



**AQUATIC PLANT IDENTIFICATION PROGRAM**

**1992 ANNUAL REPORT**

prepared by

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*Fresh Water Institute Report #93-1*

*January 1993*

*Rensselaer Fresh Water Institute*



*Rensselaer Polytechnic Institute  
Troy, NY 12180-3590 USA  
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For the sixth year, the Rensselaer Fresh Water Institute (RFWI) has continued the Aquatic Plant Identification Program. This program was initiated as a public service for the Lake George basin, in which individuals could bring specimens to RFWI for identification. In return, it assisted RFWI in locating new Eurasian Watermilfoil and Curly-leaf Pondweed sites throughout the Lake George basin. RFWI now provides the opportunity for anyone in New York State to have plant specimens verified, which also enables us to maintain a list of locations of invasive aquatic plants such as Waterchestnut (Trapa natans), Curly-leaf Pondweed (Potamogeton crispus) and Eurasian Watermilfoil (Myriophyllum spicatum) in New York State.

During 1992, forty-five specimens were received and identified (Table 1). Of these, two were verified as Eurasian Watermilfoil, both from Kirk Lake. One specimen of Curly-leaf Pondweed was received from Nassau Lake. No specimens of Waterchestnut were received.

To date, nine Eurasian Watermilfoil locations not otherwise noted by the LGAF-sponsored Milfoil Survey have been found through this program (Table 2). This program is thus a cost-effective mechanism to locate these exotic plants in Lake George, and thus assist future management efforts. No milfoil plants were received from Lake George in 1992.

The extension of this program has benefited regional lake associations and municipalities. We have identified samples from several area lakes other than Lake George. Most often the specimens have not been exotic species, and therefore the concerns of lake residents have often been allayed. In the other instances, it has provided the impetus for concerted action on the part of the lake association.

As a part of this program, RFWI maintains an expanding list of sites we have verified to contain Eurasian Watermilfoil (Table 3, Figure 1), Waterchestnut (Table 4, Figure 2) and Curly-leaf Pondweed (Table 5, Figure 3) in New York State. At this point, the list is preliminary, since we currently lack verified sources for many lakes in which these species have been reported to occur. We will only add sites to the list for which an authoritative reference can be given, or for which we have a voucher specimen. We would appreciate receiving reports or other publications listing verified occurrences of these plants.

The Aquatic Plant Identification Program of Rensselaer Fresh Water Institute will continue to be offered as a public service during 1993. In order to have samples identified, bring or send them to the RFWI at either the Troy campus or Bolton Landing facility. For more information, see the notice provided as Appendix A of this report.

## REFERENCES

- APIP, 1990. Rensselaer Fresh Water Institute, Aquatic Plant Identification Program, 1990 Annual Report. Rensselaer Fresh Water Institute, Tech. Rpt. #91-7. Rensselaer Polytechnic Institute, Troy, NY.
- APIP, 1991. Eichler, L.W. and R.T. Bombard. Rensselaer Fresh Water Institute, Aquatic Plant Identification Program, 1991 Annual Report. Rensselaer Fresh Water Institute, Tech. Rpt. #92-4. Rensselaer Polytechnic Institute, Troy, NY.
- APIP, 1992. Eichler, L.W. and R.T. Bombard. Rensselaer Fresh Water Institute, Aquatic Plant Identification Program, 1992 Annual Report. Rensselaer Fresh Water Institute, Tech. Rpt. #93-1. Rensselaer Polytechnic Institute, Troy, NY.
- Gilman, B. 1985. An Inventory of the Aquatic Weedbeds of Honeoye Lake with Suggestions for their Management. Dept. of Natural Resources Conservation. Community College of the Finger Lakes, Canandaigua, NY.
- Madsen, J.D., L.W. Eichler, C.W. Boylen, J.W. Sutherland and J.A. Bloomfield. Aquatic Plant Assessment of Onondaga Lake. Interim Report to the Onondaga Lake Management Conference. March 1992.
- Menzie, C.A. 1979. Growth of the Aquatic Plant Myriophyllum spicatum in a littoral area of the Hudson River estuary. Aquatic Botany 6:365-375.
- Miller, G.L. 1978. An Ecological Inventory of Aquatic Vegetation in the Major Lakes of Cayuga County, New York and Recommendations for their Management. Cayuga County Environmental Management Council, Auburn, NY.
- NYS DEC, 1989. Summary of Waterbodies Impaired by Aquatic Vegetation. unpublished report. Lake Services Section, New York State Department of Environmental Conservation, Albany, NY
- NYS DEC. The New York State Citizens Statewide Lake Assessment Program. Lake Services Section, New York State Department of Environmental Conservation, Albany, NY
- Reed, C.F. 1977. History and Distribution of Eurasian Watermilfoil in the United States and Canada. Phytologia 36:417-436.
- RFWI, 1989. Rensselaer Fresh Water Institute, Aquatic Plant Identification Program, 1989 Annual Report. Rensselaer Fresh Water Institute, Tech. Rpt. #90-1. Rensselaer Polytechnic Institute, Troy, NY.

