



**Natural Heritage
& Endangered Species
Program**

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Massachusetts Division of Fisheries & Wildlife

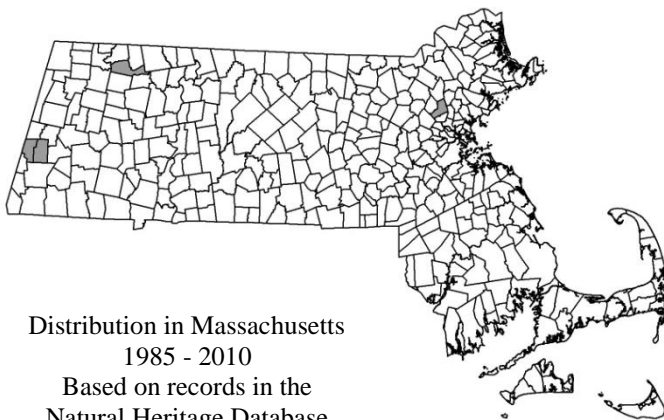
Long-leaved Bluet
Houstonia longifolia
(Gaertn.)

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

DESCRIPTION: Long-leaved Bluet is an herbaceous perennial wildflower of the madder family (Rubiaceae), which inhabits open rocky woods, glades, and ledges. Plants produce rosettes of leaves in the spring from which multiple, usually branching, flowering stems arise. The basal rosettes die back by the time the plant comes into flower in late spring. Stems are 10 to 25 cm (~4–10 in.) tall, four-angled in cross section, and bear opposite, sessile, linear or oblong leaves. The leaves are smooth-edged (lacking teeth or lobes) and 1 to 3 cm (~1/2–1 1/4 in.) long by 3 to 5 mm wide. Clusters of four-lobed pinkish to white flowers are produced at the tops of the stems. The lower portions of the petals are fused into a funnel-shaped tube about 7 mm long; the free portions of the petals are about 2 mm long and bend back (recurve) so they are perpendicular to the tube. Sepals are 1.5 to 2.7 mm.



Long-leaved Bluet. The inset shows the flower with a funnel-shaped tube and opposite leaves with their connecting triangular stipule.
Illustration: Elizabeth Farnsworth.



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

AIDS TO IDENTIFICATION:

- Opposite, entire, linear leaves; opposing leaves are connected at the base by a pale, triangular stipule (leaf-like appendage)
- Square stem
- Four-lobed pink or white flowers with their free tips much shorter than the flower-tube
- Flowers produced only from the tips of the stems
- Flowering occurs throughout early and midsummer; fruit are present in late summer

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

Please allow the Natural Heritage & Endangered Species Program to continue to conserve the biodiversity of Massachusetts with a contribution for 'endangered wildlife conservation' on your state income tax form, as these donations comprise a significant portion of our operating budget.

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SIMILAR SPECIES: Two other species of bluets, Little Bluet (*H. caerulea*) and Large Bluet (*H. purpurea* var. *calycosa*) are known from Massachusetts. Small Bluet has only one flower borne at the top of the stem, with petals that do not recurve; the leaves have distinct petioles. Large Bluet, an exotic species, has broader leaves (>5 mm) and larger sepals (<3 mm) than the rare species.

HABITAT IN MASSACHUSETTS: Long-leaved Bluet grows in dry, sunny or lightly shaded habitats. Rocky openings with ledges and bedrock exposures are particularly favorable; dry sterile fields, gravel banks, roadsides, quarries and similar human-influenced habitats also provide suitable habitat. Some associated species include Hairgrass (*Deschampsia flexuosa*), Little Bluestem (*Schizachyrium scoparium*), Poverty Oatgrass (*Danthonia spicata*), Stiff Aster (*Ionactis linariifolius*), Eastern Red Cedar (*Juniperus virginiana*), oaks (*Quercus* spp.), hickories (*Carya* spp.), blueberries (*Vaccinium* spp.), and Haircap Moss (*Polytrichum commune*).

POPULATION IN MASSACHUSETTS: Long-leaved Bluet is listed under the Massachusetts Endangered Species Act as Endangered. All listed species are protected from killing, collecting, possessing, or sale and from activities that would destroy habitat and thus directly or indirectly cause mortality or disrupt critical behaviors. It is currently known from Berkshire, Franklin, and Middlesex Counties and is historically known from Essex, Hampden, Norfolk, and Suffolk Counties.

RANGE: Long-leaved Bluet ranges from Maine to Saskatchewan, south to Arkansas and South Carolina.

THREATS/MANAGEMENT

RECOMMENDATIONS: All populations are in locations where natural processes or human activities have produced open, sunny habitat. Competition from exotic invasive and aggressive native species due to natural succession and lack of natural disturbance or management is a potential threat to Long-leaved Bluet populations. Monitoring and removal of competing vegetation should be considered as a management strategy where appropriate. 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

REFERENCES:

Gleason, H.A., and A. Cronquist. 1991. *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*. The New York Botanical Garden, Bronx, New York, USA.

Missouriplants.com: Photographs and descriptions of the flowering and non-flowering plants of Missouri, USA [web resource]. 2007. Available at http://www.missouriplants.com/Pinkopp/Houstonia_longifolia_page.html (accessed 5/13/2010).

Updated 2015

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