

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Alder - ninebark wetland

These are shrub swamps dominated by *Alnus serrulata* (smooth alder) or *A. incana* (speckled alder) and /or *Physocarpus opulifolius* (ninebark). The pH of these systems is broadly circumneutral to somewhat calcareous, and calciphiles may be present. These communities may occur at the upland edge of marshes, at the wetter edge of red maple wetlands, in small upland depressions, or at the base of slopes. The substrate is generally mineral soil with a thin organic layer, although it may occasionally occur on shallow peat. In Pennsylvania, many of these are beaver influenced or otherwise impounded systems. Grazing (past or present) may also be a factor. The species composition is variable, and dominance may be shared by any of the associate shrubs, which may include *Salix* spp. (willows), *Sambucus canadensis* (American elder), *Cornus amomum* (red-willow), *Rhododendron viscosum* (swamp azalea), *Decodon verticillatus* (water-willow), *Cephalanthus occidentalis* (buttonbush), *Ilex verticillata* (winterberry), and seedling/sapling size *Acer rubrum* (red maple). Herbaceous species include *Osmunda regalis* (royal fern), *Thelypteris palustris* (marsh fern), *Typha latifolia* (common cat-tail), *Peltandra virginica* (arrow-arum), *Carex stricta* (tussock sedge), and *Galium* spp.

Related types: The "Buttonbush wetland" type above may contain alder, but is dominated by *Cephalanthus occidentalis*. This type is broadly circumneutral, while the "Alder - sphagnum wetland" type is more acidic.

Range: Glaciated NW, Pittsburgh Plateau, Ridge and Valley.

Selected references: Jennings 1927, Metzler and Tiner 1992, PNDI field surveys, Sneddon, Anderson and Metzler 1996.

[Crosswalk: Smith's "Circumneutral Shrub Swamp" (in part), TNC's *Alnus* (*serrulata*, *incana*) Shrubland Alliance, *Alnus serrulata* - *Physocarpus* Community.]