Bicknell's Hoary Rockrose
Helianthemum bicknellii

Description

Bicknell's hoary rockrose is a perennial herb with a slender hairy stem that may grow to 18 inches (about 5 dm) in height, but is often much shorter. The leaves are alternately arranged, linear to narrowly elliptic in shape, hairy, up to 1 inch (2.5 cm) in length, and stalkless or nearly so. The small flowers, appearing in June and July, have 5 yellow petals that are about 3/8 inch (8-12 mm) in length. These flowers are clustered in the axils of the leaves on the upper part of the stem, as are flowers produced later in the season that remain closed and do not have expanded petals, but do produce fruits. The fruit is a capsule containing brownish seeds that have net-like surface markings.

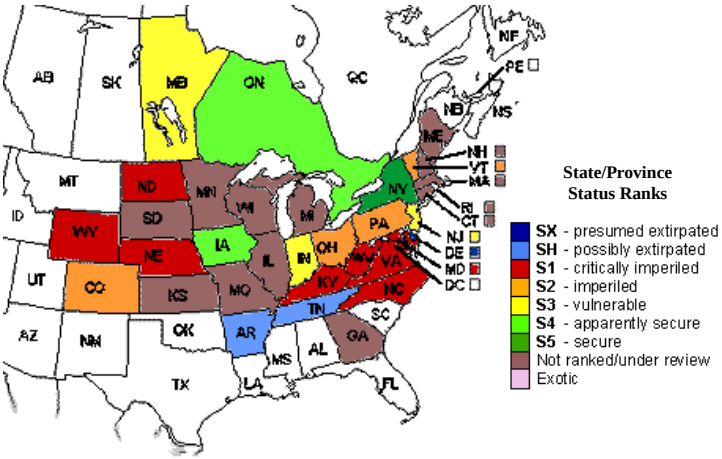
Photo source: PNHP

Distribution & Habitat

Bicknell's hoary rockrose has a distribution from Maine west into Manitoba, and south into Florida and Texas. In Pennsylvania, this species has been documented historically in numerous widespread counties. It grows in open, rocky places that are at least seasonally dry, such as riverbed scours, exposed banks and slopes, upland woods, bedrock outcrops, and serpentine barrens.

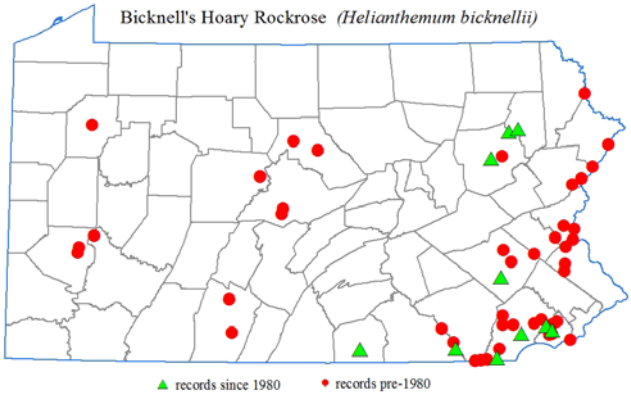
North American State/Province Conservation Status

Map by NatureServe 2014



Current State Status

The PA Biological Survey (PABS) considers Bicknell's hoary rockrose to be a species of special concern, based on the few occurrences that have been recently confirmed and the specialized habitat. It has a PA legal rarity status and a PABS suggested rarity status of Endangered. Fewer than 10 populations are currently known from the state.



Conservation Considerations

The upland populations of Bicknell's hoary rockrose have threats from habitat loss, natural succession, invasive species, and quarrying. Because of the preference of the species for relatively open habitats, active management, such as fire, mowing, or invasive species removal, may be required to maintain the proper successional stage and ecological conditions for the species to thrive. The viability of the riverine populations will require maintaining the natural hydrology of the Susquehanna River, with its seasonal fluctuations in water levels, as well as retaining the natural conditions of the shorelines and islands.

NatureServe conservation status ranks

G5 – Secure globally; S2 –Imperiled in Pennsylvania

Pennsylvania Natural Heritage Program

References

- NatureServe. 2014. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.1. NatureServe, Arlington, Virginia. Available at http://www.natureserve.org/explorer.
- Pennsylvania Natural Heritage Program. 2014.
- Rhoads, A.F. and T.A. Block. 2007. The Plants of Pennsylvania: An Illustrated Manual. 2nd edition. University of Pennsylvania Press, Philadelphia.