

Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Sessile Water-speedwell Veronica catenata

Pennell

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

DESCRIPTION: Sessile Water-speedwell is a perennial wetland wildflower of rich open wetlands. It is currently classified within the plantain family (Plantaginaceae), but was formerly within the figwort family (Scrophulariaceae) and appears as such in many floras. The species name "catenata" means chain and the name refers to the chain-like aspect of the long racemes of flowers on short pedicels. In habit Sessile Waterspeedwell can be trailing or erect. The stems are light green, glabrous, and rather stout. The leaves are entire or nearly entire (i.e., toothless), and lance-shaped, three to five times longer than wide. They are opposite and sessile to the stem. The four-parted flowers are white, pink, or pale bluish, 3 to 5 mm wide, with blunt-tipped sepals. The flowers are borne on long axillary racemes, which are widely spreading when mature. The flowers bloom just a few at a time. Each flower is replaced by a swollen capsule, longer than it is wide, topped by a conspicuous notch. Sessile Water-speedwell can reproduce rhizomatously.







Top: Sessile Water-speedwell with erect stems growing from sprawling leafy stems. Bottom: a closer view of the four-parted pale flowers. Photos; B.A. Sorrie, NHESP.

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

Massachusetts Division of Fisheries & Wildlife

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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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AIDS TO IDENTIFICATION:

- Four-parted, pale-colored flowers, 3 to 5 mm wide
- Numerous (20 to over 50) flowers borne on long, axillary racemes
- Sessile, narrow, hairless leaves, much longer than wide
- Fruit with notch at the tip

SIMILAR SPECIES: Blue Water-speedwell (*Veronica anagallis-aquatica*) is an exotic plant that is very similar to Sessile Water-speedwell. Some floras lump the two species, and in some areas the two are known to hybridize.

Compared to Sessile Water-speedwell, Blue Water-speedwell has leaves that are more elliptical in shape (1.5 to 3 times longer than wide), larger flowers (5–8 mm wide) with more acutely-tipped sepals, mature pedicels that are more ascending (than spreading), and fruit with a much less conspicuous notch. All other congeners in Massachusetts have one or more characters not shared by these two species; these have hairy leaves, distinct leaf petioles, and terminal (rather than axillary) flower racemes.

HABITAT IN MASSACHUSETTS: Sessile Water-speedwell inhabits springs and seeps, and the edges of slow-flowing streams, muddy ponds, temporary pools, and ditches. It requires abundant soil moisture for germination and flowering, and tolerates water level fluctuation well. Associated species include Sweet Flag (*Acorus americanus*), Water Purslane (*Ludwigia palustris*), Lesser Water-plantain (*Alisma subcordatum*), Shining Willow (*Salix lucida*), and Bald Spike-rush (*Eleocharis erythropoda*).

POPULATION STATUS IN MASSACHUSETTS:

Sessile Water-speedwell 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 County and is historically known from Essex County.

THREATS AND MANAGEMENT

RECOMMENDATIONS: Threats include degradation of habitat quality due to changes in hydrologic regime or water quality, and competition and shading by aggressive native and invasive plants. The habitats of Sessile Water-speedwell should be monitored for invasions of exotic plants and tall native woody plants; if the rare wildflower is threatened by over-shading or competition, a vegetation control plan should be constructed and implemented. 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

| I | Jan | | Feb | | Mar | | Apr | | May | | Jun | | Jul | | Aug | | Sep | | Oct | | Nov | | Dec | |
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Updated 2015