

Serpentine Aster

Symphyotrichum depauperatum

Description

Serpentine Aster is a perennial herb that grows in spreading clumps. Its smooth, wiry flowering stems are erect or reclining and reach up to 16 inches (4 dm) in length. The leaves are produced from the base of the plant as an over-wintering basal rosette. Basal leaves are oblong to egg-shaped and up to 1½ inches (4 cm) long. Leaves also grow alternately along the stem but are narrow and often pressed flat against the stem. The flowers are held at the top of flowering stems in open, branched clusters that contain many flower heads. The small, daisy-like flower heads have a yellow disk surrounded by 7 to 14 white rays. Flowers are displayed from August through October.



Photo source: John Kunsman (PNHP)

Distribution & Habitat

Serpentine Aster is endemic to the eastern serpentine barrens that occur in Pennsylvania and Maryland. This extremely limited distribution has given this species the status of G2 – globally imperiled. Populations in open areas of the serpentine barrens in Lancaster, Chester and Delaware Counties represent a stronghold of the species.

North American State/Province Conservation Status

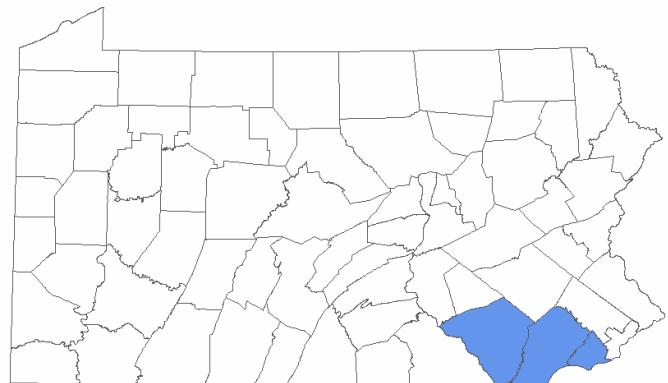
Map by NatureServe 2025



Current State Status

Serpentine Aster occurs in a limited portion of the eastern serpentine barrens, which are a globally rare plant community. This habitat is threatened by land conversion for development, dumping, ATV use and road widening. Serpentine Aster is typically found in the more open areas of serpentine barrens, suggesting that fire may be needed to weed out woody overgrowth and maintain this preferred habitat. It has a PA legal rarity status and a PABS suggested rarity status of Threatened.

Serpentine Aster (*Symphyotrichum depauperatum*)



■ <25 years ■ >25 years

Conservation Considerations

Maintenance of known populations and preservation of the serpentine barrens where Serpentine Aster grows will be crucial to its survival. Removal of overgrowth and invasive species with the integration of fire regimes, when appropriate, will help to preserve the integrity of the sites. The management of the known sites requires long term monitoring of populations. Potential sites for restoration should be evaluated.

NatureServe conservation status ranks

G2 – Globally Imperiled; S2– Imperiled in Pennsylvania

References

- NatureServe. 2025. NatureServe Explorer [web application] NatureServe, Arlington, Virginia. Available at <https://explorer.natureserve.org> (Accessed: May 8, 2025)
- Pennsylvania Natural Heritage Program. 2025.
- Rhoads, A.F. and W.M. Klein, Jr. 1993. The Vascular Flora of Pennsylvania. American Philosophical Society, Philadelphia, Pennsylvania.
- Rhoads, A.F. and T.A. Block. 2007. The Plants of Pennsylvania: An Illustrated Manual. 2nd edition. University of Pennsylvania Press, Philadelphia, Pennsylvania.