

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Pitch pine - scrub oak woodland

This is a woodland community type that occurs on rocky ridge-tops, on sandy soils, or both. Soils for this community are acidic; conditions are dry. Trees are drought-stressed and of small stature. *Pinus rigida* (pitch pine) is usually the dominant tree, although in southern Pennsylvania, *P. virginiana* (Virginia pine), and *P. pungens* (Table-mountain pine) may accompany or replace *P. rigida*. *P. resinosa* (red pine) may also occur on some sites. Hardwoods may be present but do not contribute more than 25% of the tree layer. Hardwood associates include *Nyssa sylvatica* (black-gum), *Sassafras albidum* (sassafras), *Betula lenta* (sweet birch), *Quercus montana* (chestnut oak), *Q. coccinea* (scarlet oak), *B. populifolia* (gray birch), and *Acer rubrum* (red maple). *Pinus strobus* (eastern white pine) may also occur but is not common. *Quercus ilicifolia* (scrub oak) forms a dense understory. Various shrubs, mostly ericads, often form a low shrub layer. Characteristic species include *Gaylussacia baccata* (black huckleberry), *Vaccinium angustifolium* (low sweet blueberry), *V. pallidum* (lowbush blueberry), *Aronia melanocarpa* (black chokeberry), *Comptonia perigrina* (sweet-fern), and *Gaultheria procumbens* (teaberry). Herbaceous species include *Pteridium aquilinum* (bracken fern), *Carex pensylvanica* (Pennsylvania sedge), *C. communis* (a sedge), *Oryzopsis* spp. (ricegrass), *Schizachyrium scoparium* (little bluestem), *Deschampsia flexuosa* (common hairgrass), *Melampyrum lineare* (cow-wheat), *Danthonia spicata* (poverty grass), *Aristida dichotoma* (three-awn), and *Aralia nudicaulis* (wild sarsaparilla). This community may occur as part of the "Ridgetop acidic barren complex."

Related types: If the hardwood component of the canopy exceeds 25% relative cover, see the "Pitch pine - mixed hardwood woodland" type. The pine-dominated type here often occurs adjacent to and upslope of the more mixed type. If the shrub layer is dominated by ericaceous shrubs rather than *Quercus ilicifolia* (scrub oak), consult the description for the "Pitch pine - heath woodland."

Range: Glaciated NE, Pittsburgh Plateau, Pocono Plateau, Ridge and Valley, Unglaciated Allegheny Plateau.

Selected references: Illick and Aughanbaugh 1930, Schweitzer and Rawinski 1987.

[Crosswalk: Smith's "Ridgetop Dwarf-tree Forest" (in part), "Appalachian Sand Barren" (in part), TNC's *Pinus rigida* / *Quercus ilicifolia* Woodland Alliance, *Pinus rigida*/*Quercus ilicifolia*/*Aronia melanocarpa* Community, SAF's Pitch pine (45).]