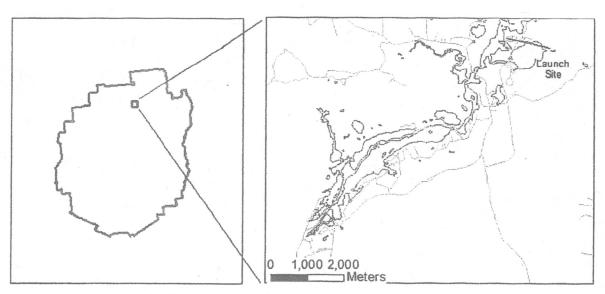
4

Rainbow Lake & Clear Pond (Rainbow Lake) Aquatic Plant Survey 2012

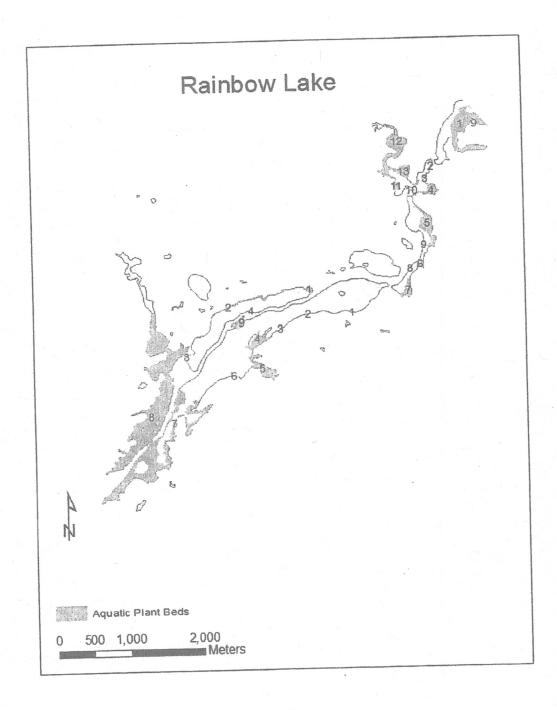


Map 1: Location of Rainbow Lake & Clear Pond (Rainbow Lake).

Rainbow Lake is located in the town of Brighton in Franklin County, New York (Map 1). The 588 acre lake was accessed by the Rainbow Lake Narrows from the Camp Road off from the Kushaqua-Mud Pond Road in Onchiota, New York.

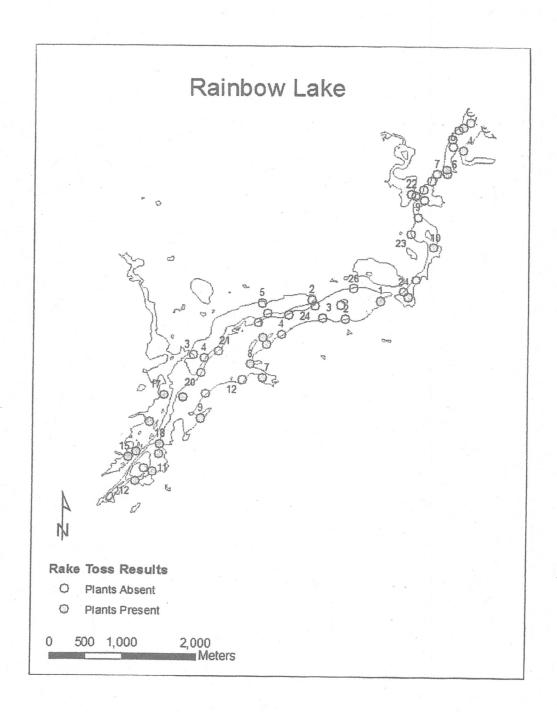
An aquatic plant survey of Rainbow Lake was conducted on 23-August-2012. No invasive species were detected during this survey. Aquatic plant coverage in Rainbow Lake was relatively high, comprised of 28 aquatic plant beds that covered 317 acres or 53.9% of the surface area of the lake (Map 2). Nineteen different aquatic species were identified during this survey. Common species in the Lake included Water naiad (Najas sp.), Spatterdock (Nuphar variegata), and Watershield (Brasenia schreberi). Purple bladderwort (Utricularia purprea), Common bladderwort (U. vulgaris), Whorl-leaf watermilfoil (Myriophyllum verticillatum), Shortspike watermilfoil (M. sibiricum), and Coontail (Ceratophyllum sp.) were species found in the lake that could be easily confused with invasive species (Table 2).

Of the 55 rake tosses spaced throughout the littoral zone of Rainbow Lake (Map 3), 23 had acquired plants upon recovery (41.8%). Brittlewort (*Nitella sp.*) was the only species recovered by the rake tosses that was not detected during the surface survey (Table 3).



