

Ridgetop Pitch Pine - Scrub Oak Community

State Rank: S2 - Imperiled



Ridgetop PPSO Community showing structural variation. Photo: Patricia Swain, NHESP.

Description: Ridgetop Pitch Pine - Scrub Oak Communities are shrub dominated with scattered low trees on acidic bedrock ridges and rock outcrops. Structural variation within the community reflects patch disturbances and clonal growth of many of the characteristic species. The exposed ridgetop environment is harsh, with strong wind, intense sunlight, extreme daily and seasonal temperature variations, and shallow nutrient poor droughty soils. Scattered emergent pitch pine trees tend to be dwarfed (~15 ft. (5m)) by winds and snow in these exposed locations. Without regular disturbance or management (storms, fire, or regular removal of trees), the community or parts of it succeed to woodland or forest. If patches of an occurrence occupy a cumulative area of >5000 sq. ft. on a ridge the community may be mappable, otherwise small patches would be considered to be part of the variation in the surrounding community.

Characteristic Species: The canopy characteristically contains somewhat dwarfed pitch pines (~15 ft (5m) tall) with

The Ridgetop Pitch Pine - Scrub Oak Community occurs on acidic bedrock along mountain ridges, often in a mosaic with one of the rocky summit communities. This community is maintained by severe growing conditions.

occasional red or other oaks, gray birch, black cherry, and red maple. White pine may dominate the canopy in areas that have not experienced regular fire or other disturbance. In the shrub layer, scrub oak is the most characteristic species of the community, typically with patches of lower growing black huckleberry and lowbush blueberries. Other shrubs in lower abundance may include dwarf chinquapin oak, mountain laurel, wild raisin, red chokeberry, and serviceberries. The herbaceous layer is extremely sparse and tends to occur in rock crevices and at tree bases. Herbaceous plants include Canada mayflower, starflower, hairgrass, goldenrods, wintergreen, and sedges. Invasive exotic species are usually absent. The understory is patchy, and often interspersed with areas of lichen covered or exposed bedrock.



Trail through dense huckleberry and scrub oak in Ridgetop PPSO Community. Photo: Nancy Putnam, DCR.

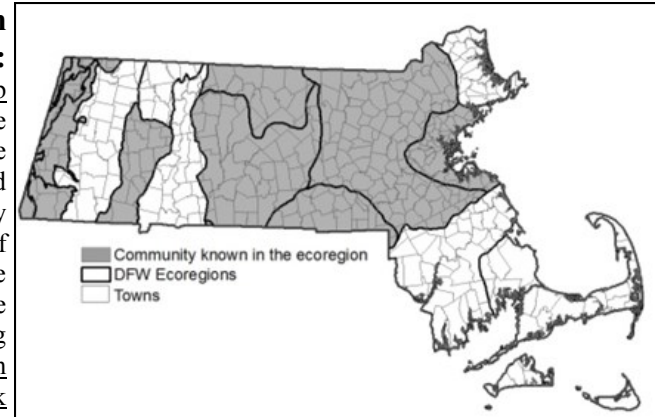
Differentiating from Related Communities:

Ridgetop Pitch Pine - Scrub Oak Communities have scattered stunted pitch pine and dense scrub oak, and usually little bare rock. They are on bedrock ridgetops. If <~5000 sq. ft., an occurrence would be considered to be part of the surrounding prevailing community. Pitch Pine - Scrub Oak

Communities are on sand or gravel, tend to be larger, and have most of the same species. Scrub Oak Shrublands lack pitch pine. Ridgetop Heathlands lack abundant scrub oak and pitch pine, have large areas dominated by continuous cover (>50%) of low shrubs, usually lowbush blueberry, and have little exposed bedrock. Rocky Summit/Rock Outcrop Communities are dominated by bare or lichen covered rock. Identifying community types on rock outcrops is complicated by interdigitation of types and overlap of constituent species.

Habitat for Associated Fauna:

Ridgetops tend to be only a part of the habitat of most vertebrate animals which are usually those of the surrounding forests and rocky outcrops. Larger mammals seem to prefer woodlands where they can move more easily, but birds find shelter in the dense shrubs during nesting and migration. Pitch Pine - Scrub Oak Communities have a rich Lepidopteran fauna. Some of the rare moths of the larger Pitch Pine Scrub Oak Communities on sands have been found on the Ridgetop Community.



Examples with Public Access:

Appalachian Trail, Clarksburg; Appalachian and Taconic Trails, Mt. Washington; Monument Mtn. (TTOR), Great Barrington; Tekoa Mtn. WMA, Russell; Middlesex Fells Reservation, Medford area; Blue Hills Reservation, Milton area.



Dense scrub oak with bearberry. Photo: Bruce A. Sorrie, NHESP.

