

Sheep Meadow Bay Lake George, New York

August 19th 2024 Submersed Aquatic
Macrophyte Survey Report

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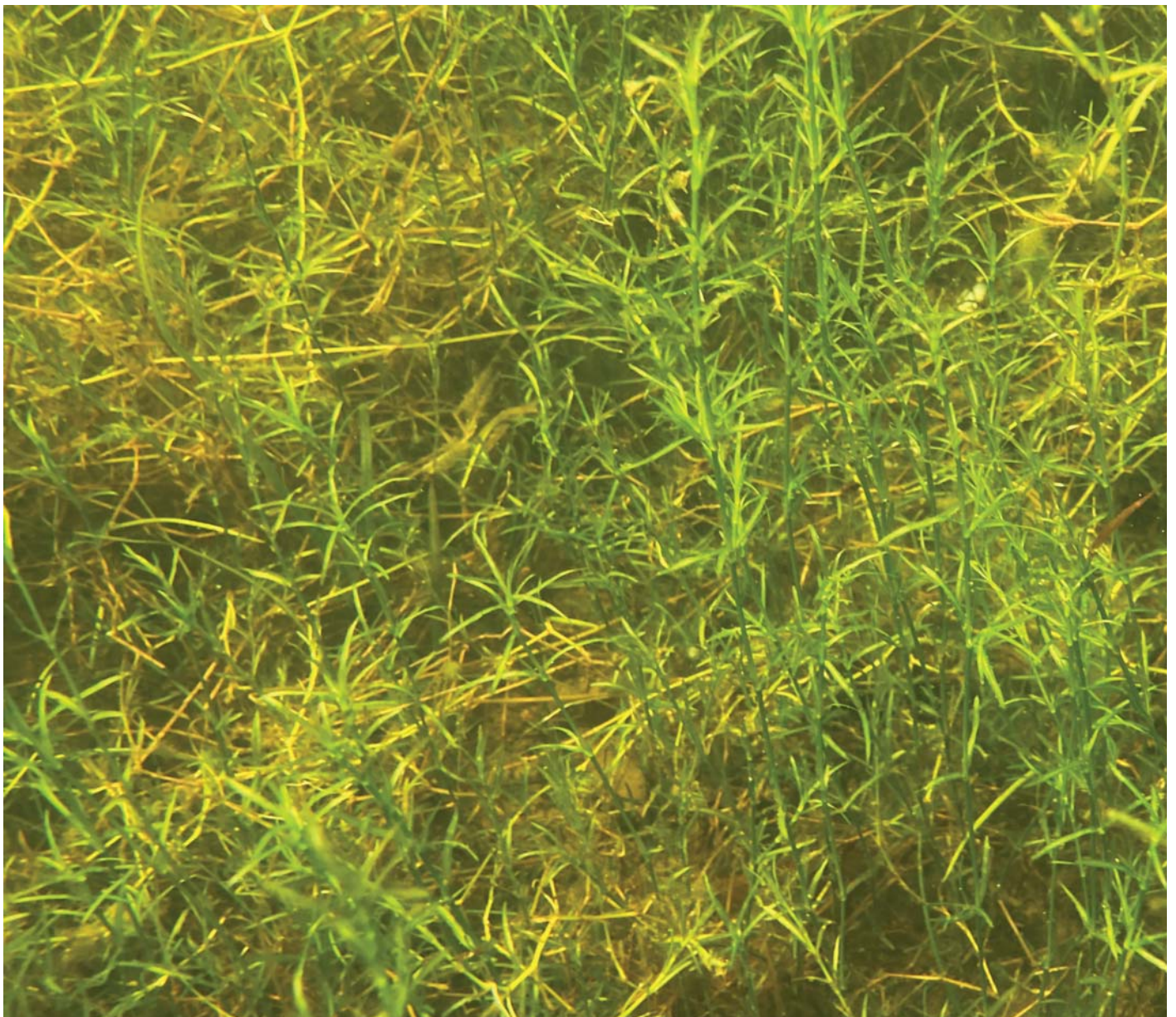


Table of Contents

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

2024 Aquatic Macrophyte Survey Report

Sheep Meadow (Jeliffe-Knight) Bay Lake George

Introduction

On August 19th 2024, Oakley Aquatic Consulting conducted a detailed aquatic macrophyte survey for the Lake George Park Commission at Sheep Meadow Bay, Lake George in New York (Warren County). Sheep Meadow 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. The 2024 post-treatment survey was to record the results of the use of ProcellaCor against Eurasian water milfoil and possible effects to the native plant population. 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 aquatic vegetation was also 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 Sheep Meadow Bay. Also included is an aquatic macrophyte library, which provides a description of each species documented in 2024.

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 Sheep Meadow Bay, 40 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 40 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 40 water depth measurements, we calculated an average depth of 12.6 feet, with a maximum depth of 25 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 40 acres have a depth shallower than 35 feet. That means only 50 % 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