## REFERENCES

- Soracco, R.J., 1990. An Aquatic Plant Survey of Lakes in Rensselaer County, NY. Rensselaer Fresh Water Institute, Rensselaer Polytechnic Institute, Troy, NY.
- Taggett, L. 1989. Aquatic Plant Inventory of the Lake George Region. Rensselaer Fresh Water Institute, Tech. Rpt. #89-2 Rensselaer Polytechnic Institute, Troy, NY.

APPENDIX A  
ANNOUNCEMENT

AQUATIC PLANT IDENTIFICATION PROGRAM

Rensselaer Fresh Water Institute has an ongoing program of identifying new sites with Eurasian Watermilfoil both in Lake George, and in regional lakes. If you have a plant that you think may be Eurasian Watermilfoil, we will gladly identify it for you free of charge.

To have plants identified, send or bring at least three intact plants to the RFWI laboratory facility in Bolton Landing on Lakeshore Drive (Route 9N) or to our RPI campus office (Materials Research Center 203). The plants should be in a plastic bag or container with water. In addition, we would like the following information: name of collector, lake name, site of collection (Town, County, State), depth at which the plant was growing, date of collection, the name and phone number of a person to contact with the results.

Plants for identification should be directed to Lawrence Eichler. For more information, contact the RFWI site at Bolton Landing (518) 644-3541 or in Troy at (518) 276-8382 or 276-6757.

