



Black Oak - Scarlet Oak Forest/Woodland

Community Code: CT1A3B0000

State Rank: S3S4



Concept: A fairly open oak/heath woodland maintained by regular light fire. Without fire, the community becomes a closed forest with more diversity of trees and a denser understory flora.

Environmental Setting: Black Oak - Scarlet Oak Woodland is a fairly open, short (<20m, ~60 ft., tall) oak / heath community maintained by regular light fire or other disturbance. The woodland occurs on dry sites, often sandy, gravelly, or rocky slopes. Without fire, there tends to be a deep accumulation of oak leaf litter that impedes germination of seeds that need mineral soil, restricting such species to small patches of disturbance. Except on the driest sites, without regular fire, the woodland community tends to succeed to more diverse, denser and taller Oak - Hemlock - White Pine Forest or one of its variants.

Vegetation Description: In Black Oak - Scarlet Oak Woodlands, black oak (*Quercus velutina*) is the dominant canopy species, with a high proportion of scarlet oak (*Q. coccinea*). White oak (*Q. alba*) and red maple (*Acer rubrum*) are common associates. A sparse subcanopy may have species of recent disturbance such as grey birch (*Betula populifolia*), black cherry (*Prunus serotina*), and sassafras (*Sassafras albidum*), as well as species less tolerant of fire such as flowering dogwood (*Benthamidia florida*) or shadbush (*Amelanchier spp.*). Lowbush blueberries (*Vaccinium angustifolium* and *V. pallidum*), huckleberry (*Gaylussacia baccata*), and scrub oak (*Quercus ilicifolia*) form a low shrub layer, with scattered sheep laurel (*Kalmia angustifolia*), maple-leaved viburnum (*Viburnum acerifolium*) and American hazelnut (*Corylus americana*). A sparse herbaceous layer includes scattered patches of Pennsylvania sedge (*Carex pensylvanica*), bracken fern (*Pteridium aquilinum*), and pink lady's slipper



(*Cypripedium acaule*). Wintergreen (*Gaultheria procumbens*) may be dense in areas with little past soil disturbance.

Differentiating Occurrences: Black Oak - Scarlet Oak Woodlands are part of a continuum of dry, acidic communities that contain a variety of tree oak and pine species. Many of the types of oak communities grade into one another in time and space and are difficult to differentiate both in a classification and on the ground. They all have tree oaks and a low shrub layer dominated by plants of the blueberry family. Black Oak - Scarlet Oak Woodlands are overtly woodlands: most canopy trees are relatively short (<20m, ~60 ft.) and the canopy is generally interrupted rather than continuous (~60% cover). Abundant scarlet oak with black oak is the key indicator of the type. Open Oak Woodlands occur on upper hill slopes with short red (and black or hybrid) and white oak trees scattered over a low shrub or graminoid (grass and sedge) understory around small rock outcrops. Mixed Oak Forests/Woodlands have more oak species (black, scarlet, and white plus red oak (*Q. rubra*) and chestnut oak (*Q. montana*)) than Black Oak - Scarlet Oak Woodlands, as well as black birch (*Betula lenta*). The type is broadly defined and Black Oak - Scarlet Oak Woodlands could be considered as a defined subtype. 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. Oak - Hemlock - White - Pine Forests are the most broadly defined in the continuum of oak dominated forests; specific types are split out from this matrix type. Oak - Hemlock - White - Pine Forests are dominated by a mix of tree oaks with scattered white pine and hemlock, either of which may be in local dense patches. White Pine - Oak Forests have >25% cover of white pine overall (not just local patches). Pitch Pine - Oak Forests have >25% cover of pitch pine overall (not just local patches).

Associated Fauna: Black Oak - Scarlet Oak Woodlands would be part of the habitat of wide-ranging or large animals. Acorns are important food for white-tailed deer (*Odocoileus virginianus*), black bear (*Ursus americanus*), grey squirrels (*Sciurus carolinensis*), other small rodents, Wild Turkeys (*Meleagris gallopavo*), and other birds. The understory of blueberries and huckleberries is used by many of these same species in areas with sufficiently large forests to provide all the habitat needs. Passerine birds of oak forests include Red-eyed Vireo (*Vireo olivaceus*), White-breasted Nuthatch (*Sitta carolinensis*), Ovenbird (*Seiurus aurocapillus*), Black-and-white Warbler (*Mniotilta varia*), Scarlet Tanager (*Piranga olivacea*), Great Crested Flycatcher (*Miarchus crinitus*), and Downy Woodpecker (*Picoides pubescens*). Orange Sallow Moth (*Pyrrhia aurantiago*) may be present when either of its host plants, smooth and fern-leaf false fox glove (*Aureolaria flava* and *A. pedicularia*), are present in sufficient abundance.

Public Access: Salisbury Marsh WMA, Salisbury; Clinton Bluff WMA, Clinton; Green Hill Park, Worcester; Cape Cod National Seashore, Truro.

Threats: Fire suppression, severe wildfire, and exotics. ATV trails.

Management Needs: Prescribed fire, exotic removal.



USNVC/NatureServe:

A4209 *Quercus velutina* - *Quercus falcata* - *Pinus rigida* Coastal Plain Forest Alliance
- *Quercus coccinea* - *Quercus velutina* / *Sassafras albidum* / *Vaccinium pallidum*
Forest [CEGL006375].