Map 2: Location of the aquatic plant beds detected in Rainbow Lake and Clear Pond (Rainbow Lake) during the surface survey performed on 23 August, 2012.

Data for Plant Beds can be found on Table 2.



Map 3: Rake toss locations on Rainbow Lake and Clear Pond (Rainbow Lake), 23 August, 2012. 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.

(<50% cover), C = Common (25-50%), P = Present (15-25%), O = Occasional (5-15%), and R = Rare (<5%). Table 1: Percent cover of aquatic plant species detected at each plant bed in Rainbow Lake. Refer to Map 2 for bed locations. A = Abundant

Rainbow Lake						Plant	Bed Numbers	umbe	S		
				2	ω	4	ű	6	7	00	9
Scientific Name	Common Name	AREA (M²)	1012	179	1085	30749	46138	1297	76488	706561	15187
Brasenia schreberi	Watershield		R	0	0	0	0	0	C	P	0
Ceratophyllum sp.	Coontail			1	S Control of the Cont	4	70	4	g and an	R	1
Eleocharis sp.	Hairgrass		8	1	1	70	Р	R	6	R	1
Elodea canadensis	Canadian waterweed		1	1	2	à	0	1	R	0	
Elodea nuttalia	Western waterweed		ı	1	1	1	P	1	R	0	R
Myriophyllum sibiricum	Shortspike watermilfoil		9	1		1	ŧ	1	8	D	
Myriophyllum verticillatum	Whorl-leaf watermilfoil		ę	1	1	æ	1	1	ŧ	70	1
Najas sp.	Waternaiad		æ	ı	0	t	0	1	0	C	P
Nuphar variegata	Spatterdock		70	1	70	R	1	1	R	0	0
Nymphaea odorata	White waterlily		70	1		8	0	R	1	70	R
Potamogeton amplifolius	Large-leaf pondweed		0	1	70	0	0	0	1	0	0
Potamogeton epihydrus	Ribbon-leaf pondweed		0	0	0	20	ŧ	0	0	0	0
Potamogeton robbinsii	Robbins pondweed		ž	1	1	1	0	1	R	P	ъ
Potamogeton zosterformis	Flatstern pondweed		1	f		æ	2	1	1	1	
Sparganium sp.	Bur-reed		70	0	ŧ	70	20		0	R	ı
Utricularia purprea	Purple bladderwort		đ	ŧ	1	æ	Ъ	1	70	R	R
Utricularia vulgaris	Common bladderwort		2	1	1	5	P	1	R	0	
Vallisneria americana	Eel-grass		1	1	1	1	1	1	ı	R	

Rainbow Lake Narrows Scientific Name Brasenia schreberi	Common Name Water shield	1 2 AREA (M²) 126082 840 P 0	-1 126082 P		4088	4 19747 R	5 54141 O	6 5028 1		ee ee	ed Numbe 8 3 2525 R	8 9 2525 4475 R 0	9 10 475 4251 0 -	9 9 0	9 10 475 4251 0 -	9 10 11 12 : 475 4251 9681 83337 24
Ceratophyllum sp.	Coontail		1		. (ı		. (+	.	1 (1 (1 3		, ,	
Eleocharis sp.	Hairgrass		1	1		1				\dashv		3	3	1	1	1
Elodea canadensis	Canadian waterweed		1	1		0		1		\dashv			. 0	. 0	. 0 . 0 .	. 0 - 0 - R
Elodea nuttalia	Western waterweed					1		0	0		,	3	, , ,	70 70	70 70 1	, , , , , , , , , , , , , , , , , , ,
Myriophyllum sibiricum	Shortspike watermilfoil		1	•		R		0	0		20	20	20	70	70	70
Myriophyllum verticillatum	Whorl-leaf watermilfoil			1	0	8		2	1	-		1	1	1	1 2	1 1 70
Najas sp.	Water naiad		A	C	0	P		Р	РР	-	ъ	P P	P P O	P P O P	P P O P R	P P O P R P
Nuphar variegata	Spatterdock		ъ	0	0	0		70	R	-	0	O R	0 R	0 R 0	0 R O O R	O R O O R
Nymphaea odorata	White waterlily		20	1	æ	20		0	0	О		, 70	, 20	, , , ,	, R	, R R R R
Potamogeton amplifolius	Large-leaf pondweed		1	0	0	0		70	R	-	0	0 0	0 0 R	0 0 R -	0 0 R - R	0 0 R . R .
Potamogeton epihydrus	Ribbon-leaf pondweed		æ	'	1	0		0	0	-	ı		O	, O R	. O R	. O
Potamogeton robbinsii	Robbins pondweed		70	1	•	9		4	2			2	g g	2 2	1	1 1
Potamogeton zosterformis	Flatstern pondweed		1	,	1	1		æ	æ ,	, ,	5	1	s 6	\$ E		1 1
Sparganium sp.	Bur-reed		1	∞	0	0		0	0		0	0 R	O R	O R	O 20 20 1 20 20 20 20 20 20 20 20 20 20 20 20 20	O R R
Utricularia purprea	Purple bladderwort		0	ī	0	0		.1	, 20		R	R 1	1	22	2	2 2
Utricularia vulgaris	Common bladderwort		20	1	70	70		8	t		ŧ	2	r 1	r 1	* t	E

