



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Fen Cuckoo-flower *Cardamine dentata* Schult.

State Status: **Threatened**
Federal Status: **None**

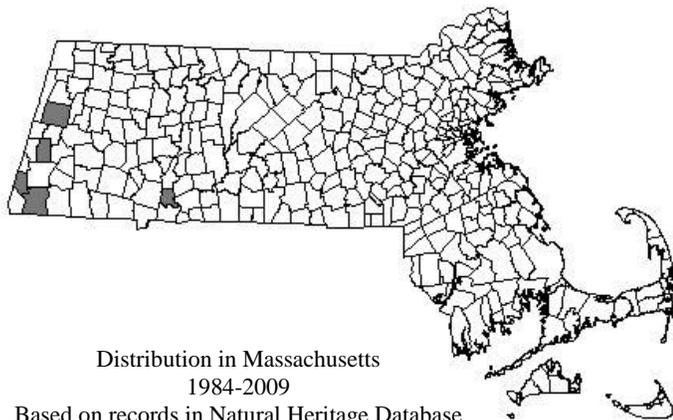
DESCRIPTION: Fen Cuckoo-flower, a member of the Mustard family (Cruciferae or Brassicaceae), is a white-flowered, fibrous-rooted, herbaceous perennial. The 2-5 dm (2/3 – 1 2/3 ft.) long, erect stem rises from a short rhizome (a horizontal, underground stem). Its leaves are pinnately compound (divided into leaflets arranged on both sides of a common axis) and of two types. The basal leaves have long petioles and three to eight broadly oval leaflets, the terminal leaflet being the largest. In contrast, the cauline leaves (growing out from the stem) have narrow, roughly elliptical leaflets. On the middle and upper cauline leaves, the side-leaflets are contracted into short stalks. The flowers, like all flowers in the Cruciferae family, have four separate petals arranged in the shape of a cross or crucifix. Fen Cuckoo-flower's fruit is a linear, 2.5-4 cm (1 – 1 1/2 in.) long pod called a silique (one of the two fruits characteristic of the Mustard family and consisting of two seed-bearing compartments or carpets, both of which fall away to leave a persistent internal partition). *C. dentata* flowers from mid-May through early July.



Holmgren, Noel H. 1998. The Illustrated Companion to Gleason and Cronquist's Manual. New York Botanical Garden.

SIMILAR SPECIES: Similar species include Pennsylvania Bitter Cress (*Cardamine pensylvanica*) and Small-flowered Bitter Cress (*C. parviflora*). Unlike Fen Cuckoo-flower, however, the leaflets on the cauline leaves of Pennsylvania Bitter Cress are usually decurrent (their bases extend down and fuse with the leaf axis). Both Pennsylvania Bitter Cress and Small-flowered Bitter Cress have smaller petals than Fen Cuckoo-flower – only 2-4 mm (2/25 – 4/25 in.) long, compared to 6-16 mm (6/25 -16/25 in.) in the Fen Cuckoo-flower.

RANGE: The range of Fen Cuckoo-flower extends across boreal Canada, south to northern Minnesota, northeastern Illinois, and West Virginia.



Distribution in Massachusetts
1984-2009

Based on records in Natural Heritage Database

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

Massachusetts Division of Fisheries & Wildlife

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HABITAT IN MASSACHUSETTS: The Fen Cuckoo-flower's habitats in Massachusetts include open portions of alkaline fens (unforested, peat-forming areas where very cold, nutrient-poor water seeps up to the surface through limey gravel), and calcareous seepage swamps. Among its associated species are Spring Cress (*Cardamine bulbosa*), Speckled Alder (*Alnus rugosa*), Larch (*Larix laricina*), Tussock Sedge (*Carex stricta*), and various willows (*Salix* spp.).

POPULATION STATUS: There are five current (discovered or relocated since 1984) stations of Fen Cuckoo-flower. Fen Cuckoo-flower is currently listed as Threatened in Massachusetts. Potential threats to these plants include logging, development, and damming of fen streams to create ponds.

Updated 2015

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