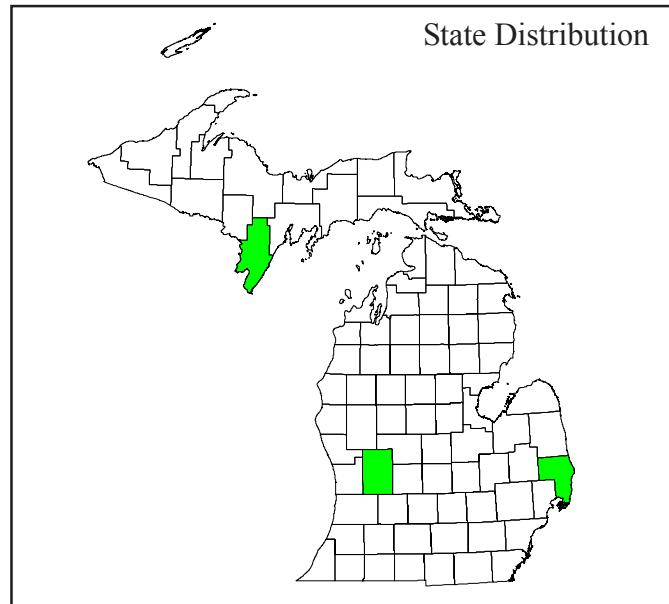


Penstemon calycosus Small

smooth beard-tongue



U.S. EPA @ Native Plants of the Great Lakes



Status: State threatened

Global and state rank: G5/S2

Other common names: eastern beard-tongue, long-sepal beard-tongue, beard-tongue, penstemon

Synonym: *Penstemon laevigatus* Aiton

Family: Scrophulariaceae (snapdragon family)

Taxonomy: This species is merged by some into *P. laevigatus* Aiton. According to the treatment by Bennett (1963) Michigan plants would be referred to ssp. *calycosus* (Small) R.W. Benn.

Total range: Smooth beard-tongue occurs primarily in the eastern United States, distributed from Maine to Michigan in the northern portion of its range and occurring south to Georgia and Alabama and reaching its western range edge from Illinois through Missouri and Arkansas. It is considered rare in Virginia and is known only from historical records in Georgia (NatureServe 2003).

State distribution: This species is known only from three localities in Michigan, consisting of an 1891 collection in Kent County, a 1985 collection in

Best Survey Period

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		

Menominee County, and a 1961 collection in St. Clair County.

Recognition: Smooth beard-tongue is an erect forb that ranges from ca. 6-12 dm in height, the stems usually hairless, though occasionally these may be finely hairy (puberulent) below the inflorescence. The leaves are opposite, lanceolate, stalkless, and finely saw-toothed (serrate), tapering to an acute tip. Terminating the stem is a narrowly branched inflorescence of stalked, tubular, **pinkish-purple flowers**. Unlike some species of beard-tongue, the **throat of the corolla is abruptly inflated and wider than the tube of the flower**, and the lower lobes of the corolla are distinctly longer than the upper lobes. The **anthers lack hairs and the calyx lobes are narrowly lanceolate to linear** and markedly longer than wide. Smooth beard-tongue is most similar to the common and wide-ranging *P. digitalis* (foxglove beard-tongue), which can be distinguished by its white to at best very pale violet flowers that have at least slightly hairy anthers (these are best examined by looking at their attachment with the filament) and calyx lobes that are lanceolate-ovate and not markedly longer than broad.

Best survey time/phenology: Flowering specimens of this species have been collected from approximately mid-June to mid-July.



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Habitat: Michigan collections provide very limited information about this species. In Kent County, it was only noted as occurring near a lake, whereas in Menominee County it was merely recorded as growing “in an open area” along US-2, a corridor known to support several prairie remnants and rare plant species. In St. Clair County, this species occurred at the edge of a prairie fragmented by a golf course, and likely grew in a remnant lakeplain prairie community. Elsewhere in its range smooth beard-tongue is cited as occurring in meadows, moist to dry woods, and alkaline rocky slopes. In the Chicago region, this species occurs on sparsely vegetated slopes in woodlands where it is associated with such species as *Anemonella thalictroides* (rue anemone), *Claytonia virginica* (spring beauty), *Cornus foemina* (gray dogwood), *Osmorhiza claytonii* (sweet cicely), *Toxicodendron radicans* (poison ivy), *Smilacina racemosa* (false Solomon’s seal), and other common forbs and woody plants; it is also reported from pastures at woodland edges and grassy areas undergoing woody plant succession (Swink and Wilhelm 1994).

Biology: Smooth beard-tongue is a perennial forb. Fernald (1950) noted that this species has weedy tendencies and can be very aggressive, an observation corroborated by the classification of this plant in several regions as an exotic species, including New Jersey, Rhode Island, and the province of Ontario (NatureServe 2003).

Conservation/management: Little can be done for this species until much more thorough data have been obtained concerning the status of documented localities, thus dedicated inventories for both known and potential new sites are the primary need at this time. Restoration management including prescribed fire would likely be required to perpetuate the prairie communities inhabited by this species.

Related abstracts: Lakeplain wet prairie, lakeplain wet-mesic prairie, Gattinger’s gerardia, Skinner’s gerardia, three-awned grass, chestnut sedge, short-fruited rush, few-flowered nut-rush, pink milkwort, purple milkweed, Sullivant’s milkweed, northern appressed clubmoss, eastern prairie fringed-orchid, meadow-beauty, eastern box turtle, eastern fox snake, red-legged spittlebug, blazing star borer, culver’s root borer, silphium borer

Selected references:

Bennett, R.W. 1963. Notes on eastern American species of *Penstemon*. *Phytologia* 9: 57-58.

NatureServe. 2003. NatureServe Explorer: An Online encyclopedia of life [web application]. Version 1.8. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: November 11, 2003).

Abstract citation

Penskar, M.R. 2004. Special plant abstract for *Penstemon calycosus* (smooth beard-tongue). Michigan Natural Features Inventory. Lansing, MI. 2 pp.

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Michigan State University Extension is an affirmative-action, equal-opportunity organization.

Funding for abstract provided by the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center via the Great Lakes Commission.

