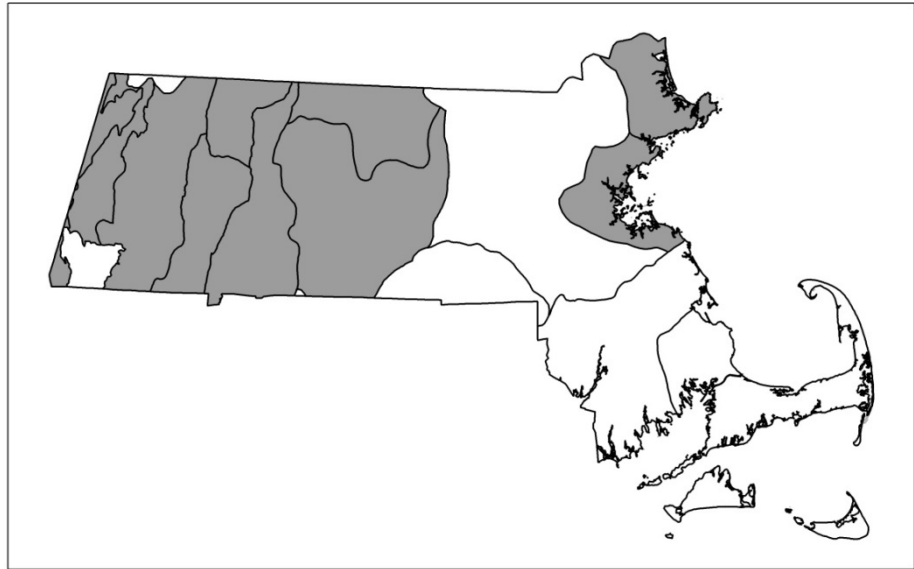




Hickory – Hop Hornbeam Forest/Woodland

Community Code: CT1B2B1000

State Rank: S2



Concept: Mixed-hardwood, open forests with a sparse shrub layer. A nearly continuous cover of graminoids includes a rich diversity of herbaceous flora.

Environmental Setting: Hickory - Hop Hornbeam Forests/Woodlands are typically short with a variable canopy cover, often ~ 60%, contributing to a characteristic park-like appearance, produced by a sparse shrub layer and a nearly continuous graminoid cover. In Massachusetts, many Hickory - Hop Hornbeam Forest/Woodlands are associated with traprock (basaltic) ridges of the Connecticut River Valley Highlands where they are found on mid-slopes (15-20 degrees) with southern or eastern exposures. Occurrences of the community tend to be very small patches (< 10 acres, with some notable exceptions), often clustered within the surrounding matrix forest on thin, well-drained soils, generally on somewhat flattish midslopes with steeper slopes above and below. They are often below balds and rock outcrops of somewhat nutrient-enriched rock. There is great variation in environmental conditions among sites, perhaps reflecting past land use that included sheep pasturing.

Vegetation Description: Hickory - Hop Hornbeam Forests/Woodlands typically have shagbark, pignut, and mockernut hickories (*Carya ovata*, *C. glabra*, and *C. tomentosa*) as the dominant overstory trees, mixed with red oak (*Quercus rubra*) and white ash (*Fraxinus americana*). Red and sugar maples (*Acer rubrum* and *A. saccharum*) can also be present in lower numbers. Hop hornbeam (*Ostrya virginiana*) is a regular and abundant subcanopy tree. The shrub layer is generally sparse. The forest floor is characteristically covered by patches of long-beaked Pennsylvania sedge (*Carex lucorum*) with Pennsylvania sedge (*C. pensylvanica*), other sedges such as long-stalked sedge (*C. pedunculata*) and loose-flowered woodland-sedge (*C.*



laxiflora), and grasses including bottlebrush grass (*Elymus hystrix*), poverty grass (*Danthonia spicata*), and the non-native Canada bluegrass (*Poa compressa*), with scattered violets (*Viola palmata*), blunt-lobed hepatica (*Anemone americana*), wood sorrels (*Oxalis* spp.), and several species of tick-trefoils (including *Hylodesmum glutinosum* and *Desmodium paniculatum*). Some sites have dense late summer forbs including asters (such as big-leaved and white wood asters (*Eurybia macrophylla* and *E. divaricata*), blue heart-leaf aster (*Symphotrichum cordifolium*), and stiff aster (*Ionactis linariifolia*)), goldenrods (*Solidago* spp.), and bonesets (*Eupatorium* spp.).

Differentiating Occurrences: Hickory - Hop Hornbeam Forests/Woodlands have a park-like appearance with sparse shrub layer and a distinctive sedge understory. Hickories dominate the canopy with hop hornbeam forming a subcanopy. Oak - Hickory Forest canopies are generally closed or almost closed, with white and black oaks, rather than primarily red oak. Hickories are consistently present but not dominant. Flowering dogwood is characteristic. Shrubs are sparse but more abundant and more diverse than in Hickory - Hop Hornbeam Forests/Woodlands. Dry, Rich Oak Forests are dominated by oaks rather than hickories, the subcanopy is not dominated by hop hornbeam, and they lack the extensive sedge lawn of Hickory - Hop Hornbeam Forests/Woodlands. Mixed Oak Forests/Woodlands and other oak-dominated woodlands have a continuous low shrub layer formed by members of the blueberry family which are not characteristic of the Hickory - Hop Hornbeam Forests/Woodlands.

Associated Fauna: These are small community occurrences and tend to be part of the habitat of species using the surrounding forests. Species of dry sites are most likely to occur in the community occurrences.

Public Access: Catamount WMA, Colrain; Walnut Hill WMA, Middlefield; Joseph Skinner State Park, Hadley; Palmer WMA, Palmer; Wachusett Meadow Wildlife Sanctuary (Massachusetts Audubon Society), Princeton; Middlesex Fells, Medford.

Threats: Exotics: black swallow-wort (*Cynanchum louiseae*), common buckthorn (*Rhamnus cathartica*).

Management Needs: Control exotics where possible. Limit trails.

USNVC/NatureServe: A2053 *Quercus alba* - *Carya* spp. - *Fraxinus americana* Forest Alliance -- *Quercus rubra* - *Carya* (*glabra*, *ovata*)/*Ostrya virginiana*/*Carex lucorum* Forest [CEGL006301].