

WOLF CREEK RIDGETOP DWARF-TREE FOREST

This Natural Community lies to the west of Route 61 between Pottsville and Interstate I-81. This area, and several adjacent ridges in north central Schuylkill County, are vegetated in a distinct **“Ridgetop Acidic Barrens Community Complex”, also known as a “Ridgetop Dwarf-Tree Forest”**. This complex is a mosaic of more narrowly defined community types including the “Pitch Pine – Scrub Oak Woodland”, “Pitch Pine - Mixed Hardwood Woodland”, “Pitch Pine - Heath Woodland”, “Scrub Oak Shrubland”, and “Low Heath Shrubland” (Fike 1999). This community complex is typically found between elevations of 1200 to 2100 feet where thin, dry soils, high winds, repeated cutting and frequent fires limit the growth of trees.

Though covering many ridgetop plateaus in the county and this part of the state, this habitat type is considered rare on a global scale. The species found on these sites are specially adapted to the conditions of these acidic, droughty, nutrient poor soils, where other species cannot survive. The ridgetops in these areas are identified by pronounced dwarf-stature trees of pitch pine (*Pinus rigida*), scrub oak (*Quercus ilicifolia*), chestnut oak (*Q. montana*), scarlet oak (*Q. coccinea*), white oak (*Q. alba*), black gum (*Nyssa sylvatica*), gray birch (*Betula populifolia*) & sassafras (*Sassafras albidum*). The dwarfed trees are usually accompanied by a thick undergrowth of blueberries (*Vaccinium spp.*), huckleberries (*Gaylussacia spp.*), mountain laurel & sheep laurel (*Kalmia latifolia* & *K. angustifolia*) and black chokeberry (*Aronia melanocarpa*). There usually exists a sparse herbaceous cover of bracken fern (*Pteridium aquilinum*), teaberry (*Gaultheria procumbens*), fly-poison (*Amianthium muscaetoxicum*), wild sarsaparilla (*Aralia nudicaulis*), poverty grass (*Danthonia spicata*) and common hairgrass (*Deschampsia flexuosa*) (Fike 1999).

Plant diversity is typically low in pitch pine barrens, but these specialized habitats frequently harbor a high diversity of rare butterflies and moths. The fly-poison borer (*Papaipema sp. I*) is a globally endangered species, currently known only from Pennsylvania that is found solely in these environments. The pitch pine barrens are disturbance dependent ecosystems. The development of a prescribed burn program would help to improve the quality of this fire-dependent natural community. The development and implementation of a prescribed burn management program would help maintain the quality of this naturally occurring community. Without periodic fires, the scrub habitat would succumb to other hardwood species. Other hardwood species may represent greater potential income as harvestable timber, but these trees would not likely become economically large enough due to the harsh conditions of these sites. The vast, nearly level expanses of Broad Mountain have seen recent commercial and industrial development in this relatively undisturbed area of the county. The periodic fire regime that has helped create and maintain the quality of this unique natural community type is likely incompatible with residential and commercial development. These Ridgetop Dwarf-Tree Natural Communities, having escaped two centuries of repeated logging and mining, may be passed intact into the future if careful planning for their survival is undertaken now. This site includes portions of Weiser State Forest and Locust Lake State Park.