

Blair's Bay Glenburnie

At Blair's Bay Glenburnie, a qualitative survey of the areas which are directly adjacent to the proposed treatment site were assessed for aquatic macrophytes from the depths of 0-30 feet. The areas of the proposed treatment site which were conducive to aquatic plant growth due to either or both bottom sediments type and depth were observed for changes to the macrophyte community since the original 2021 rake toss plant survey. The areas favorable to aquatic vegetation at this location were dominated *Myriophyllum spicatum* (EWM). Shallow areas (1'-4') which had bottom sediments consisting of mostly sand with low organic content were scrutinized for the previously observed low growing aquatic macrophytes; *Eriocaulon septangulare*, *Eleocharis acicularis*, *Juncus pelocarpus*, *Najas* sp., *Utricularia resupinata*, *Myriophyllum alterniflorum* and *M. tenellum*. All species were observed except for *Najas guadalupensis*, *Najas flexilis* was recorded; in addition to the earlier recorded species, two additional species were seen in the shallows. *Sagittaria graminea* and *Sparganium angustifolium* were found during the swimover, but were not observed during the 2021 rake-toss survey at this site. *M. alterniflorum* was again found in Blair's Bay, a swimover of the area did locate a few plants in 2 -4 feet of water at this location. *M. alterniflorum* is listed as a threatened species in New York, but it is found in many shallow sandy areas in Lake George. The macroalgae *Chara* was also noted at this location.

In the 5 to 30 foot of depth area of the Blair's Bay littoral zone, the macrophytes: *Ceratophyllum demersum*, *Elodea canadensis*, *Isoetes laeustris*, *Meglodonta beckii*, *Potamogeton amplifolius*, *P. gramineus*, *P. perfoliatus*, *P. praelongus*, *P. robbinsii*, *Ranunculus longirostris*, *Vallisneria Americana* and two of the four original narrow-leaf *Potamogetons* from the first 2021 rake-toss survey were observed during the 2022 swimover. *Potamogeton zosteriformis* was not noted during the 2022 swimover, but the macrophyte *Zosterella dubia* was found in during the 2022 observations. The macroalgae *Nitella* was recorded at depths of 25 feet and deeper during the survey. *Isoetes lacustris* is also listed as a rare macrophyte by the State of New York, but is commonly found between 15 to 30 feet in depth in Lake George.

In total, four species identified during the initial plant survey were not seen during the 2022 swimover: *Najas guadalupensis*, *Potamogeton zosteriformis* and two narrow-leaf *Potamogetons*. Three species observed during the 2022 swimover that were not collected during the initial rake-toss plant survey were : *Sagittaria graminea*, *Sparganium angustifolium* and *Zosterella dubia*.

Blairs Bay Lake George, New York

2021 Submersed Aquatic Macrophyte Survey Report



Table of Contents

| | |
|--|----|
| Introduction | 3 |
| Methodology | 3 |
| <i>Point-Intercept Submersed Aquatic Plant Mapping</i> | 4 |
| <i>Macrophyte Occurrence Table</i> | 6 |
| <i>Discussion</i> | 7 |
| <i>Summary of Findings</i> | 7 |
| Appendix | 13 |

2021 Aquatic Macrophyte Survey Report

Blair's Bay Lake George

Introduction

On August 10th & 13th 2021, Warren County Soil & Water Conservation District conducted a detailed aquatic macrophyte survey for the Lake George Park Commission at Blair's Bay Lake George in Glenburnie, New York (Warren County). Blair's Bay, Lake George is located inside the Adirondack Park. The primary goal of the submersed aquatic vegetation (SAV) survey was to map and identify the abundance and distribution of Eurasian water milfoil to provide science-based recommendations for the continual management control strategies, as a more aggressive approach seems to be appropriate. Eurasian water milfoil at this location had previously been the target of suction harvesting, benthic barrier and hand harvesting in efforts to control its population. In addition to the target invasive plant, all submersed vegetation was mapped. The appendix of this report contains survey data tables as well as detailed distribution and abundance maps for each aquatic macrophyte species collected/observed in Blair's Bay. Also included is an aquatic macrophyte library, which provides a description of each species documented in 2021.