Table 1.  
 FWI AQUATIC PLANT IDENTIFICATION PROGRAM - 1992

SPECIES	Sample #	DATE	LOCATION
Potamogeton crispus	92-01	06/16/92	Nassau Lake
Najas sp.	92-02	07/08/92	Lake Casse
Myriophyllum spicatum	92-03	07/23/92	Kirk Lake
Nuphar sp.	92-04	07/23/92	Kirk Lake
Polygonum sp.	92-05	07/23/92	Kirk Lake
Potamogeton perfoliatus	92-06	07/23/92	Kirk Lake
Najas sp.	92-07	07/23/92	Kirk Lake
Potamogeton epihydrus	92-08	07/28/92	Fern Lake
Najas flexilis	92-09	07/28/92	Fern Lake
Sparganium sp.	92-10	07/28/92	Fern Lake
Potamogeton robbinsii	92-11	07/28/92	Fern Lake
Brasenia schreberi	92-12	07/28/92	Fern Lake
Potamogeton praelongus	92-13	07/28/92	Fern Lake
Potamogeton amplifolius	92-14	07/28/92	Fern Lake
Carex sp.	92-15	07/28/92	Fern Lake
Grass	92-16	07/28/92	Fern Lake
Myriophyllum alterniflorum	92-17	07/28/92	Fern Lake
Eleocharis acicularis	92-18	07/28/92	Fern Lake
Potamogeton gramineus	92-19	07/28/92	Fern Lake
Potamogeton sp.	92-20	07/28/92	Fern Lake
Vaccinium sp.	92-21	07/28/92	Fern Lake
Polygonum sp.	92-22	08/03/92	Lake Secor
Pontederia cordata	92-23	08/03/92	Lake Secor
Sagittaria sp.	92-24	08/03/92	Lake Secor
Elodea canadensis	92-25	08/03/92	Lake Secor
Nymphoides sp.	92-26	08/03/92	Lake Secor
Potamogeton amplifolius	92-27	08/03/92	Lake Secor
Heteranthera dubia	92-28	08/03/92	Lake Secor
Nymphaea odorata	92-29	08/06/92	Tibet Lake
Myriophyllum sibiricum	92-30	08/06/92	Tibet Lake
Potamogeton epihydrus	92-31	08/06/92	Tibet Lake
Najas flexilis	92-32	08/06/92	Kirk Lake
Nymphaea odorata	92-33	08/06/92	Kirk Lake
Myriophyllum spicatum	92-34	08/06/92	Kirk Lake
Sagittaria sp.	92-35	08/12/92	Lake Secor
Heteranthera dubia	92-36	08/12/92	Lake Secor
Elodea canadensis	92-37	08/12/92	Lake Secor
Potamogeton illinoensis	92-38	08/12/92	Lake Secor
Ranunculus longirostris	92-39	08/24/92	Lake George
Myriophyllum alterniflorum	92-40	08/26/92	Schroon Lake
Myriophyllum alterniflorum	92-41	08/26/92	Schroon Lake
Bryozoon	92-42	08/27/92	Lake George
Potamogeton epihydrus	92-43	11/05/92	Lake Casse
Nymphaea odorata	92-44	11/05/92	Lake Casse
Nuphar sp.	92-45	08/12/92	Lake Secor

Table 2.

AQUATIC PLANT IDENTIFICATION PROGRAM

Lake George Eurasian Watermilfoil (*M. spicatum*) and Curly-leaf Pondweed (*P. crispus*) locations discovered as part of this program.

LOCATION	Sample #	SPECIES	DATE	FOUND BY
Agnes Island	89-6	<i>M. spicatum</i>	07-20-89	H. Wilkening
Camp Andrew Bay	89-8	<i>M. spicatum</i>	08-07-89	E. Hue
Cooks Bay, Huletts	88-13	<i>M. spicatum</i>	09-22-88	Wm. Beach
Indian Bay, Huletts	88-14	<i>M. spicatum</i>	09-26-88	A. Barbera
N. of Shadow Bay	88-8	<i>P. crispus</i>	07-29-88	B. Meyer
Northwest Bay	90-4	<i>M. spicatum</i>	07-24-90	B. Meyer
Sandy Bay	90-3	<i>M. spicatum</i>	07-19-90	J. Robertson
Shelving Rock	89-4	<i>P. crispus</i>	07-14-89	Knapp
Silver Bay	89-1	<i>M. spicatum</i>	06-27-89	T. Shuster
S. Sweet Briar Is.	88-7	<i>M. spicatum</i>	07-27-88	R. Risman
Three Brothers Is.	89-12	<i>M. spicatum</i>	09-06-89	D. Swire

