

Natural Heritage & Endangered Species Program

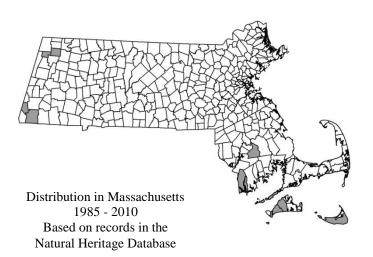
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Massachusetts Division of Fisheries & Wildlife

Canadian Sanicle Sanicula canadensis L.

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

DESCRIPTION: Canadian Sanicle is a fibrous-rooted. herbaceous biennial in the Parsley family (Apiaceae). The plants grow up to 7.5 dm (29 in.) in height. Longer branches fork two to three times. The doubly serrate, palmately compound (with leaflets radiating out from a central point) leaves are three-parted, but may appear five-parted due to deep lobing on the two lateral leaflets. Inconspicuous greenish or whitish flowers are arranged in umbels (rather flat-topped groups of flowers in which all the flowers arise from a single point) with rays of differing lengths. The small, approximately globeshaped fruits are borne in groups of three on 1-1.5 mm long pedicels. The styles (usually slender, stalk-like portions of the pistils) are shorter than the hooked bristles that cover the fruit, suggesting the plant's alternative common name of Short-styled Snakeroot. The plant's anthers (uppermost portions of the stamens) are white. Canadian Sanicle fruits from June through September.







Canadian Sanicle or Short-styled Snakeroot. Photo: B.A. Sorrie, NHESP. Illustration: 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. 2: 624.

SIMILAR SPECIES: Similar species include the other snakeroots that occur in our area: Black Snakeroot (*Sanicula marilandica*), Clustered Snakeroot (*S. odorata*), and Trefoil Sanicle (*S. trifoliata*). Clustered Snakeroot differs in its bright yellow anthers, yellowishgreen flowers, and the fact that its style exceeds its fruit bristles in length. Black Snakeroot also has styles that are longer than the fruit bristles. The pistillate, or female, flowers of Trefoil Sanicle differ from those of Canadian Snakeroot in having no stalks. In addition, the sepals of Trefoil Sanicle form a conspicuous beak at the top of the fruit.

HABITAT IN MASSACHUSETTS: Canadian Sanicle is a plant of moist, open woods and openings in them such as trail edges and tree falls. Sites in Massachusetts are nutrient rich, somewhat wet areas; sites include low knolls and mesic slopes in and along paths through extensive red maple swamp, a seepy area wet in winter-

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

Massachusetts Division of Fisheries & Wildlife

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spring and mesic in summer to fall, and rich northern hardwood forests. The forests it grows in have canopies of northern and central hardwoods, often mixed, and usually mixed with successional species. The trees at the Canadian Sanicle sites include most hardwoods in the state, reflecting the wide distribution of the species and a predilection for second-growth forests in fairly moist, rich conditions: Sugar and Red Maple (Acer saccharum and A. rubrum), oaks (Quercus spp.), White Ash (Fraxinus americana), Tulip Tree (Liriodendron tulipifera), Sassafras (Sassafras albidum), various hickories (Carya spp.), Beech (Fagus grandifolia), White Pine (Pinus strobus) and birches (Betula alleghaniensis and B. papyrifera). A subcanopy of Hophornbeam (Ostrya virginiana), Hornbeam (Carpinus caroliniana) and/or Witch Hazel (Hamamelis virginiana) is common.

The shrub layer tends to be sparse although it may have dense patches of Spicebush (*Lindera benzoin*), Highbush Blueberry (*Vaccinium corymbosum*), Northern Arrowwood (*Viburnum dentatum* var. *lucidum*), Winterberry (*Ilex* spp.), or elderberries (*Sambucus canadensis* and *S. racemosa* ssp.)

The herbaceous layer is rich and varied; many of the species are known to grow in nutrient-rich moist conditions in northern hardwoods forests and others are more widespread. Included at many sites are Wild Geranium (Geranium maculatum), Indian Cucumber Root (Medeola virginiana), White Avens (Geum canadense), Hog Peanut (Amphicarpaea bracteata), Jack-in-the-Pulpit (Arisaema triphyllum), Wild Sarsaparilla (Aralia nudicaulis), Wild Ginger (Asarum canadense), Virginia Waterleaf (Hydrophyllum virginianum), Christmas Fern (Polystichum acrostichoides), Elliptic Shinleaf (Pyrola elliptica), Poison Ivy (Toxicodendron radicans), Virginia Creeper (Parthenocissus quinquefolia), Dewberries (Rubus spp.), and many members of the Asteraceae.

RANGE: The range of Canadian Sanicle is from southern Ontario, New Hampshire and Massachusetts to southern Minnesota and South Dakota, and south to Florida and Texas. NatureServe ranks it as Globally Secure. Canadian Sanicle is considered rare in New Hampshire, Vermont, and Quebec.

POPULATION STATUS IN MASSACHUSETTS:

Canadian Sanicle is listed under the Massachusetts Endangered Species Act as Threatened. 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, Dukes, Bristol, Nantucket and Plymouth Counties and is historically known from Franklin County, as well as Bristol, Plymouth, Nantucket and Dukes Counties. There are eleven current sites in ten towns and nine historical locations (unverified since 1985) in the Commonwealth.

MANAGEMENT AND THREATS: Several of the populations occur with non-native invasive associates including Common Buckthorn (Rhamnus cathartica), Multiflora Rose (Rosa multiflora), Asian Bittersweet (Celastrus orbiculata), Japanese Barberry (Berberis thunbergii) and shrub honeysuckles (Lonicera spp.). Sites should be monitored for invasions of exotic plants; if exotic plants are crowding and out-competing this species, a plan should be developed, in consultation with the Massachusetts Natural Heritage & Endangered Species Program, to remove the invaders. 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.

REFERENCES:

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USDA, NRCS. 2011. The PLANTS Database (http://plants.usda.gov, 27 January 2011). National Plant Data Center, Baton Rouge, LA 70874-4490 USA. http://plants.usda.gov/java/profile?symbol=SACA15&photoID=saca15_001_avd.tif

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