Methodology

Point-Intercept Submersed Aquatic Plant Mapping

The Point Intercept Method (PIM) of sampling aquatic macrophytes is designed to determine the extent of aquatic plant growth within an area of concern. The total number of sample locations is typically based on the total acreage of the treatment area, where at least one sample location per acre is surveyed at a given site. For Blair's Bay, 38 GPS-referenced locations were sampled for the presence of aquatic macrophytes. During the survey, each pre-determined sampling point was accessed via a boat and the real-time GPS coordinates of the sample location were recorded using a handheld GNSS system. The same sample locations that were gathered during this survey can be utilized for future surveys for accuracy and ease of comparison purposes, if desired. This way changes in the aquatic macrophyte community can be tracked over time, especially to determine the efficacy of management program. A sample point map is included in the appendix that depicts these sampling stations. One rake toss was conducted at each sample point for detection of target species and native submersed aquatic vegetation (SAV). The Rake Toss Methodology, developed by the US Army Corps of Engineers and modified by Cornell University, was intended for use in this type of aquatic macrophyte survey (Lord and Johnson 2006). The following data was collected for each sampling station: overall abundance of aquatic macrophyte growth, relative abundance of each species, and any other pertinent field notes regarding the sample location. Based on available bathymetry information we determined that the bay had approximately 38 acres of littoral zone within 0.3 of a mile radius from the proposed treatment area. Thus, sampling stations are spread out over the entire area of 35 feet in depth or less, with a concentration on the known area of milfoil located in said grid system. Water depth was measured at each sampling station using a sonar-based depth finder and a weighted tape measure as appropriate to the SAV conditions. Water depths are depicted on a map in the appendix of this report. Based on our 38 water depth measurements, we calculated an average depth of

11.9 feet, with a maximum depth of 34 feet. The entire bay within 0.3 of a mile radius from the proposed treatment zone has an area of approximately 80 acres, of that 38 acres have a depth shallower than 35feet. That means only 47.5 % of the area would be considered littoral zone by depth; bottom conditions further reduce the applicable littoral zone due to bottom substrate type. Large stretches of this sampling location have a steep bedrock substrate which does not hold sediment and are not conducive to SAV growth. For each rake toss, the weed rake, attached to a 10-meter-long piece of rope, was tossed from a random side of the boat. The weed rake used for aquatic macrophyte surveys has a specific design. It is constructed with two 13.5-inch wide metal garden rakes attached back to back. The wooden handles are removed, and a 10-meter-long nylon rope is attached to the rake heads. It is important to toss the weed rake the full 10 meters (a loop at the end of the rope is attached to the boat to prevent losing the rake). The weed rake is slowly retrieved along the bottom, and carefully hoisted into the boat. To determine the amounts of overall submersed vegetation, the weed mass is assigned one of five densities, based on the semi-quantitative metrics developed by Cornell University.

Aquatic Vegetation Abundance Scale

Field Note

| Symbol | Abundance | Level Description |
|--------|-----------|---|
| 0 | Zero | No plants on rake |
| T | Trace | One or two stems or fingerful on rake |
| S | Sparse | Three to ten stems or handful on rake |
| M | Moderate | More than ten stems or covering all rake tines |
| D | Dense | Rakeful of plants, difficult to bring into boat |

As shown above, these densities are: *No Plants* (empty rake), *Trace* (one or two stems per rake, or the amount that can be held between two fingers), *Sparse* (three to 10 stems, but lightly covering the rake, or about a handful), *Medium* (more than 10 stems, and covering all the tines of the rake), or *Dense* (entire rake full of stems, and one has trouble getting the plant mass into the boat). Pictures of the corresponding densities are included in the appendix. These densities are abbreviated in the field notes as 0, T, S, M, and D. Next, the submersed weed mass is sorted by genus (or species if possible) and one of the five densities is assigned to each genus and/or species. Finally, overall floating macrophyte density within a 10-meter diameter of the survey boat is assigned a density, as well as an estimated density for each separate genus (or species) observed. This data is recorded in the field notes. This procedure is then repeated for the remaining sample points. For the purposes of this survey, the terms “density” and “abundance” refer to the same description.