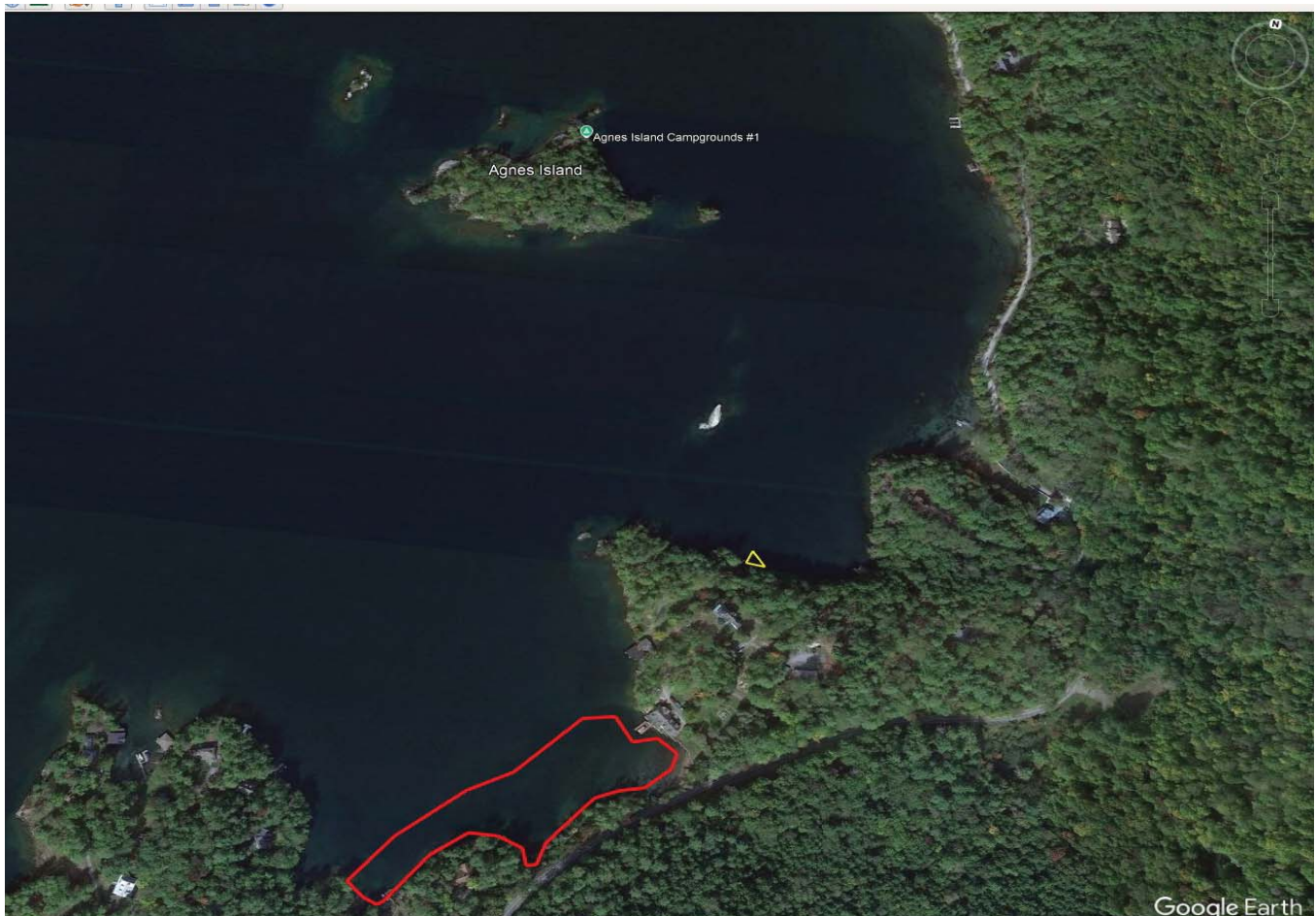
Symbol	Abundance	Level Description
0	Zero	No plants on rake
T	Trace	One or two stems or fingerful on rake
S	Sparse	Three to ten stems or handful on rake
M	Moderate	More than ten stems or covering all rake tines
D	Dense	Rakeful of plants, difficult to bring into boat

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), *Moderate* (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.

Sheep Meadow Bay, conditions at this site were very similar to those found at Glenburnie. The near shore areas with both favorable bottom substrate and depths were dominated by EWM, with pockets of native macrophytes. Areas of the wave break zone with depths of 1 to 4 feet deep mostly consisted of bottom sediments of sand with little organic materials; areas within the 0.3 mile radius of the proposed treatment areas were lacking in aquatic macrophytes due to benthic bedrock or steep drop offs which are not conducive to holding soft organic sediment needed for plant growth. Areas of 20 ft in depth and greater were found to have *Isoetes lacustris* a macrophyte found on the New York State list of Rare, Threatened or Endangered plants; though it is commonly found in Lake George throughout this depth range. Areas of 25 ft in depth or more were sampled for the presence of *Nitella* which is generally found in Lake George at the 25- 35 foot depth range.

In Sheep Meadow Bay the areas which are directly adjacent to the proposed treatment site were heavily sampled for aquatic macrophytes from the depths of 0-28 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. tenellum* was located at three locations during the survey, but not within the immediate proposed treatment area, it was found north of the proposed treatment area within the 0.3 mile radius of the known Eurasian Watermilfoil bed. Area marked in red denotes approximate treatment area. Area marked in yellow is the concentration of EWM outside of treatment zone.



Summary of Aquatic Vegetation Sheep Meadow Bay—Lake George

Sheep Meadow Bay (Jeliffe-Knight)		2024	
Common Name	Scientific Name	Stations	% occurrence
Slender Naiad	<i>Najas flexillis</i>	28	70.0
Grassy Pondweed	<i>Potamogeton gramineus</i>	14	35.0
Robbins Pondweed	<i>Potamogeton robbinsii</i>	13	32.5
American Eelgrass	<i>Vallisneria americana</i>	11	27.5
Stonewort	<i>Nitella sp.</i>	9	22.5
Narrowleaf Pondweed	<i>Potamogeton narrow-leaf 1</i>	9	22.5
Canadian Waterweed	<i>Elodea canadensis</i>	7	17.5
Northeastern Bladderwort	<i>Utricularia resupinata</i>	7	17.5
Water Stargrass	<i>Zosterella dubia</i>	7	17.5
Southern Naiad	<i>Najas guadalupensis</i>	6	15.0
Narrowleaf Pondweed	<i>Potamogeton narrow-leaf 3</i>	6	15.0
Flatstem Pondweed	<i>Potamogeton zosteriformis</i>	6	15.0
Spikerush	<i>Eleocharis acicularis</i>	5	12.5
Largeleaf Pondweed	<i>Potamogeton amplifolius</i>	5	12.5
Narrowleaf Pondweed	<i>Potamogeton narrow-leaf 4</i>	5	12.5
Pipewort	<i>Eriocaulon septangulare</i>	4	10.0
Narrowleaf Pondweed	<i>Potamogeton narrow-leaf 2</i>	4	10.0
Clasping leaf Pondweed	<i>Potamogeton perfoliatus</i>	4	10.0
Longbeak Buttercup	<i>Ranunculus longirostris</i>	4	10
Muskgrass	<i>Chara sp.</i>	3	7.5
Brown Fruit Rush	<i>Juncus pelocarpus</i>	2	5.0
Water Marigold	<i>Megalodonta beckii</i>	2	5.0
Slender Water milfoil	<i>Mryiophyllum tenellum</i>	2	5.0
White stem Pondweed	<i>Potamogeton praelongus</i>	2	5.0
Lake Quillwort	<i>Isoetes lacustris</i>	1	2.5
Eurasian Watermilfoil	<i>Myriophyllum spicatum</i>	1	2.5

