

Terrestrial & Palustrine Plant Communities Of Pennsylvania

By Jean Fike

Side-oats gramma calcareous grassland

These grasslands occur as small (usually well under 0.5 hectares) prairie-like openings in areas of thin soils over calcareous bedrock. The dominant vegetation is graminoid, although scattered forbs and woody species are usually also present. Characteristic species include *Bouteloua curtipendula*^S (side-oats gramma), *Andropogon gerardii* (big bluestem), *Sorghastrum nutans* (Indian grass), *Panicum virgatum* (switchgrass), *Schizachyrium scoparium* (little bluestem), *Carex pensylvanica* (Pennsylvania sedge), *Lespedeza* spp. (bush clovers), *Desmodium* spp. (tick-trefoil), *Asclepias verticillata* (whorled milkweed), *A. viridiflora* (green milkweed), *Onosmodium molle* ssp. *Hispidissimum*^S (false gromwell), *Senecio obovatus* (groundsel), *Lithospermum canescens* (hoary puccoon), and *Solidago bicolor* (silver-rod). Typical woody species, which may occur scattered throughout or at margins, include *Cercis canadensis* (redbud), *Celtis tenuifolia* (dwarf hackberry), *Juniperus virginiana* (red-cedar), *Fraxinus americana* (white ash), *Quercus muhlenbergii* (yellow oak), *Ostrya virginiana* (hop-hornbeam), *Cornus florida* (flowering dogwood), *Rhus glabra* (smooth sumac), *Rhus aromatica* (fragrant sumac), and *Viburnum rafinesquianum* (downy arrow-wood).

Related types: Several woodland and shrubland types may contain openings of *Bouteloua curtipendula*^S (side-oats gramma) and other grasses. These types include the "Yellow oak - redbud woodland," and the "Red-cedar - redbud shrubland." Very small openings within a matrix of these types may be considered to be part of the woodland or shrubland types in which they occur. The "Calcareous opening/cliff" is another open calcareous community type. The cliff type tends to occur on small outcrops or on steep slopes or cliffs. There is generally some degree of shading either from the landform itself or from the surrounding vegetation. Grasses dominate the grassland type, while forbs and ferns dominate the cliff type.

Range: Ridge and Valley, Piedmont.

Selected references: PNDI field surveys.

[Crosswalk: Smith's "Northern Appalachian Calcareous Rocky Summit" (in part), TNC's *Schizachyrium scoparium* - *Bouteloua curtipendula* Herbaceous Alliance.]