



Rare Plants of New Hampshire

Bulbous Bitter Cress, Spring Cress

Cardamine bulbosa (Schreb ex Muhl.) BSP.

(synonym- *Cardamine rhomboidea* (Pers.) DC.

Mustard family (Brassicaceae, also known as Cruciferae)

What Does It Look Like?

This woodland plant is an erect perennial herb, up to 50 cm (20 inches) tall, rising from a tuber-like bulb. The stem is usually single or sometimes branched.

Leaves: Basal leaves are roundish, long stalked, and often wither before flowering time. Stem leaves are longer than broad and parallel-sided or lance shaped and usually stalkless, with few irregular teeth and a sparse to dense covering of simple hairs. Plants may wither to leave only basal rosettes for much of the growing season.

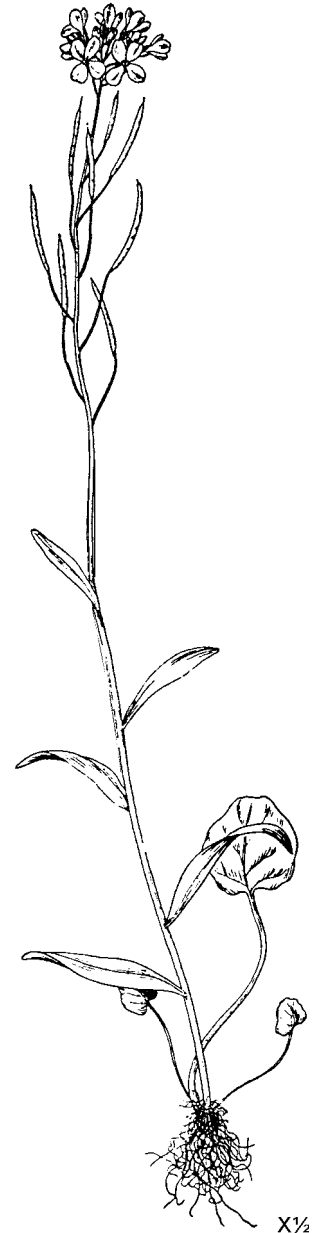
Flower: Clustered at the top of the leafy stem, with four white (rarely pink) petals, about 2 cm (0.8 inches) across. The lower flowers are on stalks up to 4 cm (1.5 inches) long. Sepals are green, turning yellowish after flowering. It flowers from early May to early June.

Fruit: Slender pods are 1.5-2.5 cm (0.6-1.0 inches) long, ascending, and often abortive (without viable seeds).

Similar species: The combination of simple (rarely with 1 or 2 lateral lobes) stem leaves, a tuber-like rhizome, erect stem, and sepals yellowing with age distinguish bulbous bitter cress from other species of *Cardamine*. The hairs, if present, are always simple, never branched as those in the genus *Arabis* (which prefer dry sites).

Where Is It Found?

Habitat: Across its range, bulbous bitter cress grows in moist or wet woods or shallow water, especially forest seeps. In New Hampshire, it is usually found in circumneutral (enriched) seepage swamps or floodplain forests in the southern and coastal parts of the state.





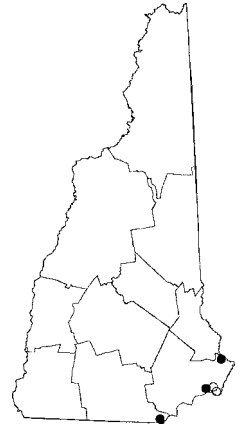
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Associated

species:

Red maple (*Acer rubrum*), basswood (*Tilia americana*), black ash (*Fraxinus nigra*), poison ivy (*Toxicodendron radicans*), Virginia creeper (*Parthenocissus quinquefolia*), alder-leaved buckthorn (*Rhamnus alnifolia*), sensitive fern (*Onoclea sensibilis*), false hellebore (*Veratrum viride*), marsh marigold (*Caltha palustris*), jewelweed (*Impatiens capensis*).

Distribution: Quebec to Minnesota, south to Florida and Texas.



Bulbous Bitter Cress in New Hampshire

- Historic Location
- Verified since 1980

What Is Its Status?

Conservation

status:

Populations elsewhere are stable, but in New Hampshire are critically imperiled. It is state listed as endangered due to extreme rarity (only 3 of 5 known occurrences for the state have been confirmed since 1980).

Management:

As a plant adapted to forested swamp ecosystems, this species of bitter cress may not respond well to significant canopy removals. Large canopy openings may be detrimental by favoring species better adapted to more open and drier conditions. Single tree selection is likely to have less impact than clear cutting.

What Should You Do If You Find This Plant?

Please report sightings of this or other rare species to the New Hampshire Natural Heritage Inventory. Documentation should include: (1) location of the sighting on USGS topographic map or road map, with written directions for relocating the plant; (2) a photo of the plant; and (3) descriptive information including how many plants there are, whether any plants are flowering or fruiting, and comments about the surrounding vegetation. Information may be sent to NHHI/DRED, PO Box 1856, Concord, NH 03302-1856. If you have any questions, please call the New Hampshire Natural Heritage Inventory Program at (603) 271-3623.

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