

**PRISM**  
(New York Partnerships for Regional Invasive Species Management)  
**NON-NATIVE PLANT INVASIVENESS RANKING FORM**

PRISM: Adirondack Park Invasive Program

Scientific name: Myriophyllum heterophyllum Michx. (including M. heterophyllum X M. pinnatum) USDA Plants Code:

Common names: Broadleaf water-milfoil, variable-leaf watermilfoil

Native Distribution: United States

Date Assessed: 1 February 2012; revised 30 November 2015

PRISM Assessors: Meghan Johnstone and Erin Vennie-Vollrath

PRISM Reviewers: Leigh Walrath, Meg Modley, Cathy McGlynn, Steve Young

Date Approved: 20 April 2016 Form version date: 13 April 2009

New York Relative Maximum score: 93.62 Date NY assessment approved: 21 July 2008

New York State Invasive Rank: Very High

**SUMMARY OF PRISM RANKING RESULTS:**

**Distribution:** Widespread

**Estimated number of infested sites:** 41

**PRISM Invasiveness Rank<sup>s</sup>:** Very High



**A. DISTRIBUTION AND ABUNDANCE (KNOWN/POTENTIAL):**

1. What is the species distribution and abundance in the PRISM?

- |  |             |
|--|-------------|
| A. Not present   | Not Present |
| B. Occurs in three or fewer natural areas (locations that are at least ¼ mile apart) with no infested area* >1 acre or containing >100 individuals | Restricted  |
| C. Present in 4–10 natural areas, or with one occupied location >1 acre or containing >100 individuals   | Common      |
| D. Present in >10 minimally managed areas  | Widespread  |
| U. Unknown   | Unknown     |

Answer: Widespread

Describe distribution:  
 Known to be present in at least 41 water bodies in the Adirondack PRISM: Blake Reservoir, Carry Falls Reservoir, Chaumont Pond, Cranberry Lake, Eldon Lake, First Pond (Saranac Chain), Fish Creek Ponds, Forked Lake, Fulton Chain Lakes (Fifth, First, Fourth, Second, Seventh, Sixth, Third), Horseshoe Lake, Lake Champlain, Lake Durant, Lake Flower, Lake Placid, Little River Flow, Long Lake (Hamilton Co.), Lower Saranac Lake, Nicks Lake, Oseetah Lake, Paradox Lake, Piercefield Flow, Rainbow Falls Reservoir, Raquette Lake, Raquette Pond, Rock Pond (Hamilton Co.), Upper Saranac Lake, Second Pond (Saranac Chain), Simon Pond, Soft Maple Reservoir, Square Pond, Stark Falls Reservoir, Stillwater Reservoir, Thendara Lake, Tupper Lake, and Union Falls Flow.  
 Variable-leaf milfoil is native to the United States, but is considered invasive in New England. However, it is considered a rare species in Quebec. The origin of this species is unknown in NY. At first, the Adirondack Park Invasive Plant Program considered variable-leaf milfoil a watched species, but it is now considered to be invasive.

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Sources of information:  
Adirondack Park Invasive Plant Program 2015

§Not Assessable: not persistent in the PRISM, or not found outside of cultivation.

\*Definition of “infested area” is the “...actual or percentage of land occupied by [canopy cover of] weed plants” NAWMA (North American Weed Management Association) 2002. North American Invasive Plant Mapping Standards (see <http://www.nawma.org/>).

2. What is the likelihood the species will occur (if not yet present) or expand its distribution and abundance (if already present) in the PRISM?

Answer:

Documentation (e.g.: history of establishment in PRISM, suitability of habitats and climate, distribution models, literature, expert opinions):

Variable-leaved watermilfoil has been reported in 20 counties around NY. It occurs throughout eastern United States including states north of NY.

Variable-leaved watermilfoil is able to grow in a wide variety of environmental conditions, is aggressive and grows rapidly.

This species is spread through stem and root fragmentation and seeds. Plant parts can easily be transported on recreational equipment.

Sources of information:

Brooklyn Botanic Garden 2008; iMapInvasives 2016; U.S.D.A. 2008; Vermont Department of Environmental Conservation 2009; Weldy et al. 2015.

**B. INVASIVENESS RANK IN THE PRISM:**

Is the species distribution Widespread or Common?

Yes: Go to column A in table below.

No: What is the likelihood of species occurrence or expansion? Answer:

- Very Likely:                      Use column A below
- Moderately likely:            Use column B below
- Unlikely:                            Use column C below
- Zero likelihood                 Invasive potential Insignificant
- Unknown                            Invasive potential Unknown
- Not assessed                      Invasive potential not assessed

Assign a PRISM invasiveness rank to the species based on its New York Relative Maximum Score, using the designated column in the table below.

New York Relative Maximum Score	New York Invasiveness Rank	A	B	C
> 80.00	Very High	VH	H	M
70.00–80.00	High	H	M	L
50.00–69.99	Moderate	M	L	Ins

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40.00–49.99	Low	L	Ins	Ins
<40.00	Insignificant	Ins	Ins	Ins

**Column used: A (Insert PRISM Invasiveness Rank on page 1)**

**References for species assessment:**

Adirondack Park Invasive Plant Program. 2015. Distribution of Lakes Monitored and Aquatic Invasive Species in the Adirondack PRISM, 2015. Adirondack Park Invasive Plant Program. Keene Valley, New York.

Brooklyn Botanic Garden. 2008. AILANTHUS database. [Accessed 1 Feb 2012 ].

iMapInvasives. 2016. <http://imapinvasives.org/> [Accessed 29 Feb 2016]

United States Department of Agriculture, National Resources Conservation Service. 2008. The PLANTS Database. National Plant Data Center, Baton Rouge, Louisiana. [Accessed 1 Feb 2012].

Vermont Department of Environmental Conservation. 2009. Variable-leaved Watermilfoil: New invasive aquatic plant confirmed in Vermont. VTDEC Watershed Division. [http://www.vtwaterquality.org/lakes/htm/ans/lp\\_mhett.htm](http://www.vtwaterquality.org/lakes/htm/ans/lp_mhett.htm). [Accessed 1 Feb 2012].

Weldy, Troy, David Werier, and Andrew Nelson. 2015 New York Flora Atlas. [S. M. Landry and K. N. Campbell (original application development), USF Water Institute. University of South Florida]. New York Flora Association, Albany, New York. <http://newyork.plantatlas.usf.edu/> [Accessed 26 Jan 2016].

**Citation:** This ranking form for regions within NYS may be cited as: Jordan, M.J., G. Moore and T.W. Weldy. 2008. Invasiveness ranking system for non-native plants of New York. Unpublished. The Nature Conservancy, Cold Spring Harbor, NY; Brooklyn Botanic Garden, Brooklyn, NY; The Nature Conservancy, Albany, NY. Note that the order of authorship is alphabetical; all three authors contributed substantially to the development of this protocol.

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