Discussion

Macrophyte Abundance and Distribution

The table above is a summary of the frequency of occurrence data for the 2024 Point Intercept survey at Sheep Meadow Bay, Lake George. Entries in **red** indicate an invasive species, while entries in **green** indicate a macro-alga species. The aquatic plant community can be divided into several different categories. These include submersed aquatic plants (such as pondweeds, milfoils, and Naiads), floating-leaf plants (such as water lilies, watershield and floating heart) 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 Sheep Meadow Bay, aquatic macrophytes were collected at 38 of the 40 sample points (95%) taken in the basin. Trace abundance macrophytes were collected at 22 (55%) of the 40 sites, Sparse abundance was found at 8 sites (20%). Moderate abundance macrophytes accounted for 8 of the sites (20%) while none of the sites (0%) were considered dense abundance. We typically consider moderate and dense Eurasian Watermilfoil (EWM) to be at nuisance abundance. Therefore, nuisance growth occurred at none of the sites with EWM growth within the treatment areas at Sheep Meadow Bay.

Species Richness (or diversity) is the measure of different species at a specific location. At Sheep Meadow Bay, we collected/observed 26 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 40 stations was calculated at 3.5 macrophyte species per site. In other words, an average of three and a half different macrophytes were collected at each sample site. Sample site 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 dense EWM bed covered an area of slightly over an acre of the 40 acres surveyed; Eurasian water milfoil occurred at 10 (25%) of the sites during the pre-treatment survey in 2021 and was one of the dominant aquatic macrophytes collected/observed in the area; exceeded only by *Najas flexilis* and *Potamogeton robbinsii*. Eurasian water milfoil was found in one larger bed area and one small bed with native macrophytes between the two beds, although EWM was found scattered in lesser amounts between the two beds. In the 2024 survey, no living milfoil was retrieved during the rake toss survey conducted within the treatment area. An area north of the treatment zone on the opposite side of the northern peninsula which forms Sheep Meadow Bay (Site 66/28), we did locate a small bed of EWM. This site is the only location to show a positive sign of living milfoil and was noted as being in a dense abundance.



Najas flexilis is very common in Lake George and New York State. *N. flexilis* was collected at 21 (or 53%) of the sites in 2021. In the 2024 survey *N. flexilis* was found at 28 Sites (70%) sampled 23 (57.5%) sites were trace, 3 sites (7.5%) sparse and 2 sites (5%) were of moderate amounts.



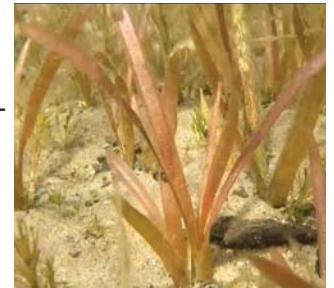
Potamogeton gramineus - Grassy Pondweed was one of the ten potamogetons found during this survey, *P. gramineus* is a common Lake George species which can be found throughout the littoral zone from 1 to 25 feet deep. During the 2021 survey it was recorded from 3 to 15 feet deep at 10 sites (25%) sampled. In the 2024 survey, *P. gramineus* was found at 14 sites (35%) of the those surveyed. It occurred in 11 sites (27.5%) in trace amount, 2 sites (5%) in sparse amounts and 1 site (2.5%) in a moderate quantity.



Potamogeton robbinsii is a highly desirable native pondweed. It was documented in 2021 at 11 sites (28%) with a distribution found most at depths of more than 10 feet. In 2024 *P. robbinsii* was recorded at 13 sites (32.5%) all of these sites the plants were found at depths between 9-21 feet; at 6 sites (15%) in trace amounts, 4 sites (10%) in sparse abundance, 1 site (2.5%) moderate and 2 sites (5%) in dense amounts.



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 9 sites (23%) in 2021 at depths from 3 to 15 feet. In 2024, 11 survey sites (27.5%) were recorded to have *V. americana*. 10 samples (25%) in trace amounts and 1 in sparse amounts (2.5%).



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.).

Nitella (stonewort) was found at 8 sites (20%) in 2021 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. In 2024 *Nitella* was recorded at 9 sites (22.5%), 7 samples were trace amounts (17.5%), 1 in sparse (2.5%) and 1 in moderate amounts (2.5%).



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 1 site (2.5%) during the 2021 Sheep Meadow Bay survey. In the 2024 survey it was found at 9 sites (22.5%). All samples were found in trace amounts.



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. In 2021, it was found in at five sample sites (13%) in Sheep Meadow Bay. The depths were from 3 to 14 feet deep, with all five densities being trace. For the 2024 survey it was recorded at 7 sites (17.5%) sampled; 6 sites (15%) were found to have trace amounts and 1 site (2.5%) was recorded as sparse.



Utricularia resupinata –Northeastern Bladderwort unlike a majority of Bladderworts, resupinata is not a free floating plant, found in sandy areas throughout Lake George, it was found in 2021 in trace amounts at 5 sites (13%) in Sheep Meadow Bay. In 2024, it was recorded at 7 sites (17.5%) during the survey, 5 sites (12.5%) were found in trace amounts and one each in sparse (2.5%) and moderate (2.5%) amounts.



Zosterella dubia: Was not recorded in Sheep Meadow Bay during the 2021 plant survey. In 2024 it found at 7 sites (17.5%), all 7 sites were recorded in trace amounts. 5 of the 7 sites were inside of the treatment zone, two were recorded in the area on the north side of the northern peninsula outside of the treatment zone in Sheep Meadow Bay.



Najas guadalupensis: Was not recorded in Sheep Meadow Bay during the 2021 plant survey. In 2024 it found at 6 sites (15%), 5 sites (12.5%) it was found in trace amounts and at 1 site (2.5%) in sparse amounts.



Narrow-leaf Potamogeton 3 - 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 Sheep Meadow Bay in 2021. It was found during the 2024 survey at 6 sites (15%), in all 6 samples (15%) it was found in trace amounts.



