

Nuttall's Tick-trefoil

Desmodium nuttallii

Description

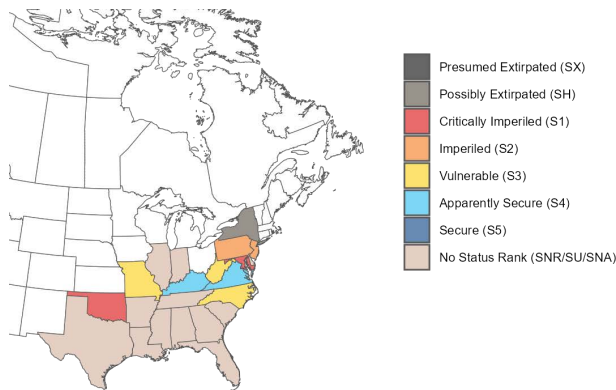
Tick-trefoils (genus *Desmodium*) are perennial herbs that receive their common name from the combination of the 3 untoothed leaflets making up each leaf and the flattened and pod-like fruit, which is covered with tiny hook-like hairs and divided into 1-seeded sections, which at maturity detach easily and readily stick (“like a tick”) to clothing or hair. Seventeen species have been documented in Pennsylvania, and their identification is difficult, as it relies on relatively inconspicuous or transient features. Nuttall’s tick-trefoil is one of the more distinctive species, primarily because the stem and leaves, particularly the lower sides of the leaves, usually have a velvety covering of hairs, which is not present in most other species of the genus. The pink or purple flowers, appearing in summer, have 5 petals and are about ¼ inch (6 mm) in length. The fruits in this species have from 2-4 segments, with the upper margin of the each segment tending to be convex in outline and the lower margin of each segment tending to be rounded or obtusely angled.



Photo source: Margaret Rhinehart @ University of Tennessee Herbarium

North American State/Province Conservation Status

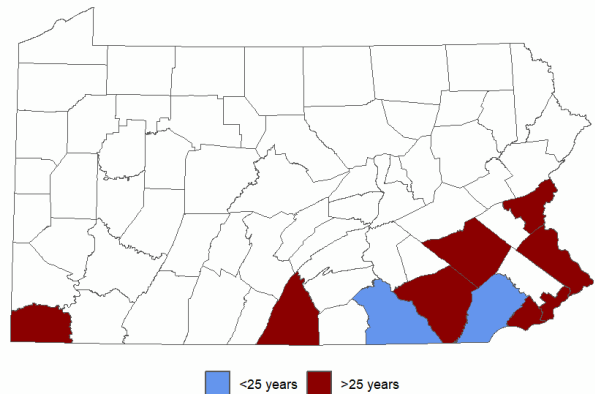
Map by NatureServe 2025



Distribution & Habitat

Nuttall’s Tick-trefoil ranges from New York south and southwest into Florida and Texas. In Pennsylvania, it has been documented historically mostly in the southeastern counties. It grows on relatively dry conditions on open slopes and banks and in clearings, fields, thickets, and open woods.

Nuttall's Tick-trefoil (*Desmodium nuttallii*)



Current State Status

The PA Biological Survey (PABS) considers Nuttall’s Tick-trefoil to be a species of special concern, based on the few locations that have been recently confirmed. It has a PA legal rarity status of Undetermined and a PABS suggested rarity status of Threatened.

Conservation Considerations

The viability of populations of Nuttall’s Tick-trefoil may require maintaining early successional conditions and controlling invasive species. Active management, such as periodic mowing, may be needed to create the proper successional stage and ecological conditions for this species to thrive.

NatureServe conservation status ranks

G5 – Globally secure; 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.