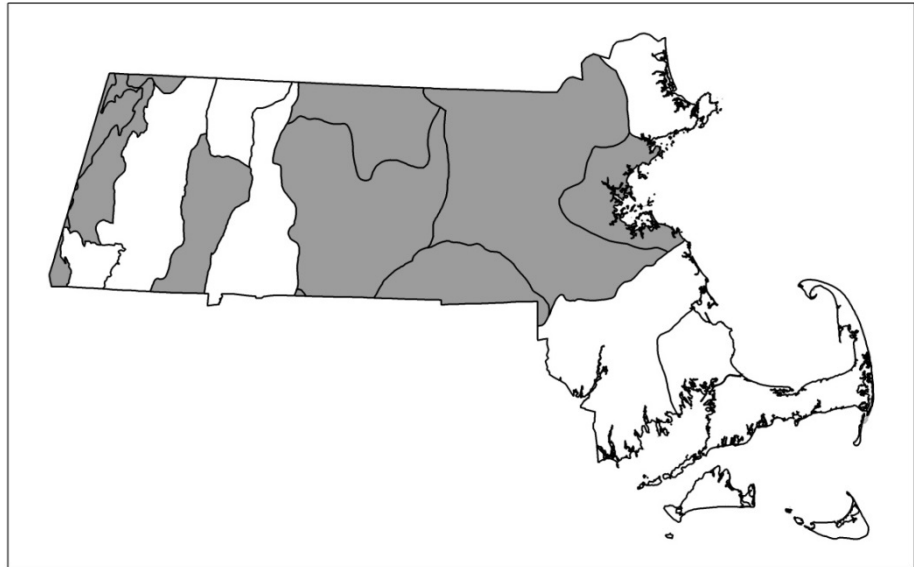




Ridgetop Pitch Pine – Scrub Oak Community

Community Code: CT2A1A1000

State Rank: S2



Concept: Ridgetop Pitch Pine - Scrub Oak community occurs on acidic bedrock, often in a mosaic with rocky summit/rock outcrop communities including Ridgetop Heathlands.

Environmental Setting: Ridgetop Pitch Pine - Scrub Oak Communities occur on exposed acidic bedrock, often in a mosaic with rocky summit/rock outcrop communities on ridgetops and steep upper mountain slopes with an open to closed canopy of pitch pine (*Pinus rigida*). The community is maintained by severe growing conditions; the characteristic species are tolerant of extremely xeric conditions. The most typical examples have a south to southwest aspect and receive high solar insolation. They are found on level crests as well as steep slopes. Soil accumulation is slow and soil depths are generally shallow, often with considerable exposed bedrock. Although some occurrences appear to be fire-dependent, other sites have little indication of past fire. In some places where fire has been infrequent, succession to White Pine - Oak Forest may be evident.

Vegetation Description: The canopy characteristically contains somewhat dwarfed pitch pines (*Pinus rigida*, avg. 5 m tall), with occasional red or other oaks (*Quercus rubra*, *Q. velutina*, *Q. montana*, or *Q. coccinea*), gray birch (*Betula populifolia*), black cherry (*Prunus serotina*), and red maple (*Acer rubrum*). White pine (*Pinus strobus*) may dominate the canopy in areas that have not experienced regular fire or other disturbance. In the shrub layer, scrub oak (*Quercus ilicifolia*) is the most characteristic species of the community, typically with patches of lower growing black huckleberry (*Gaylussacia baccata*) and lowbush blueberries (*Vaccinium angustifolium* and/or *V. pallidum*). Other shrubs in lower abundance may include dwarf chinquapin-oak



(*Quercus prinoides*), mountain laurel (*Kalmia latifolia*), wild raisin (*Viburnum cassinoides*), red chokeberry (*Aronia arbutifolia*), and serviceberries (*Amelanchier* spp.). The herbaceous layer is extremely sparse and tends to occur in rock crevices and at tree bases. Herbaceous layer plants include Canada mayflower (*Maianthemum canadense*), starflower (*Lysimachia borealis*), hairgrass (*Deschampsia flexuosa*), goldenrods (*Solidago* spp.), wintergreen (*Gaultheria procumbens*) and sedges (*Carex* spp.). Invasive exotic species are usually absent. The understory may be interspersed with areas of lichen-covered or exposed bedrock.

Differentiating Occurrences: Ridgetop Pitch Pine - Scrub Oak Communities have scattered stunted pitch pine and dense scrub oak. Usually, they have little bare rock. They are on bedrock ridgetops. 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.

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 in the ridgetop community.

Public Access: Appalachian Trail, Clarksburg; Appalachian and Taconic Trails, Mt. Washington; Monument Mtn. (The Trustees of Reservations)), Great Barrington; Tekoa Mtn. WMA, Russell; Middlesex Fells Reservation, Medford area; Blue Hills State Reservation, Milton area.

Threats: Forest succession, fire suppression, trampling, litter. The occurrences are threatened by exclusion of fire. Although many occurrences are on conservation lands, few are managed to maintain the specific natural community type. It would best be maintained by careful reintroduction of fire through prescribed burning or other fire management plans. Trails tend to run on ridge tops and, when the open areas supporting these communities are encountered, they invite human use, which can easily degrade the vegetation, destroy the lichen and moss cover on the rocks, and lead to soil loss. Balancing protection with use is possible with careful planning, such as adroit trail placement, education of users, and probably some triage of sites.

Management Needs: Prescribed fire to keep fuel loads down, limit succession, and allow regeneration of pitch pine and heaths. As open summits provide great views, trails and education are needed to minimize human impacts such as trampling and littering.



USNVC/NatureServe:

Pinus rigida Woodland Alliance -- *Pinus rigida/Quercus ilicifolia/Aronia melanocarpa* Woodland [CEGL006323] --and, in part, *Pinus rigida/Aronia melanocarpa* Woodland [CEGL006116].