Potamogeton zosterformis: Flat-stem Pondweed is another of the ten potamogetons found during this survey, *P. zosterformis* is a common Lake George species which was found throughout the littoral zone from 5 to 20 feet deep. During the 2021 survey it was recorded from 7 to 15 feet deep at 6 sites (15%) of the total samples. In 2024, it was recorded again at 6 sites (15%), 4 sites (10%) in trace amounts, and 1 each in sparse (2.5%) and moderate (2.5%) amounts.



Eleocharis accicularis: Spikerush is commonly found in sandy sediments from the wave break zone to 10 feet of depth in Lake George, during the 2021 sampling in Sheep Meadow Bay it was recorded in 3 to 10 feet of water at 5 sites (12.5%). In 2024, this species again was found at 5 sites (12.5%), 3 sites (7.5%) was listed as trace amounts and a single recording each of moderate (2.5%) and dense (2.5%) .



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 the 2021 survey it was recorded at 10 and 12 feet deep at 2 sites (5%) in trace amounts. During the 2024 survey it was found at 5 sites (12.5%), 3 sites (7.5%) had trace amounts and a single recording each of sparse (2.5%) and moderate (2.5%).



Narrow-leaf Potamogeton 4 - 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 in 2021 at 4 sites (10%) in Sheep Meadow Bay. In 2024, this species was recorded at 5 sites (12.5%), 3 sites (7.5%) were found in trace amounts, 2 samples each were recorded as sparse (5%).



Eriocaulon septangulare: Pipewort is commonly found in sandy sediments from the wave break zone to 10 feet of depth in Lake George, during the 2021 sampling in Sheep Meadow Bay it was recorded in 4 to 10 feet of water at 2 sites (5%). The 2024 sampling recorded this species at 4 site locations (10%), 2 sites (5%) had trace amounts and 2 sites(5%) had sparse amounts.



Narrow-leaf Potamogeton 2: 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 between 14 and 15 feet in depth in 2021, was found at 2 sites (5%) in Sheep Meadow Bay. It was recorded in 2024 at 4 locations (10%), 2 sites (5%) had trace amounts, 1 site (2.5%) sparse and 1 site (2.5%) moderate.



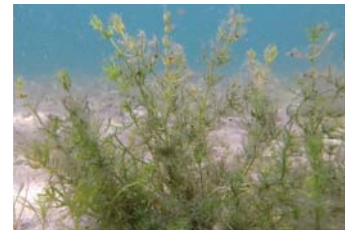
Potamogeton perfoliatus - Claspingleaf Pondweed is another of the ten potamogetons found during this survey, *P. perfoliatus* is a common Lake George species which was found throughout the littoral zone from 3 to 32 feet deep. During the 2021 survey it was recorded from 3 to 15 feet deep at 5 sites (13%) in trace amounts. In the 2024 survey it was found in 4 sites (10%) all in trace amounts.



Ranunculus longirostris: Longbeaked Buttercup has leaves that are finely divided into many thread-like segments, round to fan-shaped in outline, 3/4 inch long and about 1 inch wide, alternately attached. Stems and leaves are all submersed. It was found in 2021 at 3 sites (7.5%) at a sampling ranging from 3 to 10 feet in trace (2) or sparse (1) amounts. In the 2024 survey it was recorded at 4 sites (10%). At 2 sites (5%) it was found in trace amounts and at 2 sites (5%) it was recorded in moderate amounts.



Chara sp.: (muskgrass) tends to be darker green in color, with stiffer calcium-encrusted branches generally found in shallower waters. It was found in 2021 at 6 sites (15%) in trace amounts at Sheep Meadow Bay at an average depth less than 6.5 feet. In the 2024 survey it was recorded at 3 sites (7.5%) all 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 the 2021 sampling in Sheep Meadow Bay it was recorded in 3 to 10 feet of water at 4 sites (10%). During the 2024 survey it was found at 2 sites (5%). 1 site (2.5%) in trace amounts and 1 site (2.5%) was found in moderate amounts.



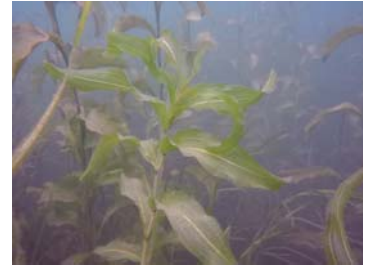
Megalodonta beckii: Water marigold is common in Lake George, found throughout the littoral zone in waters from 5 to 25 feet in depth. In Sheep Meadow in 2021, it was found at 5 sites (13%) in a trace amount at 4 of the sample sites, 1 in moderate amounts. In the 2024 post-treatment survey it was recorded at 2 sites (5%) in trace amounts. It is a native species known to be susceptible to ProcettaCor usage.



Myriophyllum tenellum - Slender Water Milfoil is the third milfoil found during the both surveys, and is one of the two milfoils found in Sheep Meadow Bay. *M. tenellum* is found in soft or sandy areas throughout Lake George. It was listed at 3 sites (7.5%) in 2021, all outside of the treatment area. It was recorded at 2 sites during 2024, the 2 samples had densities listed as trace (2.5%) and sparse (2.5%).



Potamogeton praelongus– White stem Pondweed is another of the ten potamogetons found during both surveys, *P. praelongus* is a common Lake George species which was found throughout the littoral zone from 8 to 25 feet deep. During the 2021 survey it was recorded at 15 feet deep at a single site (2.5%) in trace amounts. In 2024, it was recorded at 2 locations (5%) both in trace amounts.