Lake George New York is classified as an oligotrophic or meso/oligotrophic lake with a mean depth of approximately 70 ft deep; the lower nutrient, low production lake has a limited littoral zone by percentage of area, unlike many of the smaller Adirondack waterbodies. The Eastern shoreline and in fact a majority of the lake George shoreline is dominated by steep rocky substrates, it is not uncommon to be in 30 feet of water less than 25 feet from the mean high water mark.

In Blair's Bay Glenburnie, the areas which are directly adjacent to the proposed treatment site were heavily sampled for aquatic macrophytes from the depths of 0-25 feet; the areas within the 0.3 miles of the proposed treatment site which were conducive to aquatic plant growth due to either or both bottom sediments type and depth were also sampled. The areas favorable to aquatic vegetation at this location were dominated *Myriophyllum spicatum* (EWM). The reason for extended spacing between marked sample locations was as we travelled both to the north and south of the proposed treatment area, water shallow enough (< 30 ft) for aquatic plants had benthic conditions consisting of mostly bedrock or large cobble/ boulder piles, very little soft sediment. Areas consistent with aquatic plant growth by depth and sediment type visible from the surface (<15ft) were sampled. Shallow areas which had bottom sediments consisting of mostly sand with low organic content were also sampled repeatedly for low growing macrophytes such as *Eriocaulon*, *Eleocharis*, *Juncus*, *Myriophyllum alterniflorum* and *M. tenellum*. *M. alterniflorum* was noted at site 3 during the survey; a diver swimover of the area did anecdotally report a hand full of plants seen in 2 –4 feet of water at a location near the delta of Sucker Brook in Blair's Bay. *M. alterniflorum* is listed as a threatened species in New York, but it is found in many shallow sandy areas in Lake George. *Isoetes lacustris* is also listed as a rare macrophyte by the State of New York, but commonly found below 20 feet deep in Lake George. *M. tenellum* was found at 4 sites total during survey, with three being close to or within the proposed treatment area.

Summary of Aquatic Vegetation Blair's Bay—Lake George

| Glenburnie (Blair's Bay) | | | |
|----------------------------------|----------------------------|----------|--------------|
| Common Name | Scientific Name | Stations | % occurrence |
| Eurasian Water milfoil | Myriophyllum spicatum | 14 | 36.8 |
| Slender Naiad | Najas flexillis | 14 | 36.8 |
| Robbins Pondweed | Potamogeton robbinsii | 13 | 34.2 |
| Muskgrass | Chara | 8 | 21.1 |
| Stonewort | Nitella | 7 | 18.4 |
| American Eelgrass | Vallisneria americana | 7 | 18.4 |
| Coontail | Ceratophyllum demersum | 6 | 15.8 |
| Longbeak Buttercup | Ranunculus longirostris | 6 | 15.8 |
| Northeastern Bladderwort | Utricularia resupinata | 6 | 15.8 |
| Grassy Pondweed | Potamogeton gramineus | 6 | 15.8 |
| Brown Fruit Rush | Juncus pelocarpus | 5 | 13.2 |
| Largeleaf Pondweed | Potamogeton amplifolius | 5 | 13.2 |
| Narrowleaf Pondweed | Potamogeton narrow-leaf 3 | 4 | 10.5 |
| Narrowleaf Pondweed | Potamogeton narrow-leaf 4 | 4 | 10.5 |
| Slender Water milfoil | Myriophyllum tenellum | 4 | 10.5 |
| Canadian Waterweed | Elodea canadensis | 3 | 7.9 |
| Clasping leaf Pondweed | Potamogeton perfoliatus | 3 | 7.9 |
| Narrowleaf Pondweed | Potamogeton narrow-leaf 2 | 2 | 5.3 |
| Quillwort | Isoetes lacustris | 2 | 5.3 |
| White stem Pondweed | Potamogeton praelongus | 2 | 5.3 |
| Narrowleaf Pondweed | Potamogeton narrow-leaf 1 | 2 | 5.3 |
| Flatstem Pondweed | Potamogeton zosteriformis | 2 | 5.3 |
| Spikerush | Eleocharis acicularis | 1 | 2.6 |
| Pipewort | Eriocaulon septangulare | 1 | 2.6 |
| Alternate flowered water milfoil | Myriophyllum alterniflorum | 1 | 2.6 |
| Southern Naiad | Najas guadalupensis | 1 | 2.6 |
| Water Marigold | Megalodonta beckii | 1 | 2.6 |

