

Across a slope with Mixed Oak over mountain laurel. Photo: Beverly Vucson, DFG.

**Description:** Mixed Oak Forest/ Woodland is a deciduous forest or woodland community dominated by multiple species of tree oak that occurs on dry soils and exposed acidic talus or rocky slopes. The canopy may be closed or somewhat open (typically having ~70% cover) at ~20m (~60 ft.). More mature forest examples tend to have denser canopy cover. Trees in many examples are small - young or stunted with broken tops - with diameters 6-8", and only occasional larger trees >10" diameter. The tall shrub layer may be patchy, over an often extensive lower shrub laver. The herbaceous cover is variable. Undecomposed oak leaves cover the ground.

Characteristic Species: Canopies in Mixed Oak Forests/Woodlands have a variable mix of black, white, red, scarlet, and chestnut oaks, with black and white birches, and red maple. White Pine, if present, typically makes up much <25% of the canopy. The canopy is generally somewhat open. An understory of

Mixed Oak Forest/Woodland is a broadly defined tree oak dominated community that grades into other more narrowly defined communities. The type often occurs in areas that burn regularly, with dry soils and exposed slopes.

saplings of canopy species with (depending on location) gray birch, striped maple, witch hazel, shadbush, and chestnut is dense in patches. The shrub layer may be extensive or at least also dense in patches with lowbush blueberries, huckleberry, and/or mountain laurel. A scattered herbaceous layer is often primarily wild sarsaparilla and Pennsylvania sedge.



American chestnut, often in Mixed Oak as a shrub. Photo: Sergio Harding, NHESP.

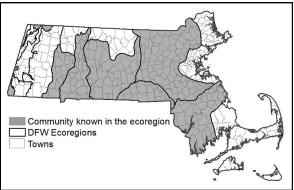
Differentiating from Related Communities: Mixed Oak Forests/Woodlands are part of a continuum of dry, acidic communities that contain a variety of tree oak and pine species. Mixed Oak Forests/Woodlands include more oak species (black, scarlet, white, red, and chestnut oak) than do most other types of oak forests, and birches and lack abundant pines or hemlock. Oak - Hemlock - White

Pine Forests (OHWPF) are the most broadly defined in the continuum of oak dominated forests; specific types are split out from this matrix type. OHWPF is dominated by a mix of tree oaks with scattered white pine and hemlock, either of which may be in local dense patches. Abundant scarlet oak with black oak is the key indicator of Black Oak - Scarlet Oak Woodlands Open Oak Woodlands occur on hill slopes

with short red and white oak trees scattered over a grassy or low shrub understory around small rock outcrops. They often occur between a rocky summit and the surrounding taller forest. Coastal Forests/Woodlands are within a few miles of the coast at <~60 ft. elevation and receive storm winds and spray. The diverse canopy includes oaks and often has American holly, sassafras, and black gum. White Pine - Oak Forests have >25% cover of white pine overall (not just local patches). Pitch Pine - Oak Forests/Woodlands have >25% cover of pitch pine overall (not just local patches).

## Habitat for Associated Fauna:

Mature upland forest types provide valuable structural attributes such as tree cavity den sites (used by a variety of bird and mammal species) and large woody material (used by various amphibian, reptile, and invertebrate species). Mixed Oak Forests/Woodlands may constitute only parts of the habitats of many animals found in them. Acorns in all oak forests are important for wildlife including white-tailed deer, black bear, grey squirrels, and other small rodents. Birds include turkeys.



The understory of blueberries and huckleberries is used by many of these same species. Amphibians expected include northern redback salamanders and spotted salamanders. Ringneck snake and redbelly snake would be expected. Moths including the orange sallow moth, butterflies, and other insects of the southeastern oak and oak-pine forest occur in Mixed Oak Forests.

## **Examples with Public Access:** Mt. Tekoa WMA, Russell; Minute Man NHP, Lexington; Douglas SF, Douglas; Palmer WMA, Palmer.



Mixed Oaks with red maple. Photo: Sergio Harding, NHESP.

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