Isoetes echinospora: - Spiny Quillwort is one of two species of found in lake George; this plant is commonly found in the shallow waters of Lake George, from depths of 2 to 10 deep. It was found at 2 sites in 2021 at Sheep Meadow Bay (5%) in trace amounts. One of the sites was listed as 15 feet deep but was on a steep section of the bay, chances are that sample came from the shallower end of the rake toss sample area. In 2024, *I. echinospora* was found in only 1 sampling rake toss (2.5%)



Appendix

Sheep Meadow Abundance Distribution	Total		Trace		Sparse		Moderate		Dense	
	Sites	%	Sites	%	Sites	%	Sites	%	Sites	%
Total Sites	40									
Overall Abundance	38	95	22	55	8	20	8	20	0	0
<i>Najas flexillis</i>	28	70	23	57.5	3	7.5	2	5	0	0
<i>Potamogeton gramineus</i>	14	35	11	27.5	2	5	1	2.5	0	0
<i>Potamogeton robbinsii</i>	13	32.5	6	15	4	10	1	2.5	2	5
<i>Vallisneria americana</i>	11	27.5	10	25	1	2.5	0	0	0	0
<i>Nitella</i>	9	22.5	7	17.5	1	2.5	1	2.5	0	0
<i>Potamogeton narrow-leaf</i> 1	9	22.5	9	22.5	0	0	0	0	0	0
<i>Elodea canadensis</i>	7	17.5	6	15	1	2.5	0	0	0	0
<i>Utricularia resupinata</i>	7	17.5	5	12.5	1	2.5	1	2.5	0	0
<i>Zosterella dubia</i>	7	17.5	7	17.5	0	0	0	0	0	0
<i>Najas guadalupensis</i>	6	15	5	12.5	1	2.5	0	0	0	0
<i>Potamogeton narrow-leaf</i> 3	6	15	6	15	0	0	0	0	0	0
<i>Potamogeton zosteri-</i> <i>formis</i>	6	15	4	10	1	2.5	1	2.5	0	0
<i>Eleocharis acicularis</i>	5	12.5	3	7.5	0	0	1	2.5	1	2.5
<i>Potamogeton amplifolius</i>	5	12.5	3	7.5	1	2.5	1	2.5	0	0
<i>Potamogeton narrow-leaf</i> 4	5	12.5	3	7.5	2	5	0	0	0	0
<i>Eriocaulon septangulare</i>	4	10	2	5	2	5	0	0	0	0
<i>Potamogeton narrow-leaf</i> 2	4	10	2	5	1	2.5	1	2.5	0	0
<i>Potamogeton perfoliatus</i>	4	10	4	10	0	0	0	0	0	0
<i>Ranunculus longirostris</i>	4	10	2	5	0	0	2	5	0	0
<i>Chara</i>	3	7.5	3	7.5	0	0	0	0	0	0
<i>Juncus pelocarpus</i>	2	5	1	2.5	0	0	1	2.5	0	0
<i>Megalodonta beckii</i>	2	5	2	5	0	0	0	0	0	0
<i>Mryiophyllum tenellum</i>	2	5	1	2.5	1	2.5	0	0	0	0
<i>Potamogeton praelongus</i>	2	5	2	5	0	0	0	0	0	0
<i>Isoetes lacustris</i>	1	2.5	1	2.5	0	0	0	0	0	0
<i>Myriophyllum spicatum</i>	1	2.5	0	0	0	0	0	0	1	2.5

Sites-#	Depth (ft)	Chara	E. acicularis	E. canadensis	E. septangulare	I. lacustris	J. pelocarpus	M. beckii	M. spicatum	M. tenellum	N. flexilis	N. guadalupensis	Nitella	P. amplifolius	P. gramineus	P. perfoliatus	P. praelongus	P. robbinsii	P. zosteriformis	P. narrowleaf 1	P. narrowleaf 2	P. narrowleaf 3	P. narrowleaf 4	R. longirostris	U. resupinata	V. americana	Z. dubia	Richness	Rake density
1	14										T	T							T									2	T
2	14										T	T	T							T	T					T	T	5	T
3	18			T				T			T	S					T	S										6	T
4	10			T							M									T	T				S			5	T
5	10										T	T						S		T	M					T	T	8	M
6	12			S							S	T		S			T	D	D	T	T				T	T	8	M	
7	13							T			T	T						D	M	T	S					T	T	11	M
8	19										T	T						S	S	T	T							7	S
9	21										T							T	T									2	T
10	10	T									T	T						T	T		T				T	T		7	T
11	10																								T			1	T
12	3		D		T		T		S		T	S						S	T		T				M			5	S
13	10										T	S						S	T		T				T	M		8	S
14	20										T	T	T					T										3	T
15	19					T					T	T								T								5	T
16	20										T	T																1	T
17	14										S	T									T					S		4	S
18	14										T	M																2	S
19	7										T	T															T	6	S
20	11										T	T														T		2	T
21	15										T																	2	T
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25	9										T																	1	T
26	28										T	T	T															2	T
27	10										T																	3	T
28	12								D		S	S								T	T						T	7	M
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30	13										T	T															T	5	T
31	6									T																		3	T
32	7													M												T		2	S
33	11																											0	0
34	21										T	T																4	T
35	15	T									T	T														T	T	6	T
36	10																									T		1	T
37	4										T																	7	M
38	5										T	M	S	T						S						T	T	7	M
39	12									M																		3	S
40	9										T	T																7	M

Lake George: Sheep Meadow Bay

● Sample Point

Google Satellite



Lake George: Sheep Meadow Bay

● Richness

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● Water Depth (FT)

