

HELIANTHEMUM BICKNELLII Fern.
Plains Frostweed

FAMILY: Cistaceae

HABIT: Erect herbaceous perennial, 2-6 dm.; flowering late June-mid July; fruiting July-October.

SIMILAR SPECIES: *H. bicknellii* is similar to *H. canadense* and is often confused with it. In *H. bicknellii*, the chasmogamous flowers usually occur in terminal clusters of 6-10 flowers that are not over-topped by lateral branches. In *H. canadense*, the chasmogamous flowers are solitary and soon over-topped by lateral branches. *H. bicknellii* flowers 2-3 weeks later than *H. canadense*. In Ohio, the species have been collected growing together.

TOTAL RANGE: ME to MN, and s. Manitoba, s. to n. GA, AR, and CO.

STATE RANGE (as of 2008): Post-1980 records are from Fulton, Henry, Knox, Lucas, Summit, and Wood counties. Pre-1980 records are from Ashtabula, Erie, Fairfield, Huron, Muskingum, and Wayne counties.

HABITAT: Dry, usually sandy or rocky soil in open woods, clearings, and plains.

HAZARDS: Unknown, but probably overshadowing by woody species, and possibly compaction of the soil by trampling.

RECOVERY POTENTIAL: Unknown, but possibly good as it occurs in disturbed habitats.

INVENTORY GUIDELINES: Most identification characters are based on either chasmogamous (cross-pollinated) flowers, or fruit and seed characters of cleistogamous (self-pollinated) flowers. Both flower types should be collected for accurate identification.

COMMENTS: Since edaphic conditions for this species are more frequent in northwestern Ohio, this species should be sought in that portion of its range. Since both similar species, *H. bicknellii* and *H. canadense*, have been found growing together, populations should be examined carefully.

SELECTED REFERENCES:

Daoud, H.S. and R.L. Wilbur. 1965. A revision of the North American species of *Helianthemum* (Cistaceae). *Rhodora* 67: 63-82, 201-216, 255-312.

Gleason, H.A., and A. Cronquist. 1991. Manual of vascular plants of northeastern United States and adjacent Canada. New York Botanical Garden, Bronx, New York. 910 pp.

O'Connor, M.A. and W.H. Blackwell, Jr. 1974. Taxonomy and distribution of Ohio Cistaceae. *Castanea* 39: 228-239.

Wilbur, R.L. and J.D. Perry. 1967. Palynological notes on American species of *Helianthemum* (Cistaceae). *Rhodora* 69: 184-194.



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