Cinhow lake)			Plar	Plant Bed Numbers	umbe	S
Clear Folia (Nambow Lanc)			↦	2	ω	4
Scientific Name	Common Name	AREA (M²)	4276	31905 7131	7131	478
SCIEILIBIC IAMILIC			And in contrast of the last of	,	,	١
Brasenia schreberi	Water shield		ω	ω	2	2
DI COCIII COLII COCII				-2	!	1
Najas sp.	Water naiad		environmental properties and propert	-		The state of the s
Number verienata	Spatterdock		}h	B	1-1	
TAMPETOL AND THE PROPERTY OF THE PARTY OF TH	loof pondwood		2	2	1	ı
Potamogeton ampilionus	raige 1091 political and 1001		NOVEN THE RESIDENCE OF THE PROPERTY OF THE PRO	-	- Contraction of the last of t	the same and
Potamogeton epihydrus	Ribbon-leaf pondweed		-	2	1	
			8	Acres	1	t
Potamogeton robbinsii	RODDING PONOWERS					THE PERSON NAMED IN COLUMN 2 I
Sparagnium sp.	Bur-reed		9	P	4	-
Vallisparia americana	Fel-grass		1	2	1	

Table 2: Species present on the rake at each of the rake toss locations and abundance. Refer to Map 3 for Rake locations.

Dainhaw I aka	- de		- Statement				מ	T GX	000	Tocs Numbers	3	D PC	Or continued and other	and the state of t	-	
NATIOOW LAKE		Ι					120	1	000	PAI		613		-	-	
Scientific Name	Common Name	>	S	0	6 7 8	-	9	10	> >	12	4	15	16	17	<u>∞</u>	19
Ceratophyllum sp.	Coontail	1	1	9	ı	1	ŧ	1	I	1	1	1	R	0	ı	1
Elodea canadensis	Canadian waterweed	1	ă	1	0	ı	E	D	1	1	1	0	1	1	1	1
Elodea nuttalia	Western waterweed	I	1	ı	1	1	8	í	1	0	3	1	1	1	1	
Myriophyllum sibiricum	Shortspike watermilfoil	1	1	8	0	1	1	ğ	1	70	1	1	1	0	1	1
Myriophyllum verticillatum	Whorl-leaf watermilfoil	1	1	1	ס	1	8	1	1	1	1	1	1	1	1	1
Najas sp.	Waternaiad	D	-1	0	1	0	D	ı		0	1	0	1	ı	D	0
Nitella sp.	Brittlewort	1	8	1	ŧ	1	1	1	9	1	1	E.	70	D	1	1
Potamogeton amplifolius	Large-leaf pondweed	1	To a	1	1	3	2	1	9	1		R	1	1	1	1
Potamogeton robbinsii	Robbins pondweed	1	0	1	1	1	8	0	70	0	1	0	0	0	R	1
Sparganium sp.	Bur-reed	2	1	1	1	1	1	1	1	æ	1	1	1	1	1	1
Utricularia purprea	Purple bladderwort	1	0	æ	- 8	R	0	ş		1	R	0	R	0	10	0
Utricularia vulgaris	Common bladderwort	1	1	1	1	ī	1	R	1	ı	ı	1	1	0	R	1
						-										

Rainbow Lake Narrows			20	6	000	S	3	Rake Toss Numbers	S
Scientific Name	Common Name	}>	2	W	4	0	10	2 3 4 6 10 14 18	100
Elodea canadensis	Canadian waterweed	1	1	1		1	ı	Р	1
Elodea nuttalia	Western waterweed	1	1	í	I	R	æ	ı	1
Najas sp.	Water naiad	A	D	Z	ARA	1	R	R A O	0
Potamogeton amplifolius	Large-leaf pondweed	1	1	1	1	1	ŧ	R	1
Vallisneria americana	Eel-grass	-1	ľ	1	1	1	1	1	R

No rakes returned with plant materials during the aquatic plant survey of Clear Pond (Rainbow Lake) 23-August-2012