Table 3  
Locations in New York State with Eurasian Watermilfoil

LAKE	COUNTY	OBSERVED BY	REFERENCE
Watervliet Reservoir	Albany	Madsen	RFWI 1989
Whitney Pt. Reservoir	Broome	Titus	Titus, J.
Susquehanna River	Broome	Titus	Titus, J.
Cuba Lake	Cattaraugus		NYS DEC
Cayuga Lake	Cayuga		NYS DEC, Miller, 1978
Como Lake	Cayuga		Miller, 1978
Cross Lake	Cayuga		NYS DEC, Miller, 1978
Duck Lake	Cayuga		Miller, 1978
Little Sodus B	Cayuga		NYS DEC, Miller, 1978
Owasco Lake	Cayuga		NYS DEC, Miller, 1978
Cassadaga L's	Chautauqua		NYS DEC
Chautauqua Lake	Chautauqua		NYS DEC
Findley Lake	Chautauqua		NYS DEC
Lime Lake	Chautauqua		NYS DEC
Plymouth Reservoir	Chenango		NYS DEC
Lake Champlain	Clinton		NYS DEC
Copake Lake	Columbia		NYS DEC
Queechy Lake	Columbia		NYS DEC
Robinson Pond	Columbia		NYS DEC
Melody Lake	Cortland		NYS DEC
Wappinger Lake	Dutchess		NYS DEC
Augur Lake	Essex	Eichler	APIP 1990
Eagle Lake	Essex	Taggett	APIP 1987, Taggett 1988
Oseetah Lake	Essex	Eichler	APIP 1991
E. Caroga Lake	Fulton		NYS DEC
Great Sacandaga Lk	Fulton	Smith	RFWI 1989
Lake Titus	Franklin	Eichler	APIP 1990
Oseetah Lake	Franklin	Eichler	APIP 1991
Upper Chateaugay Lake	Franklin		NYS DEC
Sleepy Hollow Lake	Greene	Madsen	RFWI 1989
Lake Ontario	Jefferson		Reed, 1977
Moon Lake	Jefferson		NYS DEC
Lake Bonaparte	Lewis		NYS DEC
Conesus Lake	Livingston		NYS DEC
Cazenovia Lake	Madison		NYS DEC
Lake Moraine	Madison		NYS DEC
Tuscarora Lake	Madison		NYS DEC
Onondaga Lake	Onondaga	Eichler	Madsen et al., 1992
Honeoye Lake	Ontario		NYS DEC, Gilman, 1985
Greenwood Lake	Orange		NYS DEC
Round Lake	Orange		NYS DEC
Walton Lake	Orange		NYS DEC
Paddy's Lake	Oswego		Reed, 1977
Canadarago Lake	Otsego		NYS DEC
Otsego Lake	Otsego	Titus	Titus, J.
Kirk Lake	Putnam		APIP, 1992
Lake Carmel	Putnam		NYS DEC
Lake Mahopac	Putnam		NYS DEC
Lake Oscawana	Putnam		NYS DEC
Lake Tibet	Putnam		NYS DEC

Table 3  
Locations in New York State with Eurasian Watermilfoil

LAKE	COUNTY	OBSERVED BY	REFERENCE
Castleton Reservoir	Rensselaer	Nelson	Bagdon Env. Assoc., 1989
Crooked Lake	Rensselaer	Soracco	Soracco 1990
Crystal Lake	Rensselaer	Madsen	APIP 1988
Glass Lake	Rensselaer	Soracco	Soracco 1990
Hampton Manor Lake	Rensselaer	Soracco	Soracco 1990
Pine Lake	Rensselaer	Soracco	Soracco 1990
Reichards Lake	Rensselaer	Soracco	Soracco 1990
Snyders Lake	Rensselaer		NYS DEC, FWI APIP 1988
Vanderhyden Reservoir	Rensselaer	Soracco	Soracco 1990
Haverstraw Bay	Rockland		Menzie, 1979
Ballston Lake	Saratoga		NYS DEC
Galway Lake	Saratoga	Madsen	RFWI 1989
Round Lake	Saratoga		NYS DEC
Saratoga Lake	Saratoga	Boylen	RFWI 1985
Lamoka lake	Schuyler		NYS DEC
Waneta Lake	Schuyler		NYS DEC
Seneca River	Seneca		Reed, 1977
Black Lake	St. Lawrence		NYS DEC
Brant Lake	Warren		APIP 1989, Eichler 1990
Crandall Pond	Warren	Madsen	RFWI 1987
Daggett Lake	Warren	Madsen	APIP 1989
Friends Lake	Warren		APIP 1987
Glen Lake	Warren	Madsen	RFWI 1989
Lake Luzerne	Warren	Madsen	NYS DEC, APIP 1989
Schroon Lake	Warren/Essex	Taggett	Taggett 1988, APIP 1990
Cossayuna Lake	Washington		NYS DEC
Hedges Lake	Washington		NYS DEC
Summit Lake	Washington		NYS DEC
Sodus B	Wayne		NYS DEC
Mohansic Lake	Westchester		NYS DEC
Silver Lake	Wyoming		NYS DEC
Seneca Lake	Yates		NYS DEC