Discussion

Macrophyte Abundance and Distribution

The table above is a summary of the frequency of occurrence data for the 2021 Point Intercept survey at Blair's Bay - Lake George. Entries in **red** indicate an invasive species, while entries in **green** indicate an macro-alga species. The aquatic plant community can be divided into several different categories. These include submersed aquatic plants (such as pondweeds, milfoils, and bladderworts), floating-leaf plants (such as water lilies) and free-floating aquatic plants (such as duckweeds and watermeal). The latter two groups typically comprise the floating plant community. Macroscopic algae (such as muskgrass and stonewort) are typically collected during these surveys as they impact the SAV community or serve in a similar ecological niche. Emergent growth (such as pickerelweed and cattails) commonly occur along shoreline margins, but typically are not a focal point of SAV point intercept surveys, nor were any seen or collected during this survey. At Blair's Bay, aquatic macrophytes were collected at 32 of the 38 sample points (or 84%) in the basin. Both trace and sparse abundance macrophytes were collected at twenty (or 56%) of the sites. Moderate abundance macrophytes accounted for 29% of the sites (n=11) while only one of the sites (n=1, or 3%) were considered dense abundance. We typically consider moderate and dense Eurasian Watermilfoil (EWM) to be at nuisance abundance. Therefore, nuisance growth occurred at 32% of the sites with EWM growth at Blair's Bay.

Richness (or diversity) is the measure of different species at a specific location. At Blair's Bay, we collected/observed 27 different aquatic macrophytes. Further, we can examine the individual sample site richness to determine if there are locations in the basin that have higher (or lower) richness. The richness ranged from 0 to 11 unique aquatic macrophytes. The mean richness at all 38 stations was calculated at 3.4 macrophytes. In other words, an average of just under three and a half different macrophytes were collected at each sample site. Sample station richness is depicted on a map in the appendix of this report.

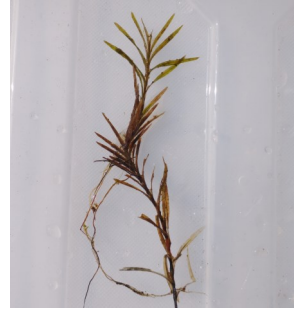
Eurasian water milfoil is an aggressive invasive submersed plant and is the current target of localized control efforts in this bay. The EWM beds cover an area of approximately 3 acres of the 38 acres surveyed; Eurasian water milfoil occurred at 14 (or 37%) of the sites surveyed and was one of the dominant aquatic macrophytes collected/observed at this area; matched by *Najas flexilis*. Most abundances were trace (3, or 21%) or sparse (3, or 21%). Therefore, 58% of the sites were medium (n=4) or dense (n=4), which we would consider a nuisance. Eurasian water milfoil is found in two large bed areas with native macrophytes surrounding the two beds, although EWM was found scattered in lesser amounts between the two beds. Its possible that given time, EWM will begin to dominate the area between the two beds forming one large population of Eurasian water milfoil; this has been seen at a number of locations in Lake George before and at this location in particular.



Najas flexilis is very common in Lake George and New York State. *N. flexilis* was collected at 14 (or 37%) of the sites in 2021. At all of these sites the small plants were found in trace abundance (n=14, or 100%).



Potamogeton robbinsii is a highly desirable native pondweed. It was documented in Blair's Bay at 13 sites (34%) with a distribution found at depths of 10 feet or more, but can be found in shallower waters.



Macroalga— *Chara* and *Nitella* are visible multi-branching algal species that ecologically function as higher plants. There are two main native genera in the northeast: muskgrass (*Chara* sp.) and stonewort (*Nitella* sp.).

Chara (muskgrass) tends to be darker green in color, with stiffer calcium-encrusted branches generally found in shallower waters. It was found at 8 sites (21%) in Blair's Bay at an average depth less than 6 feet.



