

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

PRISM: Long Island Invasive Species Management Area

Scientific name: Trapa Natans L. USDA Plants Code: TRNA
 Common names: water chestnut, water caltrop
 Native Distribution: Central and eastern Europe, central Asia, tropical Africa and Asia
 Date Assessed: April 9, 2008
 PRISM Assessors: Steven Clemants
 PRISM Reviewers: LIISMA SRC
 Date Approved: June 16, 2008 Form version date: 13 April 2009
 New York Relative Maximum score: 82.00 Date NY assessment approved: June 16, 2008
 New York State Invasive Rank: Very High

SUMMARY OF PRISM RANKING RESULTS:

Distribution: Restricted

Estimated number of infested sites: 3

PRISM Invasiveness Rank[§]: 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: Restricted

Describe distribution:
 Known from only three sites: Swan Pond, Mill Pond in Oyster Bay, Mill Pond in Wantagh.
 Sources of information:
 Brooklyn Botanic Garden 2008; Kishbaugh NYDEC pers. com; K. Schwager WIMS database; IPCNYS 2008

[§]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/>).

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

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: Very likely

Documentation (e.g.: history of establishment in PRISM, suitability of habitats and climate, distribution models, literature, expert opinions):
 Relatively poor disperser, needs nutrient rich waters, has been in Hudson river for 75 years. But recently increased from one to three locations in Suffolk and Nassau Co.
 Sources of information:
 Bickley & Cory 1955; Brooklyn Botanic Garden 2008, Hummel & Kiviat 2004; Kurihara & Ikusima 1991

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

- 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
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:

Bickley, W.E. and E.N. Cory. 1955. Water calthrop in the Chesapeake Bay. Association of Southeastern Biologists Bulletin 2: 27-28.

Brooklyn Botanic Garden. 2008. AILANTHUS database. [Accessed on April 8, 2008].

Hummel, M. and E. Kiviat. 2004. Review of World Literature on Water Chestnut with Implications for Management in North America. Journal of Aquatic Plant Management 42: 17-28.

IPCNYS. 2008. Target Plants: Water Chestnut. Invasive Plant Council of New York State website. http://ipcnys.org/sections/target/water_chestnut_overview.htm. Accessed 4/8/2008.

Kurihara, M. and I. Ikusima. 1991. The ecology of the seed in *Trapa natans* var. *japonica* in a eutrophic lake. Vegetatio 97: 117-124.

PRISM

(New York Partnerships for Regional Invasive Species Management)

NON-NATIVE PLANT INVASIVENESS RANKING FORM

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.

Acknowledgments: Valuable contributions by members of the Long Island Invasive Species Management Area's Scientific Review Committee were incorporated in revisions of this form.