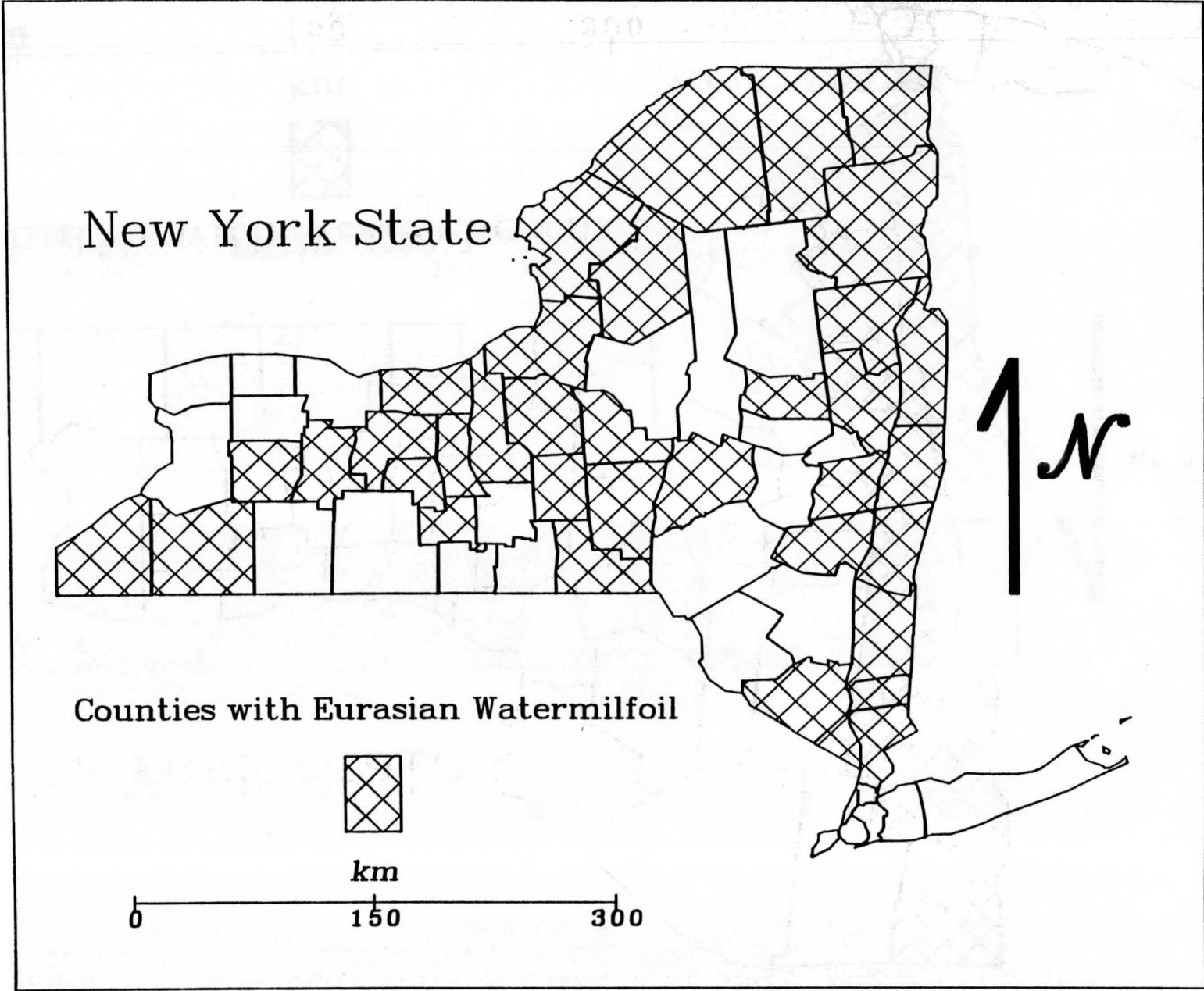
Table 4.  
 Locations in New York State with Waterchestnut (*Trapa natans*)