Nitella (stonewort) was found at 7 sites (18%) at an average depth of 24 feet; it tends to be lighter green, smooth more delicate branching and located among the last plants found in deepest waters at the end of the littoral zone.



Vallisneria Americana - Eel Grass have long basal ribbon like leaves with obvious lacunae bands their entire length, common in Lake George it was found at 7 sites (18%) at varying depths.



Ceratophyllum demersum –Coontail is a free floating plant with whorled leaves and one commonly mistaken for EWM. The plant was identified at 6 sites (16%) in Blair's Bay and was often found in amongst EWM beds.



Ranunculus longirostris –Longbeaked Buttercup has leaves that are finely divided into many thread-like segments, round to fan-shaped in outline, to $\frac{3}{4}$ inch long and about 1 inch wide, alternately attached. Stems and leaves are all submersed and mostly hairless. It was found in trace or sparse amounts at 6 sites (16%) during sampling ranging from 4 to 12 feet in depth.



Utricularia resupinata –Northeastern Bladderwort unlike a majority of Bladderworts, resupinata is not a free floating plant, it was found in trace amounts at 6 sites (16%) in shallow sandy areas in Lake George. Thin thread like leaves with carnivorous bladders on leaf stems and roots identify this species. Found at depths of less than 5 feet it sometimes forms mats in shallow sandy areas throughout the lake.



Potamogeton gramineus - Grassy Pondweed was one of the ten potamogetons found during this survey, P. gramineus is a common Lake George species which can be found throughout the littoral zone from 1 to 25 feet deep. During this survey it was recorded from 3 to 14 feet deep at 6 sites (16%) in trace amounts.



Juncus pelocarpus - Brownfruit Rush is commonly found in sandy sediments from the wave break zone to 12 feet of depth in Lake George, during this sampling in Blair's Bay it was recorded in 3 to 10 feet of water at 5 stations (13%). 4 stations (80%) were listed as trace, 1 station (20%) was listed as sparse.



Potamogeton amplifolius - Large-leaf Pondweed was one of the ten potamogetons found during this survey, P. amplifolius is a common Lake George species which can be found throughout the littoral zone from 3 to 25 feet deep. During this survey it was recorded from 6 to 21 feet deep at 5 sites (13%) in trace amounts at 4 sites (80%) and sparse amounts at 1 sites (20%).



Narrow-leaf Potamogeton 3 - there are a number of narrow-leaf potamogeton species common to Lake George that without seeds and a dissecting microscope are very difficult to identify to species. This species was found at 4 sites (10%) in Blair's Bay. It was found between 9 and 20 feet in depth, 3 samples densities were trace (75%) 1 sample density was recorded as sparse (25%).



Narrow-leaf Potamogeton 4 - there are a number of narrow-leaf potamogeton species common to Lake George that without seeds and a dissecting microscope are very difficult to identify to species. This species was found at 4 sites (10%) in Blair's Bay. It was found between 4 and 8 feet in depth, All 4 samples densities were trace (100%).



Myriophyllum tenellum - Slender Water Milfoil is the third milfoil found during the survey, and the first of the two native milfoils found. M. tenellum is found in soft or sandy areas throughout Lake George. It was found between 4 and 12 feet in depth, 3 samples densities were trace (75%) and within or close to the proposed treatment area, 1 sample density was recorded as moderate (25%) was found outside the immediate treatment area.



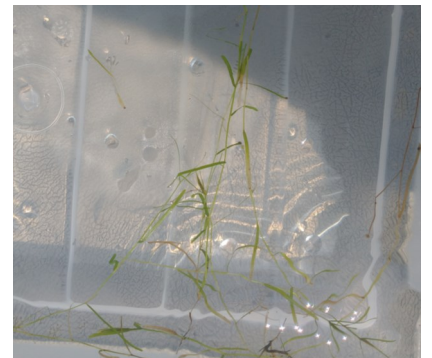
Elodea Canadensis –Canadian Waterweed has slender stems that can reach a meter in length, and a shallow root system. The stem is adorned with 3 whorled lance-like leaves that are attached directly to the stalk that tend to congregate near the stem tip. It was found in 3 at three sample sites (7%) in Blair’s Bay. The depths were from 14 to 21 feet deep, with densities of trace (1), sparse (1) and moderate (1).



