Vascular plant nomenclature follows Rhoads and Klein (1993). Bryophyte nomenclature follows Crum and Anderson (1981). Species not native to Pennsylvania are indicated by a superscript "I." The aggressive species *Phalaris arundinacea* (reed canary-grass) and *Phragmites australis* (common reed) are marked with a superscript "(I)" as their native status is unclear. Pennsylvania species of special concern are indicated by a superscript "S."

**Pitch pine - mixed hardwood woodland**

This community type occurs on dry, sandy, acidic soils. *Pinus rigida* (pitch pine) contributes between 25% and 75% relative cover. *Pinus pungens* (Table-mountain pine) or *P. resinosa* (red pine) may also occur on some sites. Hardwood associates include *Quercus montana* (chestnut oak), *Q. coccinea* (scarlet oak), *Q. velutina* (black oak), *Nyssa sylvatica* (black-gum), *Sassafras albidum* (sassafras), *Betula lenta* (sweet birch), *B. populifolia* (gray birch), and *Acer rubrum* (red maple). The shrub layer may be entirely composed of low shrubs like *Vaccinium angustifolium* (low sweet blueberry), *V. pallidum* (lowbush blueberry), *Comptonia perigrina* (sweet-fern), and *Gaylussacia baccata* (black huckle-berry), or may have an additional layer of taller shrubs like *Kalmia latifolia* (mountain laurel), *V. corymbosum* (highbush blueberry), and *Quercus ilicifolia* (scrub oak). Herbaceous species include *Pteridium aquilinum* (bracken fern), *Deschampsia flexuosa* (common hair-grass), *Danthonia spicata* (poverty grass), *Epigaea repens* (trailing arbutus), *Gaultheria procumbens* (teaberry), *Melampyrum lineare* (cow-wheat), *Carex pensylvanica* (Pennsylvania sedge), *C. communes* (a sedge), *Oryzopsis* spp. (ricegrass), *Aralia nudicaulis* (wild sarsaparilla). Lichens such as *Cladonia* spp. and *Cladina* spp. (reindeer lichens) are abundant in some areas. This community may occur as part of the "Ridgetop acidic barren complex."

**Related types:** This type is similar to and may grade into the "Pitch pine - scrub oak woodland" community. This type is distinguished from the pine type by having at least 25% of the tree stratum contributed by hardwoods. Likewise, this type is distinguished from the "Dry oak -heath woodland" community by its greater pine component—at least 25% relative cover. The canopy is generally less open than in the "Pitch pine - scrub oak woodland" type, and often occurs adjacent downslope of that type on somewhat less dry or more sheltered sites. See the "Ridgetop acidic barren complex" description for more information.

**Range:** Glaciated NE, Glaciated NW, Piedmont, 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), TNC's *Quercus (coccinea, velutina) - Pinus rigida* Woodland Alliance, *Quercus (coccinea, velutina) - Pinus rigida - Schizachyrium scoparium* Community, SAF's Pitch pine (45).]