Province. Most common in northern and eastern Maine, and likely extends to the east, west, and north.

Landscape Pattern: Small patch.

Characteristic Plants
These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Canopy
Black ash*
Northern white cedar*
Red maple
Yellow birch

 Sapling/shrub
Alderleaf buckthorn*
Black ash*
Mountain holly
Northern white cedar
Red maple
Speckled alder*
Winterberry
Witherod

 Herb
Foamflower
Marsh fern
Purple avens
Robbins’ ragwort
Royal fern
Sensitive fern*
Small enchanter’s nightshade
Spotted touch-me-not

Associated Rare Plants
Bog bedstraw
Showy lady’s-slipper
White adder’s mouth

Location Map

Showy Lady’s-slipper