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● Chara

Google Satellite

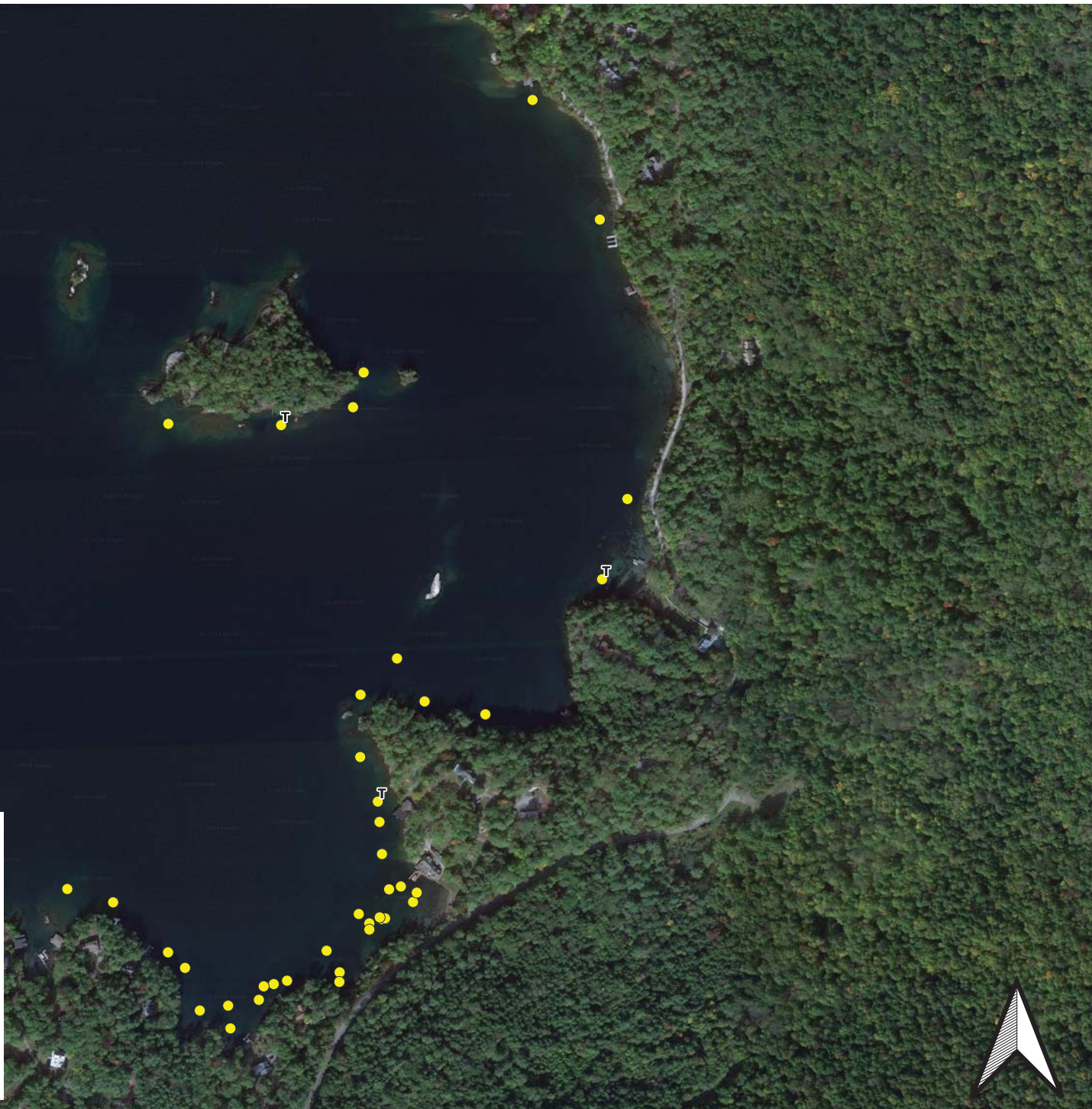
Plant Density

T = Trace Plants

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M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● *Eleocharis acicularis*

