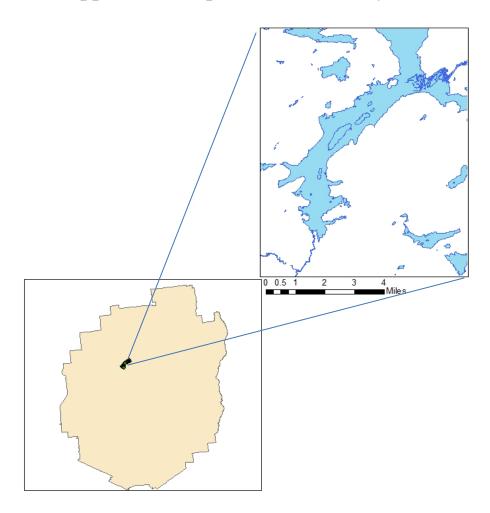
Tupper Lake Aquatic Plant Survey 2013



Map 1: Location of Tupper Lake in relation to the Adirondack Park.

Tupper Lake is located in the Town of Tupper Lake in the southwest corner of Franklin County, New York (Map 1). This 3,853 acre lake was accessed through the use of a public boat launch on Route 30. Motor boats can have access to this lake through the use of this boat launch.

An aquatic plant survey was conducted at Tupper Lake from 11-15 July 2013. Aquatic plant coverage was moderate, and was comprised of 53 plant beds that covered 606 acres or 16% of the lakes surface area. The invasive aquatic plant, Variable-leaf milfoil, was detected in Tupper Lake in several large beds scattered throughout the lake. Seventeen species of native aquatic plants were also identified. Species most common in this lake were Water Shield (*Brasenia schreberi*), Yellow Water Lily (*Nuphar variegata*), and Yellow floatingheart (*Nymphoides pelata*)(Table 1).

Of the 73 rake tosses deployed through the littoral zone of this lake, 9 had plants recovered. There was one plant species that was brought up on the rake that was not detected during the surface survey. This species was Brittlewort (*Nitella spp.*) (Table 2).

Table 1: Abundance and area of aquatic plant beds in Tupper Lake. Refer to Map 3 for plant bed locations. Abundance key: 1=RARE (<5%), 2=OCCASIONAL (6-15%), 3=PRESENT (16-25%), 4=COMMON(26-50%), 5=ABUNDANT(>50%).

Bed #	BRSC	POEP	POPE	NYOD	SPSP	NUVA	UTVU	MYHE	SAGR	POGR	PONA	POOA	ERSP	LODO	ELSP	NYPE	UTPU	Area (acres)
1		2																0.15
2	1				1													0.18
3	1	1		1	1	1						1				1		1.24
4	1				1	1												0.66
5	3	1			1	2										1		1.27
6	2	1		1	1	1										1		2.64
7		1		4														0.71
8	3	1			1	2					1		1					0.03
9	1					1												0.17
10	1					1												0.55
11	1					1												0.21
12	4	1				1												0.01
13	2					1												0.26
14	1	1			1	1	1									1		6.18
15		1			1	1												0.63
16	2					1												0.19
17	1																	0.58
18					4													0.41
19	3	1	3			1	1	3								1		7.08
20	3				1													0.76
21	1				1											4		0.01
22	4	1				2										3		4.54
23	3	1	1	2	2	3	1	2	1	1	1			1	2	3	2	503.57
24	2	1		4			1				2			1		2	1	11.05
25			2													2		7.69
26						4												5.21

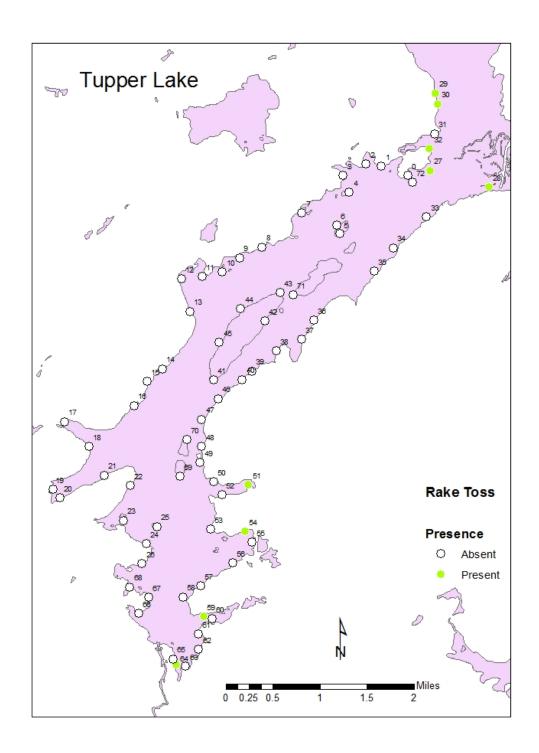
Table 1. (continued)

