

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Alder - sphagnum wetland

These are wetlands dominated by *Alnus serrulata* (smooth alder) and/or *A. incana* (speckled alder), and having a sphagnum layer. The substrate may be peat or mineral soil with a substantial accumulation of organic matter. This community type typically occurs in upland depressions, along slow-moving streams, or associated with large wetland complexes, frequently influenced by beaver action or other impoundment. Shrub associates include *Vaccinium corymbosum* (highbush blueberry), *Lyonia ligustrina* (maleberry), *Ilex verticillata* (winterberry), *Cornus racemosa* (swamp dogwood), and seedling and sapling size *Acer rubrum* (red maple). The most characteristic herbaceous species is *Osmunda cinnamomea* (cinnamon fern), although a variety of species, mostly ferns and sedges, may also occur.

Related types: This community type may be differentiated from the "Alder - ninebark" type described above, in that this type occupies the lower end of the pH spectrum for alder-dominated wetlands, while the former is circumneutral to slightly calcareous. The associate species reflect this shift, with shrubs like *Physocarpus opulifolius* (ninebark), and *Cornus amomum* (red-willow) occurring in circumneutral situation, while acid-loving heaths like *Vaccinium corymbosum* (highbush blueberry) and *Lyonia ligustrina* (maleberry) are more typical under lower pH conditions. The presence of a substantial sphagnum layer generally distinguishes the two. This community type is also related to the "Highbush blueberry - sphagnum wetland" type. When *Vaccinium corymbosum* (highbush blueberry) and *Alnus* spp. occur together underlain by sphagnum, the types may be distinguished by dominance.

Range: Entire state except Coastal Plain.

Selected references: Sneddon, Anderson and Metzler 1996.

[Crosswalk: Smith's "Acidic Shrub Swamp" (in part), TNC's *Alnus (incana, serrulata)* Shrubland Alliance, *Alnus (incana, serrulata) - Osmunda cinnamomea - Sphagnum* spp. Community.]