Google Satellite

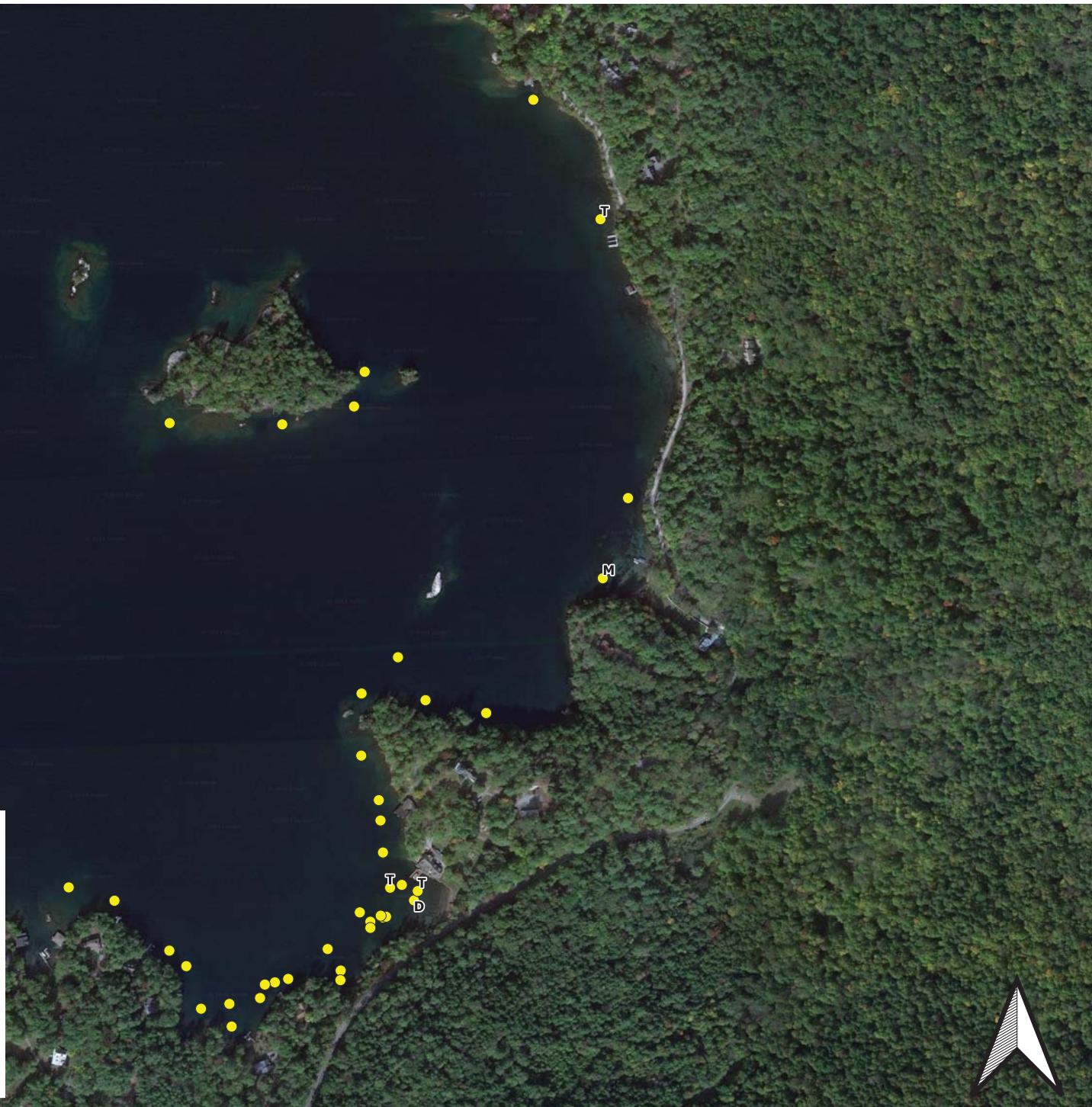
Plant Density

T = Trace Plants

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M = Moderate Plants

D = Dense Plants

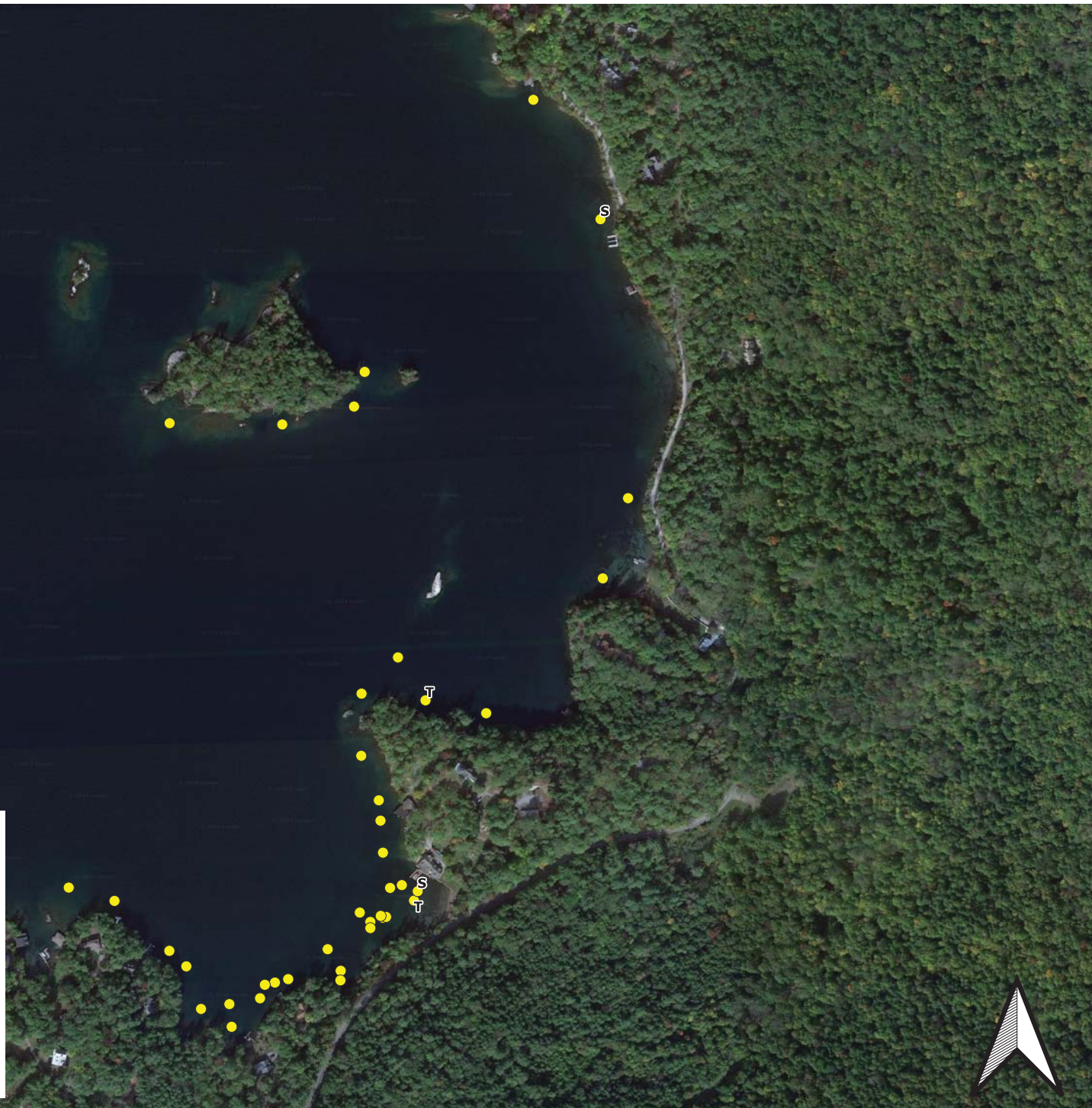


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Ds=sDui usnthi g



Lake George: Sheep Meadow Bay

● *Isoetes lacustris*

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● *Juncus pelocarpus*

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● *Megalodonta beckii*

Google Satellite

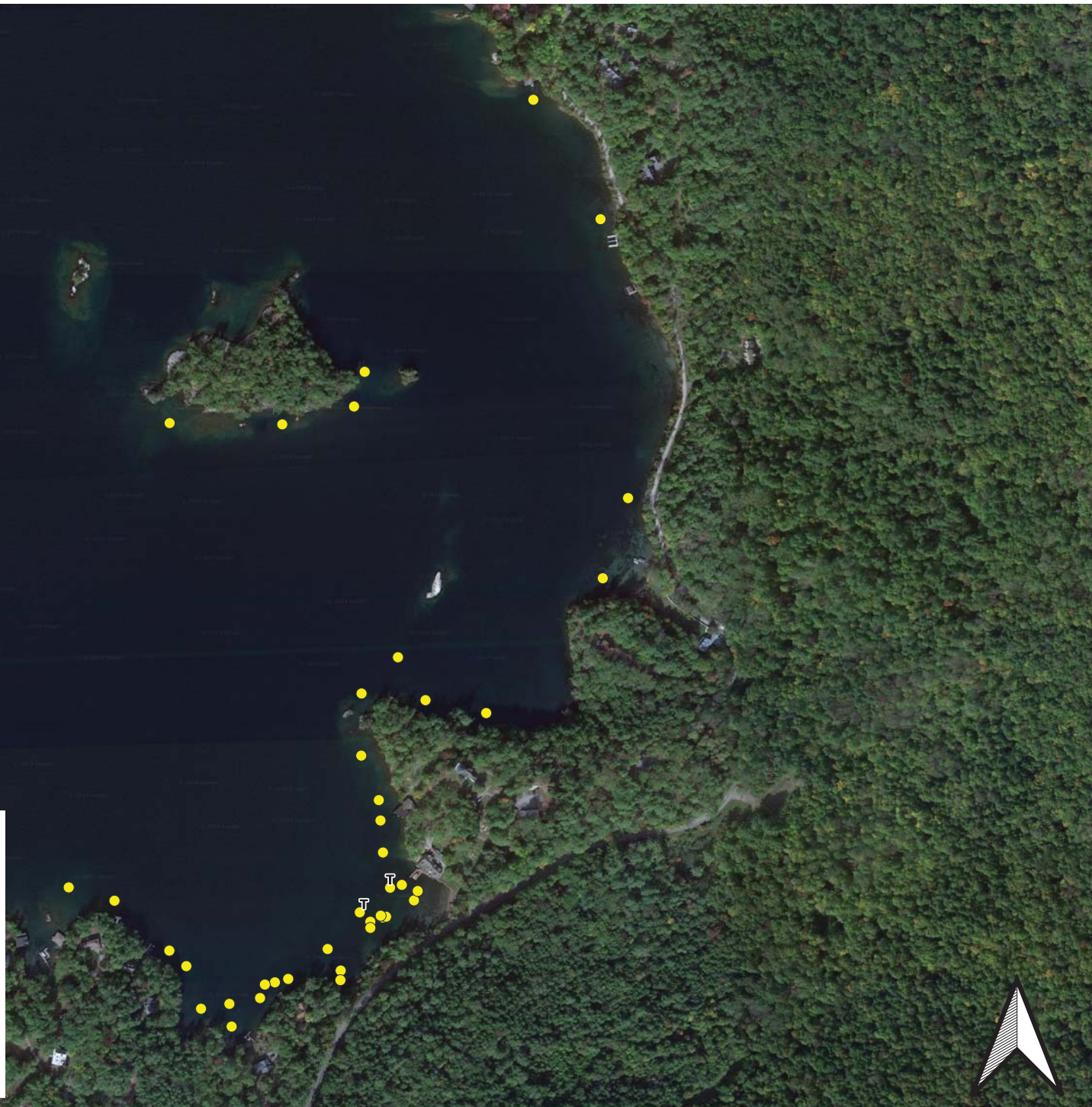
