



## Natural Heritage & Endangered Species Program

[www.mass.gov/nhesp](http://www.mass.gov/nhesp)

Massachusetts Division of Fisheries & Wildlife

## Mountain Spleenwort *Asplenium montanum* Willd.

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

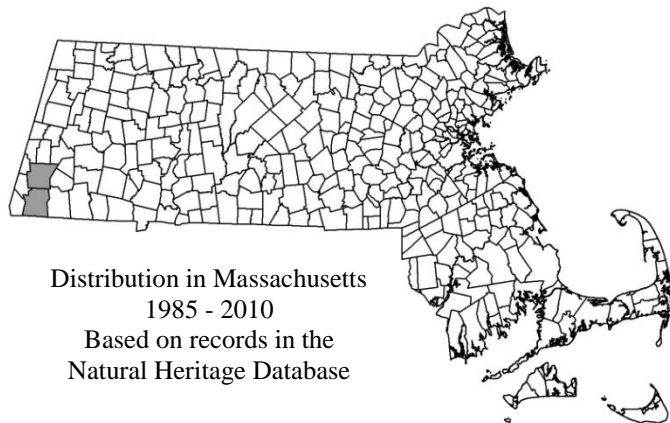
**DESCRIPTION:** Mountain Spleenwort--a member of the spleenwort family (Aspleniaceae)--is a tiny, delicate, evergreen fern that grows in drooping tufts in dry to moist rock crevices. Its slightly leathery, 5-20 cm (2 - 8 in.) long fronds end in blades (the flattened, expanded portions of leaves) that are mostly deltoid-lanceolate, or broadly triangular, in general outline. The pinnae (first divisions of compound fern fronds) occur in five to twelve pairs and have either no stalks or very short ones. The elongate sori (clusters of spore-producing structures) occur on the lower surface of the fronds and have thin, scale-like coverings called indusia that are attached on one side. The 2-10 cm (3/4 - 4 in.) long stipe (stalk of a fern frond) is brown along the lower two-thirds of its length; the frond's midrib is flattened and green.



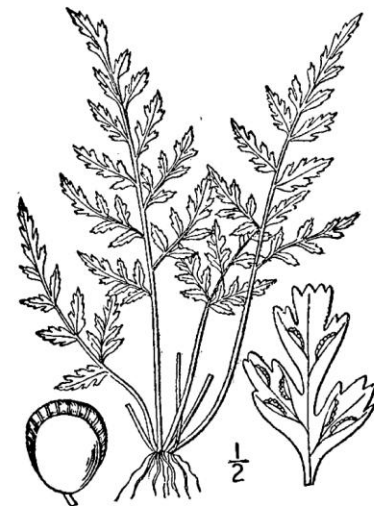
UGA5078073

Photo: Troy Evans, Great Smoky Mountains National Park,  
Bugwood.org

**SIMILAR SPECIES:** Both Wall-rue Spleenwort (*Asplenium ruta-muraria*) and Fragile Fern (*Cystopteris fragilis*) superficially resemble Mountain Spleenwort; however, they occur in different types of habitat.



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



Drawing: USDA-NRCS PLANTS Database / Britton, N.L., and  
A. Brown. 1913. *An illustrated flora of the northern United  
States, Canada and the British Possessions*. 3 vols. Charles  
Scribner's Sons, New York. Vol. 1: 29.

**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](http://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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Wall-rue Spleenwort grows on limestone and calcareous rocks, and Fragile Fern grows in soil that is near neutral on slope and ledges. In contrast, Mountain Spleenwort grows only on non-calcareous rock. Unlike Mountain Spleenwort, Wall-rue Spleenwort does not have a dark stipe. Finally, Fragile Fern has from eight to eighteen pairs of pinnae, compared to the five to twelve pairs of Mountain Spleenwort.

**HABITAT IN MASSACHUSETTS:** Mountain Spleenwort is found growing as tufts lodged in crevices and cracks in non-calcareous rock outcrops, often ones protected by small overhangs. This species prefers acidic conditions. It can be found in association with both hemlock and upland oak communities and favors dense to medium shade. Specific habitats in Massachusetts include vertical ledges of stratified rocks and barren, sunny quartzite cliffs, under an overhanging ledge. Historical Massachusetts habitats include a crevice in the bare face of a cliff and the lower shoulder of a mountain. Associated species include Hayscented Fern (*Dennstaedtia punctilobula*) and Dicranum mosses (*Dicranum* spp.).

**RANGE:** The documented range of Mountain Spleenwort extends from southern Vermont, Massachusetts, and southern New York to Ohio and Kentucky, and south to Georgia and Alabama. Mountain spleenwort is also considered rare in Vermont, New York, Connecticut, Rhode Island, New Jersey, and Indiana. It was present historically in Missouri and Michigan.

**POPULATION STATUS:** Mountain Spleenwort 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. Causes of its rarity in the state include the scarcity of its habitat and the fact that Massachusetts is at the northern edge of its range. There are two current stations (discovered or relocated 1985-2010) in two towns and four historical stations (unverified since 1978).

**MANAGEMENT AND THREATS:** 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.

Updated 2015

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