Hickory - Hop Hornbeam Forest/Woodland

**Description:** Hickory - Hop Hornbeam Forest/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 Forests/Woodlands are associated with traprock (basaltic) ridges along the Connecticut River where they are found on mid-slopes 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 mid-slopes 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 expansion due to sheep pasturing.

**Characteristic Species:** Hickory - Hop Hornbeam Forest/Woodlands typically have shagbark, pignut and mockernut hickories as the dominant overstory trees mixed with red oak and white ash. Red and sugar maples can also be present in lower numbers. Hop-hornbeam 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 with Pennsylvanian sedge, other sedges such as long-stalked sedge and loose-flowered woodland-sedge, and grasses including bottlebrush grass, poverty grass and the non-native Canada bluegrass, with scattered violets, blunt lobed hepatica, wood sorrels, and several species of tick-trefoils. Some sites have dense late summer forbs including big-leaved and white wood asters, blue heart-leaf aster, and stiff aster, goldenrods, and bonesets.

**Differentiating from Related Communities:** Hickory – Hop Hornbeam Forests/Woodlands (HHH) 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 HHH. Dry Rich Oak Forests/Woodlands are dominated by oaks rather than hickories, the subcanopy is not dominated by hop hornbeam, and they lack the extensive sedge lawn of HHH. 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 HHH.

**Habitat for Associated Fauna:**
There are no animals known to be restricted to Hickory – Hop Hornbeam Forests/Woodlands. These are small, dry communities, and would be part of the habitat of species using the surrounding forests.

**Examples with Public Access:**
Catamount WMA, Colrain; Walnut Hill WMA, Middlefield; Joseph Skinner SP, Hadley; Palmer WMA, Palmer; Wachusett Meadow WS (MAS), Princeton; Middlesex Fells, Medford.

Trail through patch of Hickory - Hop Hornbeam Forest/Woodland. Photo: P. Swain, NHESP.