

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Scrub oak shrubland

This community type occurs either on sandy soils or on thin soils over bedrock. Conditions are dry; soils are acidic. It most commonly occurs on rocky ridgetops. In this case, it may be part of the "Ridgetop barren complex." It also may occur on sites where frequent or recent disturbance has removed the tree layer. This type also includes most of what is referred to as "Sand barrens." Sand barrens are areas of sandy (Morrison series) infertile soils that form extensive, gently rolling expanses of mostly scrub oak with occasional patches of blueberries ("Low heath shrubland") and grassy frost pockets ("Little bluestem / Pennsylvania sedge grassy opening"). Sand barrens in Pennsylvania are found primarily in Huntingdon and Centre counties. *Quercus ilicifolia* (scrub oak) is by far the dominant shrub species, although low shrubs like *Vaccinium angustifolium* (low sweet blueberry), *V. pallidum* (lowbush blueberry), *Gaultheria procumbens* (teaberry), *Kalmia angustifolia* (sheep laurel), *Gaylussacia baccata* (black huckleberry), *Salix humilis* (dwarf upland willow), *Prunus pumila* var. *susquehanae*^s (Appalachian sand cherry), and *Comptonia peregrina* (sweet-fern) sometimes occur beneath the taller shrub stratum. Tree species may occur as scattered individuals or as small patches of woodland. Characteristic tree species include *Populus tremuloides* (quaking aspen), *Quercus prinoides* (chinquapin oak), and *Pinus rigida* (pitch pine). Herbs include *Danthonia compressa* (northern oatgrass), *Pteridium aquilinum* (bracken), *Melampyrum lineare* (cow-wheat), *Andropogon gerardii* (big bluestem), *Schizachyrium scoparium* (little bluestem), and *Hypericum gentianoides* (orange-grass). This community type may occur as part of the "Ridgetop acidic barrens complex."

Related types: The "Pitch pine - scrub oak woodland" type frequently occur in association with this community type; the two may be delineated at the physiognomic cutoff for woodlands: 10% cover by trees greater than five meters high.

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

Selected references: Slack et al. 1991.

[Crosswalk: Smith's "Northern Appalachian Sand Barren" (in part), "Ridgetop Dwarf-Tree Forest" (in part), TNC's *Quercus ilicifolia* Shrubland Alliance.]