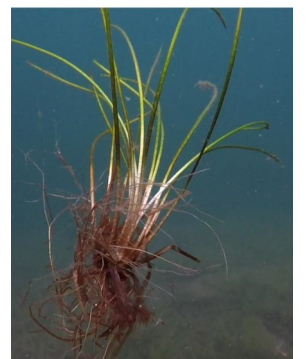
Potamogeton perfoliatus - Claspingleaf Pondweed is another of the ten potamogetons found during this survey, P. perfoliatus is a common Lake George species which was found throughout the littoral zone from 3 to 32 feet deep. During this survey it was recorded from 8 to 32 feet deep at 3 sites (8%) in trace amounts.



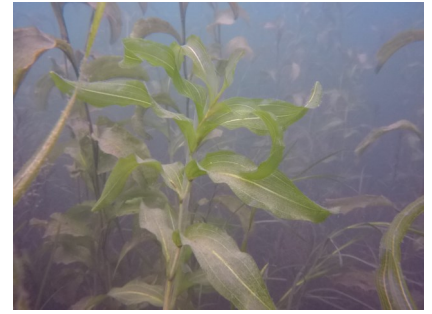
Narrow-leaf Potamogeton 2: - there are a number of narrow-leaf potamogeton species common to Lake George that without seeds and a dissecting microscope are very difficult to identify to species. This species was found at 2 sites (5%) in Blair’s Bay. It was found between 11 and 15 feet in depth, Both sample densities were trace (100%).



Isoetes lacustris: - Lake Quillwort is one of two species of found in lake George and listed as a rare aquatic plant in New York State; this plant is commonly found in the deep waters of Lake George, from depths of 20 to 30 deep. It was found at two sites in Blair’s Bay (5%) in trace amounts. One of the sites was listed as 13 feet deep but was on a steep section of the bay, chances are this sample came from a deeper end of the rake toss sample area.



Potamogeton praelongus– White stem Pondweed is another of the ten potamogetons found during this survey, *P. praelongus* is a common Lake George species which was found throughout the littoral zone from 8 to 25 feet deep. During this survey it was recorded from 12 to 14 feet deep at 2 sites (5%) in trace amounts.



Narrow-leaf Potamogeton 1: - there are a number of narrow-leaf potamogeton species common to Lake George that without seeds and a dissecting microscope are very difficult to identify to species. This species was found at 2 sites (5%) in Blairs Bay. It was found at 4 and 21 feet in depth, Both sample densities were trace (100%).



Potamogeton zosteriformis: Flat-stem Pondweed is another of the ten potamogetons found during this survey, *P. zosteriformis* is a common Lake George species which was found throughout the littoral zone from 5 to 20 feet deep. During this survey it was recorded from 6 to 9 feet deep at 2 sites (5%) in trace amounts.



Eleocharis accicularis: Spikerush is commonly found in sandy sediments from the wave break zone to 10 feet of depth in Lake George, during this sampling in Blair's Bay it was recorded in 5 feet of water at 1 station (3%). 1 site (100%) was listed as trace.



Eriocaulon septangulare: Pipewort is commonly found in sandy sediments from the wave break zone to 10 feet of depth in Lake George, during this sampling in Blair's Bay it was recorded in 8 feet of water at 1 site (3%). 1 site (100%) was listed as trace.



Myriophyllum alterniflorum: Alternate Flowered Water Milfoil is one of two native species of found in lake George and listed as a threatened aquatic plant in New York State; this plant is not uncommon in the waters of Lake George, from depths of 3 to 10 deep. It was found at one site in Blair's Bay (3%) in trace amounts. The one site (#3) during the survey with M. alterniflorum noted was listed as 4 feet deep; a diver reported a few plants seen on the stream delta in Blair's Bay.



Najas guadalupensis: Southern Naiad is found occasionally in Lake George, this species was identified at one station (3%) in Blair's Bay at 8 feet in depth.



Megalodonta beckii: Water marigold is common in Lake George, found throughout the littoral zone in waters from 5 to 25 feet in depth. In Blair's Bay it was found at a single site (3%) in a trace amount in 13 feet of water.



