

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Rhodora - mixed heath - scrub oak shrubland

This is a very rare, highly restricted community type. It is known only from the southern Pocono Plateau. This barren-like vegetation does not appear to be a response to droughty or nutrient-poor soils. The same deep, fine-loamy Illinoian till on which it occurs also underlies nearby forests (Latham et al. 1997). The origin of the barrens, and the processes responsible for their persistence and distribution are not known, but fire appears to be a critical factor. Please see the description for the "Mesic till barrens complex" for more information. The shrub layer is dominated by a combination of *Quercus ilicifolia* (scrub oak), *Kalmia angustifolia* (sheep laurel), *Rhododendron canadense* (rhodora), and *Vaccinium angustifolium* (low sweet blueberry), often with just one or two of these species in much greater abundance than the others, with an admixture of *Aronia melanocarpa* (black chokeberry), *Gaylussacia baccata* (black huckleberry), *V. pallidum* (lowbush blueberry), and *Viburnum cassinoides* (withe-rod). Other shrub species commonly include *Amelanchier sanguinea*^S (round serviceberry), *A. stolonifera* (low juneberry), *Chamaedaphne calyculata* (leatherleaf), *Comptonia peregrina* (sweet-fern), *Gaylussacia frondosa* (dangleberry), *Hamamelis Virginiana* (witch-hazel), *Lyonia ligustrina* (maleberry), *Spiraea latifolia* (meadow-sweet), *Vaccinium corymbosum* (highbush blueberry), *Viburnum myrtilloides* (sour-top blueberry), and *V. stamineum* (deerberry). Scattered trees may be present, mostly *Pinus rigida* (pitch pine) and *Acer rubrum* (red maple). The most abundant species in the herbaceous and creeping shrub layer are *Carex pennsylvanica* (Pennsylvania sedge), *Pteridium aquilinum* (braken fern), *Gaultheria procumbens* (teaberry), *Oryzopsis racemosa* (ricegrass) and *Rubus hispidus* (dewberry). This is part of the "Mesic till barren complex."

Related types: This type usually occurs in combination with the "Pitch pine – rhodora – scrub oak woodland" type. These two types, together with small herbaceous openings or "frost pockets" constitute the "Mesic till barren complex." For more information on the ecology of these systems, consult the description of the complex. This community type and its associated complex share many species with several community types belonging to the "Acidic ridgetop barren complex." The predominance of *Rhododendron canadense* (rhodora), the presence of deep, mesic soils and the restricted distribution of this type easily distinguish it from its ridgetop counterpart.

Range: Pocono Plateau

Selected references: Latham et al. 1996

[Crosswalk: Smith's "Mesic Scrub Oak – Heath – Pitch Pine Barrens" (in part), TNC's *Pinus rigida* Seasonally Flooded (sic.) Woodland Alliance, *Pinus rigida* – *Quercus ilicifolia* – *Rhododendron canadense* Community.]