



Natural Heritage & Endangered Species Program

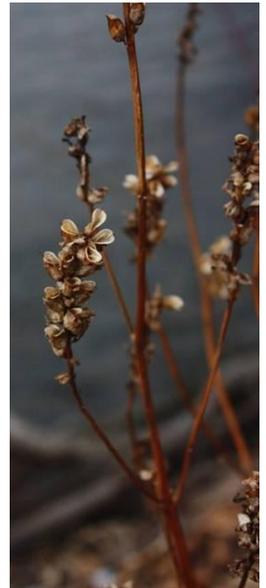
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Massachusetts Division of Fisheries & Wildlife

Swamp Lousewort *Pedicularis lanceolata* Michx.

State Status: **Endangered**
Federal Status: **None**

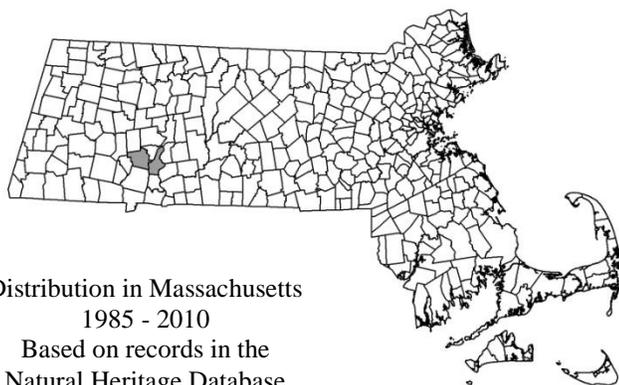
DESCRIPTION: Swamp Lousewort is an erect, herbaceous, showy-flowered perennial in the Snapdragon or Figwort family (Scrophulariaceae). Its genus name comes from the Latin *Pediculus*, for louse, and reflects the early European belief that sheep and cattle grazing near louseworts would pick up lice. (*Wort* is an Anglo-Saxon term for plant.) The hairless, or nearly hairless, stems grow 3-9 dm (3/4 - 3 ft.) tall and usually occur singly. Swamp Lousewort's leaves are 5-10 cm (2-4 in.) long, stalkless or short-stalked, and mostly opposite. They are lanceolate in general outline and pinnately lobed, with the sinuses extending less than halfway back to the midrib. The 15-25 mm (3/5 - 1 in.) long, pale yellow to cream-colored flowers occur in a crowded spike (an unbranched, elongate inflorescence of stalkless flowers). The calyx (outermost floral whorl) is two-lobed, about 1 cm (4/10 in.) in length, and has a toothed, foliar appendage on each side. The fruit is an ovoid, beaked capsule (a dry, many-seeded fruit derived from a compound pistil) that barely exceeds the calyx in length. Swamp Lousewort flowers from mid-August to mid-September. The plant is a hemi-parasite whose seedlings must partially rely on other plants in order to develop normally.



Swamp Lousewort, flowering and winter views.
Photos: Noah Charney.

SIMILAR SPECIES: There are two other species of *Pedicularis* that occur in New England: Wood Betony (*P. canadensis*) and Furbish's Lousewort (*P. furbishiae*). Swamp Lousewort has opposite leaves and an entire galea while Wood Betony and Furbish's Lousewort have alternate leaves and toothed galeas. Differences in habitat, phenology, and geography also distinguish these three species. Swamp Lousewort grows in wet soils and flowers late summer, whereas Wood Betony grows in dry woods or thickets and flowers in late May or June. Furbish's Lousewort only grows along the St. Johns River in Maine.

HABITAT: Swamp Lousewort grows in open areas that are periodically flooded such as wet meadows, marsh edges, and stream banks. It occurs primarily in calcareous soils, but has also been found growing in a non-calcareous wetland in Connecticut. Associated



Distribution in Massachusetts
1985 - 2010
Based on records in the
Natural Heritage Database

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

Massachusetts Division of Fisheries & Wildlife

1 Rabbit Hill Rd., Westborough, MA; tel: 508-389-6300; fax: 508-389-7890; www.mass.gov/dfw

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species in Massachusetts include: Arrow-leaved Tearthumb (*Persicaria sagittata*), False Nettle (*Boehmeria cylindrica*), Glossy Buckthorn (*Frangula alnus*), Hog-peanut (*Amphicarpaea bracteata*), Jewelweed (*Impatiens capensis*), Reed Canary Grass (*Phalaris arundinacea*), Rough-stemmed Goldenrod (*Solidago rugosa*), and Smooth Brome (*Bromus inermis*).

THREATS: Swamp Lousewort thrives in open sunny habitat, so competition from woody vegetation or invasive species are a threat. In addition, activities that alter hydrologic regimes (i.e., beaver dams) are a threat because Swamp Lousewort requires periodic, but not constant, flooding. Damage from off-road vehicles and trampling by hikers pose a threat for Swamp Lousewort growing along trails.

RANGE: The documented range of Swamp Lousewort spans from Massachusetts to Georgia on the east coast of the United States west to Missouri and Manitoba, Canada. Swamp Lousewort is rare along the eastern coast of the United States, but is relatively common in the Midwest. It is historically known from Delaware and Kentucky.

POPULATION IN MASSACHUSETTS: Swamp Lousewort is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are legally protected from killing, collection, possession, or sale, and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors. Swamp Lousewort is currently known from Hampden and Hampshire Counties; it is historically known from Franklin, Suffolk, and Worcester Counties.

MANAGEMENT RECOMMENDATIONS: Sites containing Swamp Lousewort should be monitored for over-shading caused by the succession of woody vegetation and/or invasive species. Efforts to remove competitive associated species should strive to not inadvertently eliminate host plants. Some documented host plants of Swamp Lousewort include: Common Rush (*Juncus effusus*), Reed Canary Grass (*Phalaris arundinacea*), Smooth Brome (*Bromus inermis*), and Wool-grass (*Scirpus cyperinus*). Note that some invasive species (i.e., Reed Canary Grass) are also hosts of Swamp Lousewort, making the management of heavily invaded areas complicated. Sites should also be monitored for changes in hydrologic regime because Swamp Lousewort requires occasional, but not persistent, flooding. In Massachusetts, beaver activity may cause local declines in Swamp Lousewort if beavers flood areas where the plant grows at the time of flowering or seed set.

All active management of rare plant populations (including invasive species removal) is subject to review under the Massachusetts Endangered Species Act, and should be planned in close consultation with the Massachusetts Natural Heritage & Endangered Species Program.

Flowering time in Massachusetts

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

Updated 2015

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