

# Dry, Rich Oak Forest/Woodland

State Rank: S4 - Secure



Rocky slope with open Dry, Rich Oak Forest/Woodland. Photo: Jennifer Longsdorf, NHESP.

**Description:** The oak dominated canopy of Dry, Rich Oak Forest/Woodland is somewhat open (50–75% cover) to mostly closed. This forest occurs on southwest facing mid-slopes and coves with well-drained slightly acidic, often rocky soils of intermediate fertility. The steep slopes may include open rocky glades or occur near rock outcrop communities. A rich understory often includes legumes and false fox-gloves. Most occurrences show evidence of recurrent fires (i.e., charred bases of trees, dead blackened shrubs or sprouts, burned duff) that maintain an open park-like appearance.

**Characteristic Species:** In Dry, Rich Oak Forests/Woodlands, the tree canopy is dominated by a mixture of oaks (including red, black, and white), with lower amounts of sugar and red maples, American beech, white ash, and shagbark and other hickories. Eastern hemlock is an occasional part of the canopy. Scattered flowering dogwood and hop-hornbeams form an open subcanopy. A fairly sparse shrub layer includes saplings of canopy

Dry, Rich Oak Forests/Woodlands are deciduous, predominantly oak, forests with rich understories of herbaceous plants and graminoids. The shrub layer has fewer blueberry family plants than other oak forests.

tree species, witch hazel, and maple-leaved viburnum. A rich herbaceous flora includes blunt-lobed hepatica, perfoliate bellwort, four-leaved milkweed, early meadow-rue, false foxgloves, wild coffee, bush clovers, tick-trefoils, and sedges.

**Differentiating from Related Communities:** Dry, Rich Oak Forests/Woodlands are on the richer, less acidic end of a continuum of oak dominated forests. The addition of occasional maples in the canopy, flowering dogwoods and hop-hornbeams in the subcanopy, and a shrub layer lacking abundant heaths distinguishes this from more acidic oak forests and woodlands such as Mixed Oak, Open Oak, and Black Oak - Scarlet Oak Forests/Woodlands. On the rich end of the continuum, Dry, Rich Oak Forests/Woodlands are related to Sugar Maple -



Fern-leaf false foxglove, typical of Dry, Rich Oak Forests/Woodlands. Photo: Don Cameron.

## Oak - Hickory Forests (SMOHF)

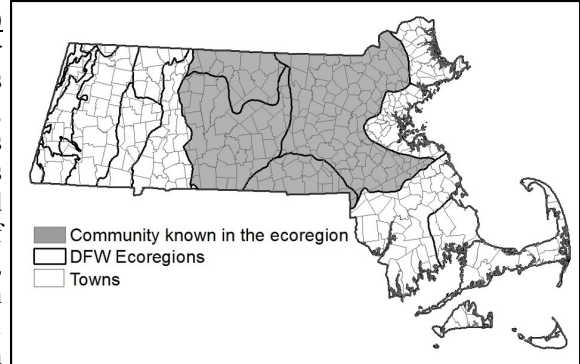
that are moister and have a greater abundance of northern hardwoods (primarily sugar maple, basswood, and white ash). The herbaceous layer of SMOHF has fewer legumes and more spring ephemerals and herbaceous species indicative of rich conditions such as herb Robert, wild geranium, and baneberry than Dry, Rich Oak Forests/Woodlands.

## Red Oak - Sugar Maple Transition

Forests have a greater dominance of red oak and sugar maple than Dry, Rich Oak Forests/Woodlands; and they have a less dense and rich herbaceous layer, particularly lacking the legumes and false fox-gloves. Dry, Rich Oak Forests/Woodlands may be an open, early successional variant of Oak - Hickory Forests that is maintained by regular or severe disturbance, particularly fire. They both lack abundant sugar maple, basswood, and white ash, and lack spring ephemerals and herbaceous species indicative of rich conditions. Both include a mix of tree oak species and prominent but not dominant hickories. Oak - Hickory Forests tend to have more closed canopies and less of an herbaceous layer. Flowering dogwood is more common in the subcanopy of Oak - Hickory Forests than in Dry, Rich Oak Forests/Woodlands where it also occurs.

## **Habitat for Associated Fauna:**

Many vertebrate species that use forests as part of their habitat are more dependent on size of undisturbed forest than on the precise type. Patch communities would contribute to needed variation in the overall habitat. There are no species known to



be restricted to Dry, Rich Oak Forest/Woodland. Common species of dry sites include short-tailed shrew, white footed mouse, and chipmunks. Snakes of dry forest sites include garter snakes and redbelly snakes. Birds that nest in dry oak forests include Eastern Wood-Pewee, Red-eyed Vireo, Scarlet Tanager, and Ovenbird. Insects such as moths and butterflies would be those of oak forests, including orange swallow moth.

## **Examples with Public Access:**

None identified on public lands.



Opening on a slope with sedges in Dry, Rich Oak Forest/Woodland. Photo: J. Longsdorf, NHESP.



From: *Classification of Natural Communities of Massachusetts* <http://www.mass.gov/nhesp/>

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