

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Pitch pine - heath woodland

This is a woodland community type that occurs on rocky ridge-tops, on sandy soils, or both. A similar type occurs on serpentinite-derived soils on the Piedmont (see related types section below). 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 *Pinus pungens* (Table-mountain pine) may accompany or replace *P. rigida*. *Pinus 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), *Betula populifolia* (gray birch), and *Acer rubrum* (red maple). *Pinus strobus* (eastern white pine) may also occur but is not common. Various shrubs, mostly ericads, 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 peregrina* (sweet-fern), *Gaultheria procumbens* (tea-berry), and *Kalmia angustifolia* (sheep laurel).

Scattered *Q. ilicifolia* (scrub oak) may be present but is not dominant.

Herbaceous species include *Pteridium aquilinum* (bracken fern), *Carex pensylvanica* (Pennsylvania sedge), *Carex communis* (a sedge), *Schizachyrium scoparium* (little bluestem), *Deschampsia flexuosa* (common hair-grass), *Melampyrum lineare* (cow-wheat), *Danthonia spicata* (poverty grass), *Lespedeza* spp. (bush-clovers), and *Aralia nudicaulis* (wild sarsaparilla). *Cladonia* spp. and *Cladina* spp. (reindeer lichens) are also very common. This community may occur as part of the "Ridgetop acidic barren complex."

Related types: This type may contain scattered *Q. ilicifolia* (scrub oak), but sites where *Q. ilicifolia* becomes the dominant shrub should be classified as "Pitch pine -scrub oak woodland". 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. On the Piedmont, on areas of serpentine geology, a similar dry pine type occurs with many of the same dominants. For sites in this ecoregion of unknown geology, please read both descriptions.

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* / *Vaccinium* Woodland Alliance, SAF's Pitch pine (45).]