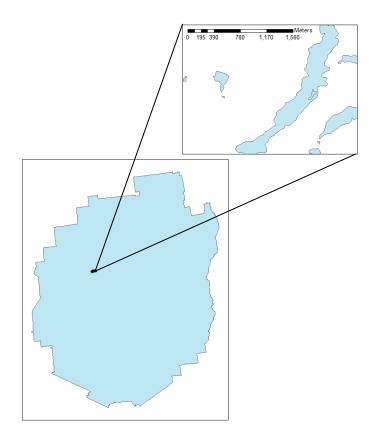
Twitchell Lake Aquatic Plant Survey 2013



Map 1: Location of Twitchell Lake within the Adirondack Park.

Twitchell Lake is located in Twitchell Lake, Herkimer County, New York (Map 1). This 150 acre lake was accessed through the use of a public boat launch located on the beach.

An aquatic plant survey was conducted at Twitchell Lake on 18 June 2013. Aquatic plants were relatively abundant in this body of water, with 17 aquatic plant beds comprising 17.41 acres or 11% of the lake. No invasive aquatic plant species were detected in this survey. Species most common in Twitchell Lake were Water Shield (*Brasenia schreberi*), Bur-reed (*Sparganium spp.*), Spatterdock (*Nuphar variegata*), and Ribbon Leaf Pond Weed (*Potamogeton epihyrus*) (Table 1).

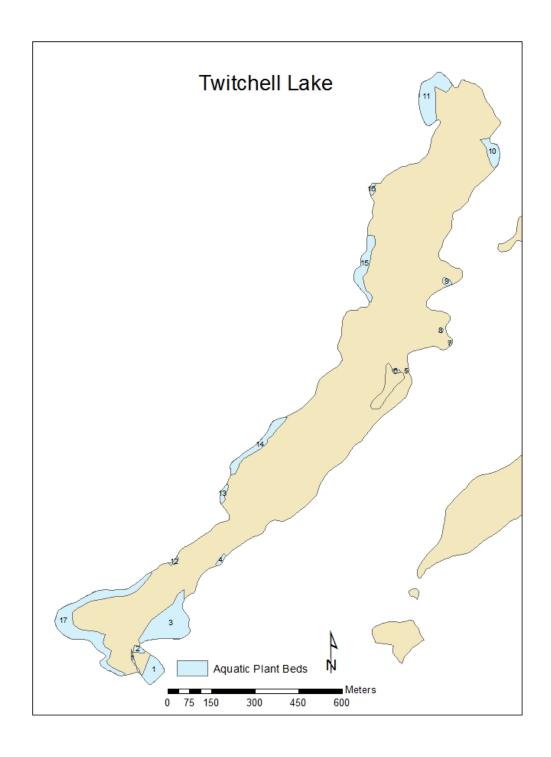
Of the 42 rake tosses deployed throughout the littoral zone of the lake, 9 had plants recovered. Common Bladder Wort (*Utricularia vulgaris*), Slender Watermilfoil (*Myripphyllum tenellum*), and Purple Bladderwort (*Utricularia purprea*) were species brought up on the rakes that were not detected during the surface survey of the lake (Table).

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

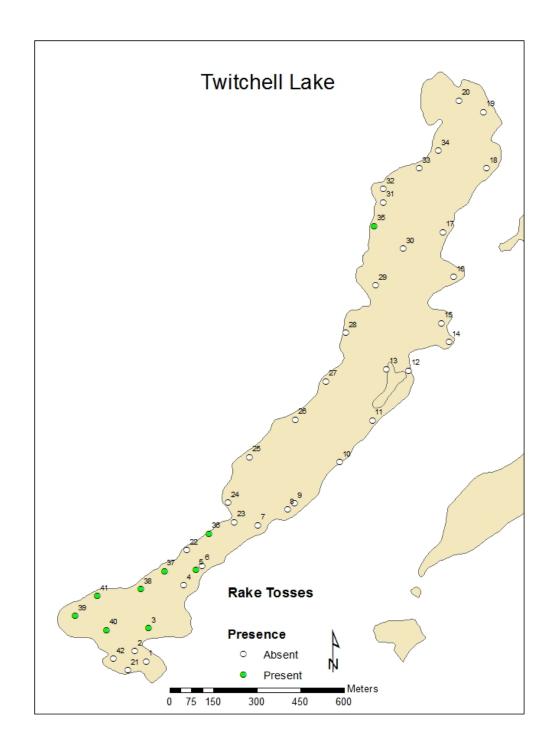
| Bed# | Water Shield (Brasenia schreberi) | Ribbon Leaf Pond Weed (Potamogeto n epihyrus) | White Water Lilly (Nymphae odorata) | Bur-reed (Sparganium spp.) | Spatterdock (Nuphar variegata) | Grassy Arrowhead (Sagittaria spp.) | Oakes Pond Weed (Potamogeto n oakesianus) | Pipewort (Eriocauln spp.) | Hairgrass (Eleocharis spp.) | Yellow Floating Heart (Nymphoides peltata) | Acres |
|------|---|--|--|----------------------------|--------------------------------------|---|---|---------------------------|-----------------------------------|--|----------|
| 1 | 1 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 1 | 1.25 |
| 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0.18 |
| 3 | 5 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 3.86 |
| 4 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0.13 |
| 5 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9.45E-04 |
| 6 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.08 |
| 7 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.02 |
| 8 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0.03 |
| 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.16 |
| 10 | 2 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0.86 |
| 11 | 2 | 0 | 0 | 2 | 2 | 0 | 2 | 0 | 0 | 0 | 2.61 |
| 12 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.1 |
| 13 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.26 |
| 14 | 3 | 2 | 0 | 2 | 2 | 3 | 3 | 0 | 0 | 1 | 1.38 |
| 15 | 3 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1.51 |
| 16 | 4 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 0 | 0.15 |
| 17 | 3 | 1 | 1 | 2 | 1 | 1 | 2 | 1 | 3 | 1 | 4.83 |

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

| Rake Toss # | Common Bladder Wort (Utricularia vulgaris) | Oakes Pond Weed (Potamogeton oakesianus) | Slender Watermilfoil (Myripphyllum tenellum) | Hairgrass (Eleocharis spp.) | Purple Bladderwort (Utricularia purprea) | Depth (ft) |
|-------------|--|---|--|-----------------------------------|---|------------|
| 3 | 0 | 2 | 0 | 1 | 0 | 6 |
| 5 | 0 | 0 | 0 | 0 | 1 | 11 |
| 35 | 1 | 0 | 0 | 0 | 0 | 9 |
| 36 | 1 | 0 | 0 | 2 | 0 | 5 |
| 37 | 0 | 0 | 0 | 0 | 1 | 12 |
| 38 | 0 | 0 | 0 | 1 | 2 | 7 |
| 39 | 0 | 0 | 0 | 0 | 2 | 8 |
| 40 | 0 | 0 | 0 | 0 | 3 | 10 |
| 41 | 0 | 0 | 1 | 0 | 0 | 7 |



Map 2: Locations of the aquatic plant beds detected in Twitchell Lake during the surface survey on 18 June 2013. Data for plant beds can be found on Table 1.



Map 3: Rake toss locations on Twitchell Lake on 18 June 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.