Bed	BRSC	POEP	POPE	NYOD	SPSP	NUVA	UTVU	MYHE	SAGR	POGR	PONA	POOA	ERSP	LODO	ELSP	NYPE	UTPU	Acres
27	2	4	2	2	3	4	2		4						2	4		7.98
28			3	3												2		1.34
29	2			4	2											2		0.97
30	2			3	2													1.12
31		2									2							1.18
32					3											2		1.71
33					2											2		0.57
34		4			2	2												0.49
35	3				3													1.11
36	2															2		1.14
37	2			4		2												2.27
38				3														2.19
39					3													0.37
40					2											2		0.22
41	3																	1.26
42	2				2													1.12
43	2					1										2		2.12
44	4				2		3	4								4		3.83
45					3	2												0.14
46						1		2										0.77
47					1													5.47
48		3																0.72
49						4		4										1.94
50	3							3								2		0.86
51	2	2				3										2		3.69
52						3		3								3		0.76
53																2		0.63
54		2				3												1.11
55					4	3												3.13

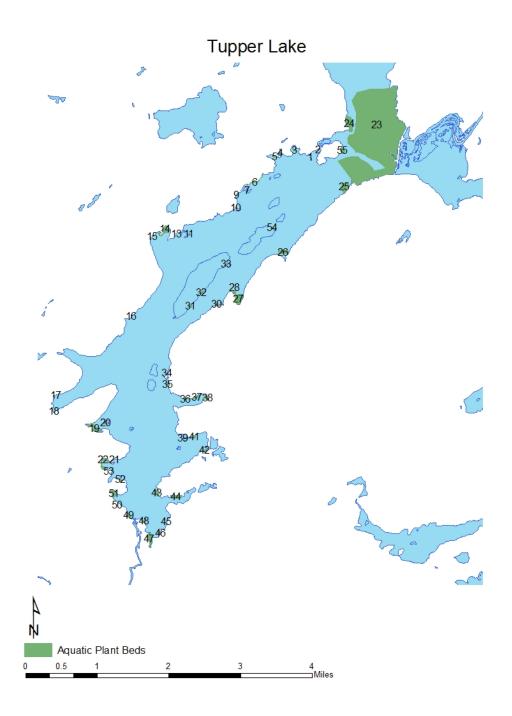
Code	<u>Species</u>
BRSC	Water Sheild (Brasenia schreberi)
POEP	Ribbon Leaf Pondweed (Potamogeton epihydrus)
POPE	Clasping Leaf Pondweed (Potamogeton perfoliatus)
NYOD	White Water Lily (Nymphaea odorata)
SPSP	Bur-Reed (Sparganium spp.)
NUVA	Yellow Water Lily (Nuphar variegata)
UTVU	Common Bladderwort (Utricularia vulgaris)
MYHE	Variable Leaf Milfoil (Myriophyllum heterophyllum)
SAGR	Grassy Arrowhead (Sagittaria graminea)
POGR	Variable Leaf Pondweed (Potamogeton gramineus)
PONA	Floating Pondweed (Potamogeton natans)
POOA	Oake's Pondweed (Potamogeton oakesianus)
ERSP	Pipewort (Eriocaulon spp.)
LODO	Water Lobelia (Lobelia dortmanna)
ELSP	Hairgrass (Eleocharis spp.)
NYPE	Yellow Floatingheart (Nymphoides peltata)
UTPU	Purple Bladderwort (Utricularia purpurea)

Table 2:Species present on the rake, abundance, and depth at each of the rake toss locations that had plants recovered at Tupper Lake. Refer to Map 2 for rake toss locations. Abundance key: 1=RARE (<5%), 2=OCCASIONAL (6-15%), 3=PRESENT (16-25%), 4=COMMON (26-50%), 5=ABUNDANT (>50%).

Rake Toss #	Clasping-leaf pondweed (Potamogeton Perfoliatus)	Brittlewort (<i>Nitella</i> spp.)	Bur-reed (Sparganium spp.)	Hairgrass (Eleocharis spp.)	Purple Bladderwort (<i>Utricularia</i> purpurea)	Depth (ft)
28					1	12
29				2		8
30				1		5
31				2		3
33					1	5
52	1					5
55				1		8
60		2				6
65			3			7



Map 2: Rake toss locations on Tupper Lake from 11-15 July, 2013. Open circles represent locations where no plants were detected, closed circles represent locations where plants were encountered on the rake. Data for rake tosses can be found on Table 2.



Map 3: Locations of the aquatic plant beds detected in Tupper Lake during the surface survey from 11-15 July, 2013. Data for plant beds can be found on Table 1.