



**Natural Heritage
& Endangered Species
Program**

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Massachusetts Division of Fisheries & Wildlife

Lyre-leaved Rock-cress
Arabidopsis lyrata
(L.) O'Kane & Al-Shehbaz

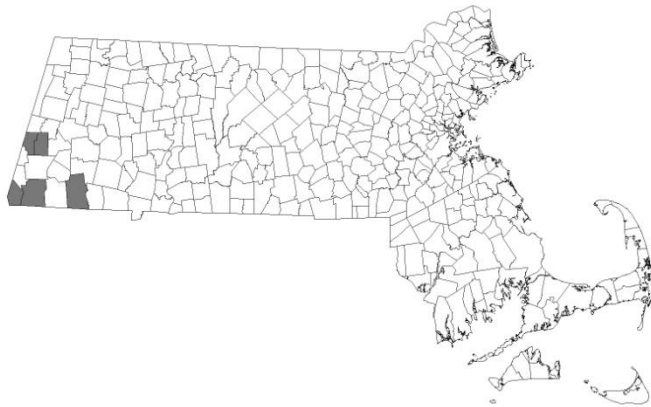
State Status: **Endangered**
Federal Status: **None**

DESCRIPTION: Lyre-leaved Rock-cress (*Arabidopsis lyrata*) is a small, pubescent perennial or biennial mustard (family Brassicaceae), with small white flowers and distinctive, pinnately-lobed (or “lyre-shaped”) basal leaves.

AIDS TO IDENTIFICATION: Lyre-leaved Rock-cress is a slender, branching plant, which reaches 10 to 40 cm (4–15.7 in.) in height. The basal leaves are hairy, and 2 to 4 cm (0.8–1.6 in.) in length. The stem leaves are alternate and linear to slightly spoon-shaped, with smooth margins and a tapering base. The flowers are tiny (3–8 mm; 0.1–0.3 in.), pure white, and four-lobed, and are borne on widely ascending pedicels, 7 to 12 mm (0.2–0.3 in.) in length. The fruits, or siliques, are 2 to 4.5 cm (0.8–1.8 in.) long and about 1 mm in width. The seeds, 1 mm in length, are arranged in one row, and are wingless. Lyre-leaved Rock-cress blooms mid-May through June and produces fruit into early August.



Britton, N.L., and A. Brown. 1970. *An Illustrated Flora of the Northern United States and Canada*, Second Edition. Dover Publications, Inc. New York.



Distribution in Massachusetts
1983-2008
Based on records in
Natural Heritage Database

SIMILAR SPECIES: Hairy Rock-cress (*Arabis pycnocarpa*), Drummond’s Rock-cress (*Boechera stricta*), Sicklepod (*B. canadensis*), Green Rock-cress (*B. missouriensis*; Threatened), Smooth Rock-cress (*B. laevigata*; Special Concern), and Tower Mustard (*Turritis glabra*) are all generally larger plants than Lyre-leaved Rock-cress. Also, most of these species have winged fruits, larger siliques, and flowers that are not pure white.

HABITAT: In Massachusetts, Lyre-leaved Rock Cress inhabits thin soils and crevices of calcareous rocky cliffs, outcrops, and ledges, in full to filtered sun. Associated species include Broad-leaved Ragwort (*Packera obovata*), Downy Arrowwood (*Viburnum rafinesquianum*; Endangered), Early Saxifrage

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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(*Micranthes virginensis*), Ebony Spleenwort (*Asplenium platyneuron*), Harebell (*Campanula rotundifolia*), hickories (*Carya* spp.), Rusty Woodsia (*Woodsia ilvensis*), and Wild Columbine (*Aquilegia canadensis*).

THREATS: Heavy recreational use, such as hiking and climbing in Lyre-leaved Rock-cress habitat areas can result in physical damage to plants, and compaction and erosion of the soil. Some populations of Lyre-leaved Rock-cress are threatened by invasion of exotic plant species such as Japanese Barberry (*Berberis thunbergii*). This species can dominate the vegetation cover and effectively out-compete native plants.

RANGE: Lyre-leaved Rock-cress has a broad range, encompassing much of the eastern and mid-western United States south to North Carolina and Oklahoma, and west through central and western Canada, Montana, Washington, and Alaska.

POPULATION IN MASSACHUSETTS: Lyre-leaved Rock-cress 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. Lyre-leaved Rock-cress is currently known from Berkshire County, and is historically known from Hampden County.

MANAGEMENT RECOMMENDATIONS: As with many rare species, the exact management needs of Lyre-leaved Rock-cress are not known. Lyre-leaved Rock-cress locations that receive heavy recreational use (e.g., hiking, rock climbing) should be carefully monitored for rare plant damage, soil compaction, and erosion; if plant damage or soil disturbance is evident, trails and climbing routes should be re-routed if possible. Habitat sites should also be monitored for invasions of exotic plants, particularly Japanese Barberry. 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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