



Invasive Plant Atlas of New England

Catalog of Species Search Results



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Najas minor

(Brittle water-nymph
eutrophic water-nymph)

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COMMON NAME

Brittle water-nymph
eutrophic water-nymph

FULL SCIENTIFIC NAME

Najas minor All.

FAMILY NAME COMMON

Water-nymph family

FAMILY SCIENTIFIC NAME

Najadaceae

IMAGES



Habit



Close-up



Clump of Plants



Habit Close-up

NOMENCLATURE/SYNONYMS

Synonyms: *Caulinia minor* (All.) Coss. & Germ.

DESCRIPTION

Botanical Glossary

Najas minor is an herbaceous, aquatic annual with stems that can grow 10-20 cm (4-7.75 in.) long. These stems can be up to 1 mm (0.04 in.) thick. The oppositely arranged, dark green leaves become recurved as they age, and have serrulate margins with 7-15 small teeth on each side. The leaf base is truncate or lobed. The leaves measure 0.5-3.5 cm (0.2-1.25 in.) long and 0.1-1.2 mm (0.007-0.05 in.) wide.

Najas minor is a monoecious plant, with 1-2 flowers per axil. The male flowers are located distally and are 1.9-2.2 mm (0.08 in.) in size. The involucre has two lobes and the beaks are 0.4 to 2.1 mm (0.02-0.08 in.) in length. The female flowers are located in the distal to proximal axils and measure 2.2 mm (0.8 in.) in size. The spindle-shaped seeds of this plant are 1.5-3 mm (0.05-0.1 in.) in size and purple colored.

Page References Crow & Hellquist 68, Fernald 82, Flora of North America 79, Gleason & Cronquist 646, Holmgren 640, Magee & Ahles 121. See reference section below for full citations.

SIMILAR SPECIES

None

REPRODUCTIVE/DISPERSAL MECHANISMS

Najas minor can reproduce by means of seeds, but its primary method of dispersal is fragmentation. The seeds are dispersed by waterfowl that consume them.

DISTRIBUTION

Najas minor is native to North Africa, Japan, Turkey, India as well as central and eastern Europe. In the United States it is located from New Hampshire to Florida and west to Michigan and Oklahoma. In New England this plant has been reported from New Hampshire, Vermont, Massachusetts and Connecticut.

HISTORY OF INTRODUCTION IN NEW ENGLAND

Najas minor was first reported in the United States from the Hudson River in 1934. There was an intentional introduction into Cayuga Lake, New York in 1935. There is speculation as to why the

plant was introduced. One possibility is that it was somehow shipped here from Europe. Another possibility is that it was from aquaria being dumped into local waterbodies. Finally, it was encouraged as food for waterfowl in the 1930's, though the specific species is difficult to identify. The first report in New England was in 1974 from Berkshire County in western Massachusetts. The first collected specimen in Connecticut is from 1995. Both the Massachusetts and Connecticut localities were within 80 km of the first New York records.

HABITATS IN NEW ENGLAND

Aquatic
Lake or Pond
River or Stream
Yard or Garden

Najas minor is most often found in ponds, lakes, reservoirs, and slow-moving streams. The plant is typically found in water of depths of 0.6-4.5 m (2-15 ft.).

THREATS

Najas minor has the ability to form thick stands that can cover or clog a lake or stream. This plant is extremely brittle, which allows it to fragment and get moved via boats, waterfowl and river channels. Waterfowl readily eat and move this plant from waterbody to waterbody. In North Carolina, this plant is reported to out-compete other exotics such as *Hydrilla verticillata*. This plant has not yet caused major problems in New England, but needs to be watched, contained or removed if found.

MANAGEMENT LINKS

[US Army Corps of Engineers](#)
Information on mechanical control

DOCUMENTATION NEEDS

Documentation required: Herbarium specimen or mounted snippet of the plants.

Best time for documentation: Summer, fall.

ADDITIONAL INFORMATION

[Ohio Department of Natural Resources](#)

[Integrated Taxonomic Information System](#)
Taxonomic information

[PLANTS Database](#)

General information and map

[Flora of North America](#)

Extensive description

[GRIN database](#)

Taxonomic and distributional information

[North Carolina State University](#)

Fact sheet with description and images

[CT Invasive Plant Working Group](#)

Description and images

[Northern Prairie Wildlife Research Center](#)

General information and a map

[US Army Corps of Engineers](#)

General information and a map

[Virginia Tech Weed Identification Guide](#)

Images

REFERENCES

Andersen, R.N. 1968. Germination and Establishment of Weeds for Experimental Purposes. Weed Science Society of America Handbook. WSSA, Illinois.

Bennike, O., J.B. Jensen, W. Lemke. 2001. Late quaternary records of *najas* spp. (najadaceae) from the southwestern baltic region. Review of Palaeobotany and Palynology 114 (3-4): 259-267.

Crow G.E. and C.B. Hellquist. 2000. Aquatic and Wetland Plants of Northeastern North America. Vol 2. University of Wisconsin Press, Madison.

Fernald, M.L. 1950. Gray's Manual of Botany 8th ed. American Book Co., Boston.

Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. Vol 1. Oxford University Press.

Flora of North America Association ed. 2000. Flora of North America vol. 22. Oxford University Press, Oxford, New York.

Gleason H.A. and A.C. Cronquist. 1991. Manual of Vascular Plants of the Northeastern United States and Adjacent Canada. 2nd ed. New York Botanical Garden, Bronx, New York.

Haynes, R.R. 1979 . Revision of North American and Central American *najas* najadaceae. SIDA Contributions to Botany 8.

Haynes, R.R. 1977. The najadaceae in the southeastern USA. Journal of the Arnold Arboretum Harvard University 58 (2): 161-170.

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

Les, D.H. and L.J. Mehrhoff. 1999. Introduction of nonindigenous aquatic vascular plants in southern New England: a historical perspective. *Biological Invasions* 1:281-300.

Lowden, R.M. 1986. Taxonomy of the genus *najas najadaceae* in the neotropic. *Aquatic Botany* 24 (2): 147-184.

Magee D.W and H.E. Ahles. 1999. *Flora of the Northeast*. University of Massachusetts Press, Amherst.

Nelson, E.N. and R.W. Couch. 1981. Occurrence of *najas-minor* new-record and *najas-marina* new-record *najadaceae* in Oklahoma USA. *Proceedings of the Oklahoma Academy of Science* 61: 78.

Padgett, D.J and G.E. Crow. 1993. Some unwelcome additions to the flora of New Hampshire. *Rhodora* 95 (883-84): 348-351.

Sullivan, V.I. 1981. *Najas-minor* new record *najadaceae* in Louisiana USA. *SIDA Contributions to Botany* 9 (1): 88-90.

USDA, NRCS. 2001. The PLANTS Database, Version 3.1. (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Zalewska, J. 1999. The genus *Najas* (*Najadaceae*) in Poland: Remarks on taxonomy, ecology, distribution and conservation. *Fragmenta Floristica et Geobotanica* 44 (2): 401-422.

DATA RETRIEVAL

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MAPS OF PLANT DISTRIBUTION IN NEW ENGLAND

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