Appendix

| Site-# | Depth (ft) | C.demersum | Chara | E. acicularis | E. canadensis | E. septangulare | I.lacustris | J. pelocarpus | M. beckii | M. alterniflorum | M. spicatum | M. tenellum | N. flexilis | N. guadalupensis | Nitella | P. amplifolius | P. gramineus | P. perfoliatus | P. praelongus | P. robbinsii | P. zosterformis | P. narrowleaf 1 | P. narrowleaf 2 | P. narrowleaf 3 | P. narrowleaf 4 | R. longirostris | U. resupinata | V. americana | Richness | Rake density | |
|--------|------------|------------|-------|---------------|---------------|-----------------|-------------|---------------|-----------|------------------|-------------|-------------|-------------|------------------|---------|----------------|--------------|----------------|---------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|--------------|----------|--------------|---|
| 1 | 2.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 2 | 4.5 | | T | | | | | S | | | T | | T | | | | | | | T | | | | | T | T | T | | | 8 | S |
| 3 | 4 | | T | | | | | | | T | S | | T | | T | | T | | | T | | T | | | | S | | T | 10 | M | |
| 4 | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 |
| 5 | 9 | | | | | | | | | | S | | | | | | | | | | | | | | | | | | 1 | T | |
| 6 | 18 | | | | T | | | | | | T | | T | | M | | | | | T | | | | | | | | | | 5 | M |
| 7 | 31 | | | | | | | | | | | | | | T | | | | | | | | | | | | | | 1 | T | |
| 8 | 19 | | | | | | | | | | | | | | | | | | | S | | | | | | | | | 1 | S | |
| 9 | 9 | | | | | | | | | | | T | | | | | | T | | M | | | | T | | | | | 4 | M | |
| 10 | 6 | T | | | | | | | | | M | | | | | | | | | | | | T | | | | | T | 4 | M | |
| 11 | 6 | T | | | | | | | | | M | | | | | T | | | | T | T | | | | | | | T | 6 | M | |
| 12 | 5 | | | | | | | T | | | | T | T | | | | | | | T | | | | | | | S | | 5 | S | |
| 13 | 21 | S | | | S | | | | | | | | | | | S | | | | S | | T | | | | | | | 5 | S | |
| 14 | 9 | | | | | | | | | | M | | | | | | | | | S | T | | T | | | | | | 4 | M | |
| 15 | 7 | | | | | | | | | | | | T | | | T | | | | T | | | | | T | T | | | 5 | S | |
| 16 | 4 | | T | | | | | T | | | | T | T | | | | | | | | | | | | | | T | | 5 | T | |
| 17 | 34 | | | | | | | | | | T | | | | S | | | | | | | | | | | | | | 2 | S | |
| 18 | 15 | | | | | | | | | | D | | | | | | | | | | | | | | | | | | 1 | M | |
| 19 | 8 | | T | | | T | | | | | S | | T | T | | | T | T | | T | | | | | T | S | | T | 11 | M | |
| 20 | 5 | | | T | | | | | | | | | | | | | T | | | | | | | | T | T | T | | 5 | S | |
| 21 | 3.5 | | T | | | | | | | | | | T | | | | | | | | | | | | | | | | 2 | T | |
| 22 | 8 | | | | | | | | | | D | | | | | | | | | | | | | | | | | | 1 | D | |
| 23 | 10 | T | | | | | | | | | D | | | | | | | | | | | | | S | | | | | 3 | M | |
| 24 | 12 | T | | | | | | | | | D | | | | | T | T | | T | T | | | | | | T | | T | 8 | M | |
| 25 | 14 | M | | | M | | | | | | M | | | | | | | | T | T | | | | | | | | T | 6 | M | |
| 26 | 20 | | | | | | T | | | | | | | | T | | | | | | | | | T | | | | | 3 | T | |
| 27 | 32 | | | | | | | | | | | | T | | S | | | T | | | | | | | | | | | 3 | S | |
| 28 | 5 | | T | | | | | T | | | | | | | | | | | | | | | | | | | T | | 3 | S | |
| 29 | 8 | | | | | | | | | | | | T | | | | | | | | | | | | | | | | 1 | T | |
| 30 | 10 | | | | | | | | | | | | T | | | | | | | | | | | | | | | | 1 | T | |
| 31 | 18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 32 | 12 | | T | | | | | T | | | | M | T | | | | T | | | | | | | | | | | T | 6 | S | |
| 33 | 3 | | T | | | | | | | | | | T | | | | | | | | | | | | | | T | | 3 | T | |
| 34 | 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 35 | 13 | | | | | | T | | T | | | | T | | | T | T | | | | | | | T | | | | | 6 | T | |
| 36 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 37 | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 0 | 0 | |
| 38 | 29 | | | | | | | | | | | | | | T | | | | | | | | | | | | | | 1 | T | |

LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Sample Point



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Water Depth in Feet

N

0 125 250 500 750 Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

**Richness-Number of
 Species per Sample Point**

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11



0 125 250 500 750
 Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
 IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Ceratophyllum demersum
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Chara sp
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Eleocharis acicularis*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Elodea canadensis*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Eriocaulon septangulare
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

- *Isoetes lacustris*
- Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Juncus pelocarpus
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Myriophyllum alterniflorum*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

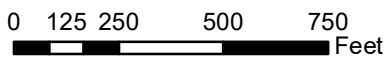
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Megalodonta beckii
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



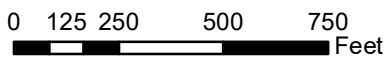
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Myriophyllum spicatum*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



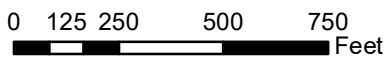
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Myriophyllum tenellum*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



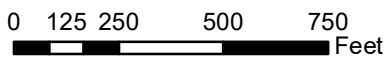
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Najas flexilis*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Najas guadalupensis*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

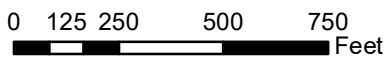
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Nitella sp
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



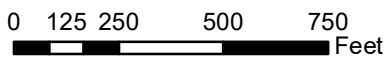
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Potamogeton amplifolius
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



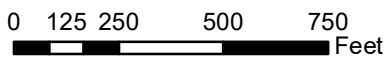
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Potamogeton gramineus
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



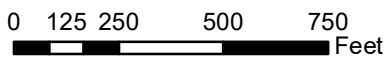
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Potamogeton narrow-leaf 1 o
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Potamogeton narrow-leaf 2 p
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

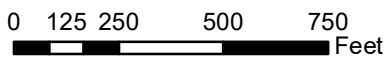
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Potamogeton narrow-leaf 3 s
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



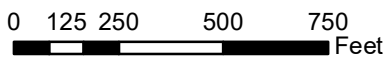
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Potamogeton narrow-leaf 4 v
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



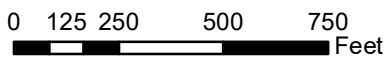
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Potamogeton perfoliatus
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



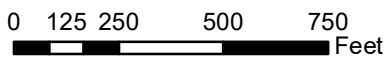
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Potamogeton praelongus
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



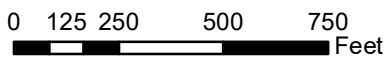
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Potamogeton robbinsii
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

- *Potamogeton zosteriformis*
- Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

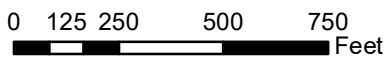
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Ranunculus longirostris*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Utricularia resupinata*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Vallisneria americana*
● Sample Point

Plant Density
T = Trace Plants
S = Sparse Plants
M = Moderate Plants
D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community

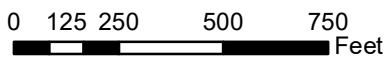


LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Sample Point

■ Treatment Area

N



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● *Myriophyllum alterniflorum*

● Sample Point

■ Treatment Area

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community



LAKE GEORGE
Aquatic Vegetation Survey
Aug & Sept 2021
Site: Blair's Bay

● Myriophyllum tenellum

● Sample Point

■ Treatment Area

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



0 125 250 500 750
Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus
IGN, and the GIS User Community

