

# Yellow Oak Dry Calcareous Forest

State Rank: S1 - Critically Imperiled



Yellow Oak Dry Calcareous Forest on a dry limestone knoll. Photo: Michael Batcher.

**Description:** The Yellow Oak Dry Calcareous Forest occurs on moderate to steep slopes and summits of low knolls or ridges underlain by calcium rich limestone or dolostone. Exposed bedrock outcrops or boulders are common. The shallow soils tend to be well drained and nutrient rich, with a pH >6.5. The forest canopy is often somewhat open (>50% cover) and all layers have a large diversity of species. The community generally occurs as small (a few acres) patches on southwest to southeast facing slopes within other forest types.

**Characteristic Species:** Yellow oak (sometimes called chinquapin oak) is the key characteristic and indicator species of Yellow Oak Dry Calcareous Forests, though rarely dominant in the canopy or subcanopy. The diverse, often somewhat open canopy is usually dominated by sugar maple, white oak, and black oak, with red oak, white ash, hickories, white pine, and hemlock. Yellow oak is often in the subcanopy, along with one or more of these canopy dominants and hop hornbeam. Tall shrubs include pagoda-

Yellow Oak Dry Calcareous Forests usually occur on well-drained slopes underlain by calcareous rocks. They are dry, often open, oak - sugar maple forests with a rich understory.

dogwood and bladdernut with occasional prickly ash. The herbaceous layer tends to be rich in species. Dominant graminoids include sedges, mountain ricegrass, and bottlebrush-grass. Characteristic forbs include hog peanut, early meadow-rue, blunt-lobed hepatica, lance-leaf bedstraw, broad-leaved ragwort, and wild geranium. Invasive exotic species occur in disturbed areas.



Yellow oak features: Trunk with typical flakey bark in vertical ridges (left). Photo: Patricia Swain, NHESP.



Leaves on a seedling sized plant (below). Photo: William Moorhead.

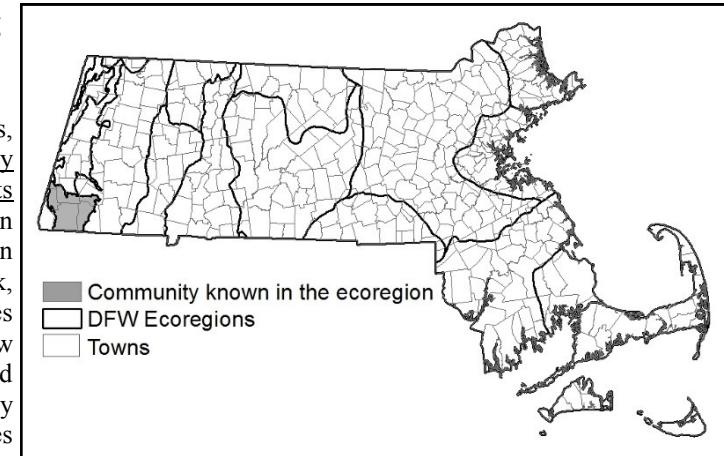
## Differentiating from Related Communities:

In Massachusetts, Yellow Oak Dry Calcareous Forests occur only in southern Berkshire County on calcium rich bedrock, usually on upper slopes and ridgetops. Yellow oak is the indicator and characteristic canopy and subcanopy species of Yellow Oak Dry

Calcareous Forest and is seldom found growing in other communities. Other oak forests and woodlands are generally less diverse and lack species typical of calcium rich environments such as prickly ash, bladdernut, and pagoda-dogwood, as well as yellow oak. In appearance, Yellow Oak Dry Calcareous Forest are often similar to a Hickory - Hop Hornbeam Forest/Woodland in having a somewhat open canopy that includes hickories, a subcanopy with hop hornbeam, and an often sedge dominated herbaceous layer; however, the yellow oak forest has a richer flora due to its calcareous substrate, and, of course, yellow oak.

## Habitat for Associated Fauna:

Mature upland forest types provide valuable structural attributes such as tree cavity den sites. The fauna tends to be that of generally dry forests, but with no species restricted to the Yellow Oak Dry Calcareous Forest. The patches would be parts of the habitats of wide ranging animals.



**Examples with Public Access:** Appalachian Trail, Sheffield; Dohoney Property (Sheffield Land Trust), Sheffield.



Yellow Oak Dry Calcareous Forest with mixed canopy. Photo: Michael Batcher.



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

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