

Community Name: Oak - Tulip Tree Forest

Community Code: CT1B2C0000

SRANK: S1



Concept: A forest, on gentle, moist concave slopes (coves), or on well-drained flats at the base of the slopes. Soils are circumneutral to slightly acidic. One site is rocky.

Environmental Setting: The community occurs in fairly gradually sloped ravines (or coves), from the upper midslope to the bottom. The soil typically is fine sandy loam or loamy sand, moist and generally well drained. Leaf litter covers the soil surface. The community is not continuous within the ravines.

Vegetation Description: Tulip Trees (*Liriodendron tulipifera*) are emergent (over 100 ft.) above an already tall, fairly diverse canopy dominated by Red Oak (*Quercus rubra*) with Red Maple (*Acer rubrum*), Sugar Maple (*Acer saccharum*), Black Birch (*Betula lenta*), Yellow Birch (*Betula alleghaniensis*), and White Ash (*Fraxinus americana*), and more Tulip Trees. A subcanopy/tall shrub layer may include the same species and scattered White Pine (*Pinus strobus*), Eastern Hemlock (*Tsuga canadensis*), Striped Maple (*A. pensylvanicum*), and Witch-hazel (*Hamamelis virginiana*). Witch hazel is often the most dominant shrub with abundant Maple-leaf Viburnum (*Viburnum acerifolium*). One site has patches of Mountain Laurel (*Kalmia latifolia*) and Beaked Hazelnut (*Corylus cornuta*), in the shrub layer. Significant are the lack of ericaceous understory and presence of Sugar Maple. The diverse herbaceous layer covers about a third of the ground, with leaf litter covering the rest. Common herbaceous species include Small Jack-in-the-pulpit (*Arisaema triphyllum*), False Solomon's Seal (*Maianthemum racemosum*), Ground Pine (*Dendrolycopodium obscurum*), Skunk-cabbage (*Symplocarpus foetidus*), New York Fern (*Parathelypteris noveboracensis*), Indian Cucumber (*Medeola virginiana*), Cinnamon Fern (*Osmundastrum cinnamomeum*), Christmas Fern (*Polystichum acrostichoides*), White Wood-aster (*Eurybia divaricata*), Wild Oats (*Uvularia sessilifolia*), and Two-leaved Toothwort (*Cardamine* formerly *Dentaria*) *diphylla*).

Associations:

Habitat Values for Associated Fauna: These small patch communities would constitute only parts of the habitats of many animals found in them. Acorns are important for wildlife including white-tailed deer (*Odocoileus virginianus*), black bear (*Ursus americanus*), grey squirrels (*Sciurus carolinensis*), and other small rodents. Birds include Wild Turkeys (*Meleagris gallopavo*) in areas with sufficiently large forests to provide all the habitat needs. Passerine birds of oak forests include Red-eyed Vireo (*Vireo olivaceus*), Ovenbird (*Seiurus aurocapillus*), Black-and-white Warbler (*Mniotilta varia*), Scarlet Tanager (*Piranga olivacea*), Great Crested Flycatcher (*Miarchus crinitus*), Downy Woodpecker (*Picoides pubescens*), Hairy Woodpecker (*P. villosus*) and Red-bellied Woodpecker (*Melanerpes carolinus*). Amphibians expected include Northern Redback Salamanders (*Plethodon cinereus*), and Spotted Salamanders (*Ambystoma maculatum*). Ringneck Snake (*Diadophis punctatus*) and Redbelly Snake (*Storeria occipitomaculata*) would be expected.

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

Associated Rare Plants: None known

Associated Rare Animals: None known

Examples with Public Access: Robinson State Park, Agawam; Douglas State Forest, Douglas

Threats: Major threat is invasive plants, particularly Japanese Barberry (*Berberis thunbergii*).

Management Needs:

Synonyms:

USNVC/TNC: C EGL006125 High Allegheny Rich Red Oak - Sugar Maple Forest

MA (old name): CNE MESIC HARDWOOD FOREST ON ACIDIC BEDROCK/TILL.

ME: NA

NH: NA

VT: NA

NY: Oak-tulip tree forest; Edinger et al. 2002

CT: *Fagus grandifolia* - *Quercus alba* - *Quercus rubra* - *Liriodendron tulipifera* forests: Metzler and Barrett 2006

RI: Related to: Oak - Hickory Forest (Enser & Lundgren. 2006)

Weatherbee:

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