LAKE	COUNTY	OBSERVED BY	REFERENCE
Hudson River	Albany		NYS DEC
Mohawk River	Albany		NYS DEC
Watervliet Res.	Albany	Madsen	RFWI, 1989
Lake Champlain	Clinton		NYS DEC
Hudson River	Columbia		NYS DEC
Hudson River	Dutchess		NYS DEC
Lake Champlain	Essex		NYS DEC
Hudson River	Green		NYS DEC
Hudson River	Orange		NYS DEC
Hudson River	Putnam		NYS DEC
Hudson River	Rensselaer		NYS DEC
Nassau Lake	Rensselaer		NYS DEC
Tamarack Pond	Rensselaer		Soracco, 1991
Hudson River	Rockland		NYS DEC
Ballston Lake	Saratoga		NYS DEC
Saratoga Lake	Saratoga		NYS DEC
Mohawk River	Schenectady		NYS DEC
Hudson River	Ulster		NYS DEC
Lake Champlain	Warren		NYS DEC
Hudson River	Westchester		NYS DEC

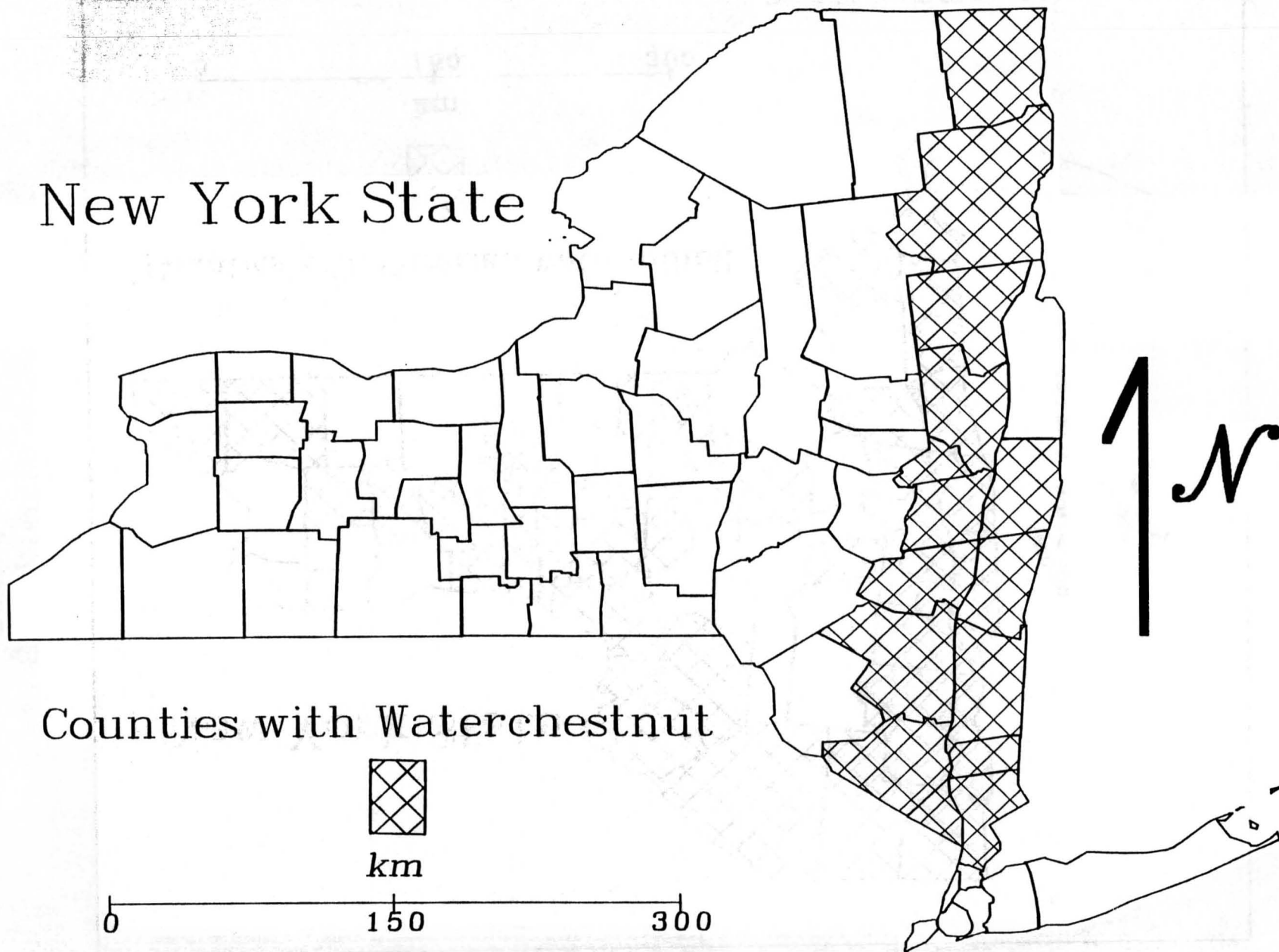
Table 5.

