Dwarf spiraea (*Spiraea betulifolia* var. *corymbosa*)

Pennsylvania Threatened Plant Species
State Rank: S1 (critically imperiled) Global Rank: G5 (vulnerable)

What it looks like:

Robert Coxe

Dwarf spiraea is a perennial shrub that is a member of the rose family; it is sometimes referred to as *Spiraea corymbosa*. It grows to about a half meter to one meter in height and is capable of forming dense clumps of clones in areas with reduced tree canopy.

Leaves are oval, sometimes with a rounded apex that tapers at the obtuse base of the leaf. The leaves are coarsely serrated with a double tooth serration and are often yellowish above.

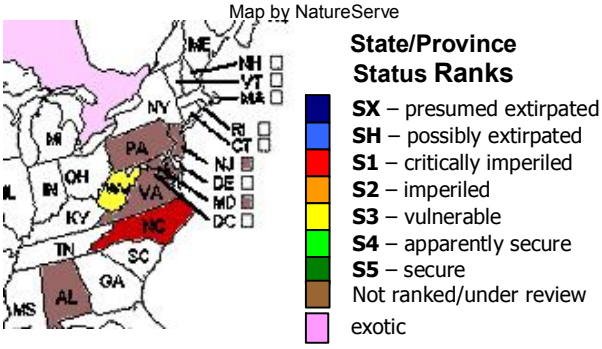
Flowers are small, chalky white to pink, forming in dense clumps called corymbs at the terminal ends of branches. The corymb of our variety is about 2-10 cm in size. Flowering is profuse, occurring on every stem including first year plants, from May through October. Mass flowering also occurs after fire disturbance. Flowering can be inhibited in years with low water availability as well as in areas where increasing tree canopy causes a decline in light intensity.

Where it is found:

Dwarf spiraea occurs on dry upland sites, wooded slopes, and steep shale hillsides in the Ridge and Valley region of Pennsylvania. Current populations exist in Fulton County; historically however, there are records for Bedford and Franklin Counties as well. The range extends further south through the Northern Ridge and Valley region into Maryland, Virginia, West Virginia, and south to Alabama. Another variety of *Spiraea betulifolia* occurs commonly in western states.

North American State/Province Conservation Status

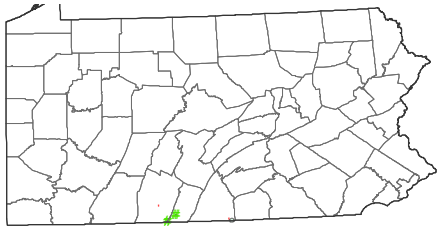
Map by NatureServe



Why it is rare:

The northern extent of dwarf spiraea's range occurs only slightly into Pennsylvania, exclusively in the Ridge and Valley region of the state. Dwarf spiraea is a plant of special concern due to its specific habitat requirements. This species can reproduce asexually via cloning; this however limits the genetic diversity of the plant, which inhibits the plant's ability to adapt to stresses and changes in the environment.

Pennsylvania Distribution by County



Pennsylvania Natural Heritage Program Data 2006

Conservation considerations:

Maintaining healthy populations of dwarf spiraea will require managing and conserving its current habitat. This includes protecting these areas from human disturbance as well as limiting competition by invasive plants. Forestry management practices such as selective cutting to prevent canopy closure and a fire disturbance regime may increase flowering and seed set, thus expanding the genetic diversity of the plant and population numbers throughout its range.

References:

- Gleason, Henry A. and Arthur Cronquist. 1991. *Manual of Vascular Plants of Northeastern United State and Adjacent Canada*. Second Ed. New York: The New York Botanical Garden. 240.
- NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: September 4, 2007).
- Ogle, Dan W. 1992. Virginia Spiraea (*Spiraea virginiana* Britton) Recovery Plan. USFWS Region 5. Newton Corner, MA.
- Rhoads, Ann F. and Timothy A. Block. 2000. *The Plants of Pennsylvania*. University of Pennsylvania Press. 628.
- Rhoads, Ann F. and William K. McKinley. 1993. *The Vascular Flora of Pennsylvania: Annotated Checklist and Atlas*. American Philosophical Society, Philadelphia, PA:196.
- Uttal, Leonard J. 1974. The varieties of Spiraea betulifolia. Bulletin of the Torrey Botanical Club 101(1): 35-6.

Pennsylvania Natural Heritage Program

Saving the places we care about