

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Virginia pine - mixed hardwood shale woodland

This community type occurs on dry (typically acidic) shale slopes with a more or less southerly exposure. Although the overall character is that of a woodland, there may be herbaceous openings and sparsely vegetated areas within the woodland matrix. *Pinus virginiana* (Virginia pine), sometimes in combination with *P. strobus* (eastern white pine), *Juniperus virginiana* (red-cedar), or *P. pungens* (Table-mountain pine), contributes between 25% and 75% relative cover. Hardwood associates include *Fraxinus americana* (white ash), *Quercus montana* (chestnut oak), *Q. rubra* (red oak), *Q. velutina* (black oak), *Q. stellata* (post oak), *Carya glabra* (pignut hickory), *C. ovalis* (sweet pignut hickory), and *C. ovata* (shagbark hickory). The shrub layer includes such species as *Amelanchier arborea* (shadbush), *Gaylussacia baccata* (black huckleberry), *Vaccinium stamineum* (deerberry), and *Quercus ilicifolia* (scrub oak). The herbaceous layer is generally sparse; species include *Schizachyrium scoparium* (little bluestem), *Panicum linearifolium* (panic-grass), *Carex pensylvanica* (Pennsylvania sedge), *Danthonia spicata* (poverty grass), *Deschampsia flexuosa* (hairgrass), *Penstemon hirsutus* (beard-tongue), *Heuchera americana* (alum-root), *Cunila organoides* (common dittany), *Aster cordifolius* (blue wood aster), and *Hieracium venosum* (rattlesnake-weed). Lichens such as *Cladonia* spp. and *Cladina* spp. (reindeer lichens) are abundant in some areas.

Related types: The "Red-cedar - mixed hardwood rich shale woodland" type also occurs on steep shale slopes. This type generally has a sparser herbaceous layer, and tends to be less open. More data are needed on substrate chemistry, but it appears that this type is more typically associated with acidic shales.

Range: Ridge and Valley and maybe Glaciated NE.

Selected references: Berdine 1998, PNDI field surveys.

[**Crosswalk:** *Pinus virginiana* Woodland Alliance, and *Quercus (rubra, prinus) - Pinus (strobus, virginiana)* Woodland Alliance, SAF's Virginia pine - oak (78).]