

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Yellow oak - redbud woodland

This community type represents the high-pH range of the moderately dry mixed oak woodlands. This woodland type is characterized by the consistent presence of calciphilic species. *Quercus muhlenbergii* (yellow oak) is nearly always present, often dominant or codominant. Associate tree species include *Quercus montana* (chestnut oak), *Q. alba* (white oak), *Nyssa sylvatica* (black-gum), *Acer saccharum* (sugar maple), *Fraxinus americana* (white ash), *Tilia americana* (basswood), *Carya ovalis* (sweet pignut hickory), *C. glabra* (pignut hickory), and *Juniperus virginiana* (red-cedar). Aside from *Cercis canadensis* (redbud), characteristic shrubs include *Ostrya virginiana* (hop-hornbeam), *Rhus aromatica* (fragrant sumac), *Celtis occidentalis* (hackberry), *Viburnum rafinesquianum* (downy arrow-wood), and *Cornus florida* (flowering dogwood). Herbs include *Aquilegia canadensis* (wild columbine), *Senecio obovatus* (groundsel), *Bouteloua curtipendula*^S (side-oats gramma), and *Asclepias quadrifolia* (four-leaved milkweed).

Related types: In areas where the canopy becomes more open, this type may grade into the "Red cedar - redbud shrubland." Sufficiently large herbaceous openings may support the "Side-oat gramma grassland" or "Calcareous opening/cliff" types. As soil conditions become less dry and the canopy closes, this woodland type may grade into the "Dry oak - mixed hardwood forest" type.

Range: Pittsburgh Plateau, Ridge and Valley.

Selected references: PNDI field surveys.

[**Crosswalk:** Smith's "Dry-Mesic Calcareous Central Forest," TNC's *Acer saccharum* - *Quercus muhlenbergii* Forest Alliance, SAF - no crosswalk.]