Locations in New York State with Curly-leaf Pondweed (*P. crispus*)

LAKE	COUNTY	OBSERVED BY	REFERENCE
Watervliet Res.	Albany	Madsen	RFWI, 1989
Cayuga	Cayuga		Miller, 1978
Como	Cayuga		Miller, 1978
Cross	Cayuga		Miller, 1978
Little Sodus	Cayuga		Miller, 1978
Owasco	Cayuga		Miller, 1978
Skaneateles	Cayuga		Miller, 1978
Chautauqua Lake	Chautauqua		NYS DEC
Queechey Lake	Columbia		NYS DEC
Conesus Lake	Livingston		Bloomfield, 1978
Irondequoit Bay	Monroe		Bloomfield, 1978
Little Fresh Pond	Nassau		NYS DEC
Onondaga Lake	Onondaga	Eichler	Madsen et al., 1992
Honeoye Lake	Ontario		NYS DEC, Gilman 1985
Round Lake	Orange		NYS DEC
Oneida Lake	Oswego		Bloomfield, 1978
Canadarago Lake	Otsego		NYS DEC
Otsego Lake	Otsego		Bloomfield, 1978
Lake Peekskill	Putnam		NYS DEC
Cooper's Pond	Rensselaer	Madsen	RFWI 1989
Nassau Lake	Rensselaer		APIP, 1992
Saratoga Lake	Saratoga		NYS DEC
Collins Lake	Schenectady		NYS DEC
Duane Lake	Schenectady		NYS DEC
Brant Lake	Warren	Taggett	Eichler, 1990
Lake George	Warren	Taggett	APIP, 1988
Cossayuna Lake	Washington	Madsen	RFWI 1987
Hedges Lake	Washington		NYS DEC
Hills Pond/Emerald Lake	Washington	Eichler	Eichler & Bombard, 1991
Summit Lake	Washington		NYS DEC
Silver Lake	Wyoming		NYS DEC



# New York State



Counties with Waterchestnut



km

