

Community Name: RED MAPLE-BLACK ASH-BUR OAK SWAMP
Community ELCODE: CP1B2B1000
SRANK: S2



- Concept:** Deciduous swamp forest with pockets of coniferous trees, occurring in areas with somewhat enriched circumneutral groundwater. The tree canopy is close to continuous.
- Environmental Setting:** Circumneutral, not calcareous, groundwater strongly influences this community. Soils are a mucky mix of mineral and organic, silt and sandy loams, most with pH ranges about 5.1 to 7.3, with some organic accumulation on the hummocks. The hummock – hollow topography supports a variety of species from aquatic in the hollows to trees on the hummocks. The soils are saturated throughout the year, and may become inundated after storms: the hollows are filled with water in the spring then dry to barely mucky late in the summer when they have bare soil or leaf litter, and often emergent plants.
- Vegetation Description:** The canopy is a variable mixture of deciduous and occasionally coniferous trees. Red Maple (*Acer rubrum*), Black Ash (*Fraxinus nigra*), and Bur Oak (*Quercus macrocarpa*) are most common. Associated tree species include Green Ash (*F. pennsylvanica*), Red and American Elms (*Ulmus rubra* and *U. americana*), Sugar Maple (*A. saccharum*), and yellow birch (*Betula alleghaniensis*); Eastern Hemlock (*Tsuga canadensis*), Tamarack (*Larix laricina*), and White Pine (*Pinus strobus*) are generally scattered, but sometimes locally abundant. Ironwood (*Carpinus caroliniana*) is characteristic of the subcanopy, with young of the tree species. The shrub layer is generally patchy with Highbush Blueberry (*Vaccinium corymbosum*), Winterberry (*Ilex verticillata*), and Spicebush (*Lindera benzoin*). Poison sumac (*Toxicodendron vernix*) is uncommon and even in open areas true calciphiles (calcium-loving) species are absent. The herbaceous layer is diverse although dominated by tussock sedge (*Carex stricta*) and skunk cabbage (*Symplocarpus foetidus*). Other typical herbaceous layer species are Common Horsetail (*Equisetum arvense*), Awned Sedge (*Carex crinita*), Sensitive Fern (*Oncoclea sensibilis*), Cinnamon Fern (*Osmundastrum cinnamomeum* (formerly *Osmunda cinnamomea*)), Royal Fern (*Osmunda regalis*), Foamflower (*Tiarella cordifolia*), Goldthread (*Coptis trifolia*), Marsh Marigold (*Caltha palustris*), and Blueflag (*Iris versicolor*).
- Associations:** One occurrence in the Housatonic River floodplain might be a floodplain variant, although it is very similar to the other occurrences. This community is related to 1) Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp, 2) Alluvial Red Maple Swamp, 3) High Terrace Floodplain Forest, 5) the new Alluvial Hardwood Flats, and 6) Hemlock-Hardwood Swamp.
- Habitat values for Associated fauna:** Swamps can function as vernal pool habitat if water remains standing for 2-3 months and they lack fish; these areas provide important amphibian breeding habitat.

Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife

Associated rare plants:

BLEPHILIA CILIATA	DOWNY WOOD-MINT	E
CARDAMINE BULBOSA		WL
CAREX GRAYI	GRAY'S SEDGE	T
CAREX RETRORSA		WL
CONIOSELINUM CHINENSE	HEMLOCK PARSLEY	SC
PETASITES FRIGIDUS VAR PALMATUS	SWEET COLTSFOOT	T
RIBES AMERICANUM	WILD BLACK CURRANT	WL

Associated rare animals: None known

Examples with Public Access:

Berkshire County: George L. Darey WMA, Lenox. Permission needed for MAS Lime Kiln Farm Sanctuary, Sheffield and TNC Roger and Virginia Drury Preserve, Sheffield.

Threats:

Logging, nutrient inputs such as road salts, damming by beavers, and alterations of water levels threaten this community. Disturbances from canopy opening and water level changes can lead to the invasion by non-native plants, including the aggressive exotics Japanese Barberry (*Berberis thunbergii*) and Glossy Alder-buckthorn (*Frangula alnus*). Phragmites (*Phragmites australis*) is also an aggressive exotic in disturbed openings.

Management Needs

Removal/control of non-native plant species.

Synonyms:

USNVC/NatureServe

FRAXINUS NIGRA - ACER RUBRUM SATURATED FOREST ALLIANCE: CEG006502
 Acer rubrum - Fraxinus nigra - (*Tsuga canadensis*) / *Tiarella cordifolia* Forest. Related to Acer rubrum - Fraxinus pennsylvanica Seasonally Flooded Forest Alliance CEG006630: Acer (rubrum, saccharinum) - Fraxinus pennsylvanica / *Ilex verticillata* / *Osmunda regalis*/Forest (more calcareous) and Midwestern: CEG002098- *Quercus macrocarpa* - *Quercus bicolor* - *Carya laciniosa* / *Leersia* spp. - *Cinna* spp. Forest

MA (old name):

Separated from Black Ash-Red Maple-Tamarack Calcareous Seepage Swamp and Black Ash

ME (2010):

Related to Hardwood Seepage Forest

VT (2000):

Related to Red Maple-Black Ash Swamp

NH (2010):

Related to Northern Hardwood-Black Ash-Conifer Swamp and Red Maple-Black Ash- Swamp (modified from 2004)

NY 2002:

More finely divided than Red maple-hardwood swamp and Related to Rich Hemlock-Hardwood Peat Swamp

CT (2006):

Related to Red Maple – Black Ash / Bristly Buttercup community (more calcareous) and somewhat related to Eastern hemlock (*Tsuga canadensis*) seasonally flooded forests

RI (2006):

Related to Rich Red Maple – Ash Swamp

Other:

Cowardin 1979: Broad-leaved Evergreen Forested Wetland

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