

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Red maple - black ash palustrine forest

These are palustrine forests enriched by base-rich groundwater. The substrate is usually mineral soil with a thin layer of organic matter. Calciphiles characterize this community type. The dominant trees are usually *Acer rubrum* (red maple) and *Fraxinus nigra* (black ash). Associates include *Quercus bicolor* (swamp white oak), *Nyssa sylvatica* (black-gum), and *Ulmus americana* (American elm). Common understory species include *Rhamnus alnifolia* (alder-leaved buckthorn), *Physocarpus opulifolius* (ninebark), *Spiraea latifolia* (meadowsweet), *Ilex verticillata* (winterberry), *Alnus serrulata* (smooth alder), *Vaccinium corymbosum* (highbush blueberry), and *Rhododendron viscosum* (swamp azalea). Common herbs include *Osmunda regalis* (royal fern), *Carex stricta* (tussock sedge), *C. lacustris* (lakebank sedge), *Symplocarpus foetidus* (skunk cabbage), *Viola* spp. (violets), and *Onoclea sensibilis* (sensitive fern). Most calciphilic species associated with this type have moderate to high light requirements, and thus are found in openings. These species include *Conioselinum chinense* (hemlock parsley), *Trollius laxus*^S (spreading globeflower), *Carex interior* (inland sedge), *C. flava*^S (yellow sedge), *C. leptalea* (bristly-stalked sedge), *Cypripedium calceolus* var. *parviflorum*^S (small yellow lady's-slipper), *C. reginae*^S (showy lady's-slipper), *Geum rivale*^S (water avens), and *Epilobium strictum* (downy willow-herb).

Related types: The much more common "Red maple -black-gum palustrine forest" is not generally influenced by calcareous waters, and lacks the *Fraxinus nigra* (black ash) and herbaceous calciphiles that characterize this type.

Range: Glaciated NE, Glaciated NW, Piedmont, Ridge and Valley.

Selected references: Golet et al. 1993, Sneddon, Anderson, and Metzler 1996.

[**Crosswalk:** Smith's "Eastern calcareous seepage swamp," TNC's *Acer rubrum* - *Fraxinus nigra* Saturated Forest Alliance, SAF's Red maple (108).]