Plant Density

T = Trace Plants

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D = Dense Plants



Lake George: Sheep Meadow Bay

● *Myriophyllum spicatum*

Google Satellite

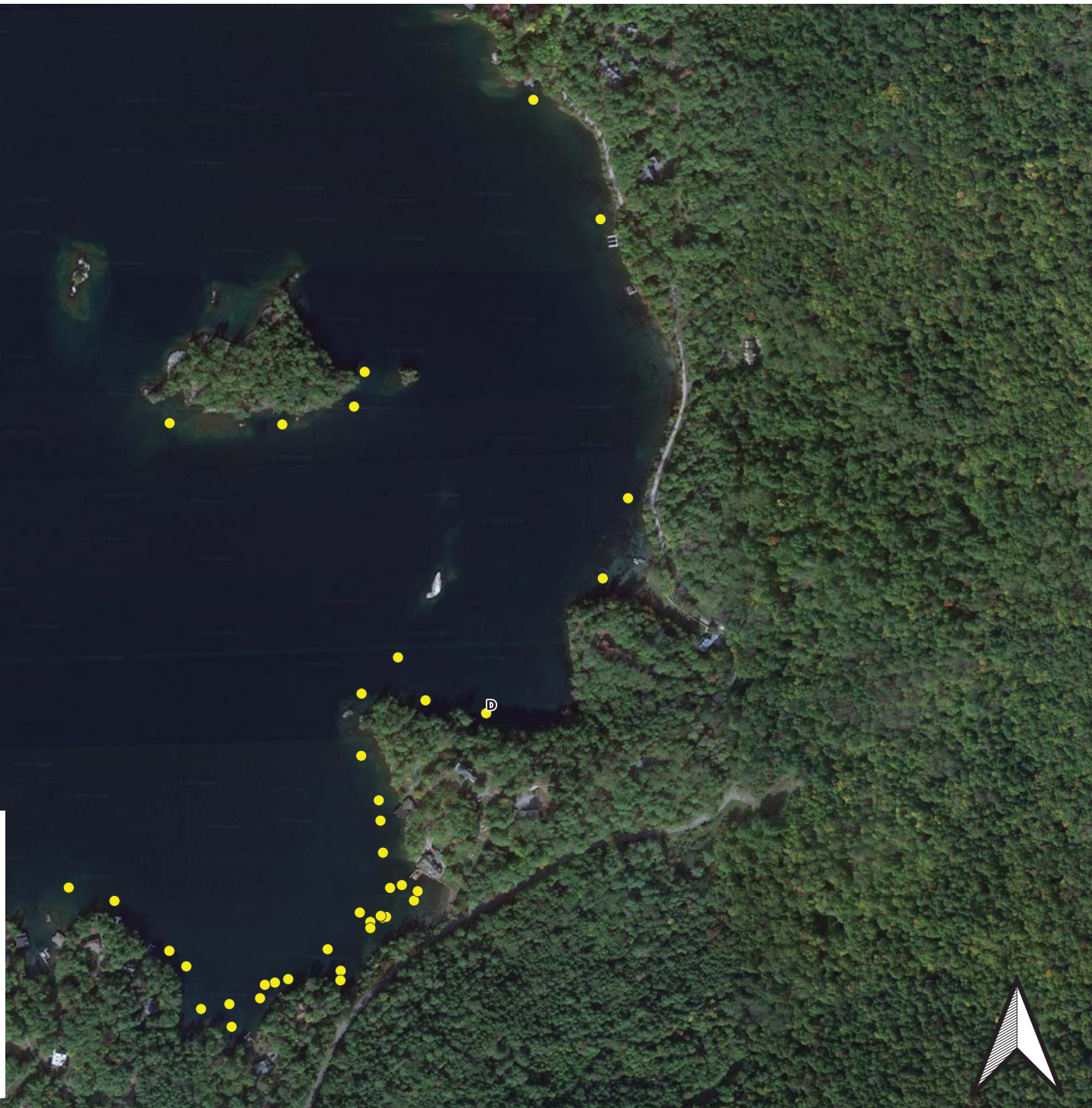
Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



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● Myriophyllum spicatum

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Lake George: Sheep Meadow Bay

● *Najas flexillis*

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● *Najas guadalupensis*

Google Satellite

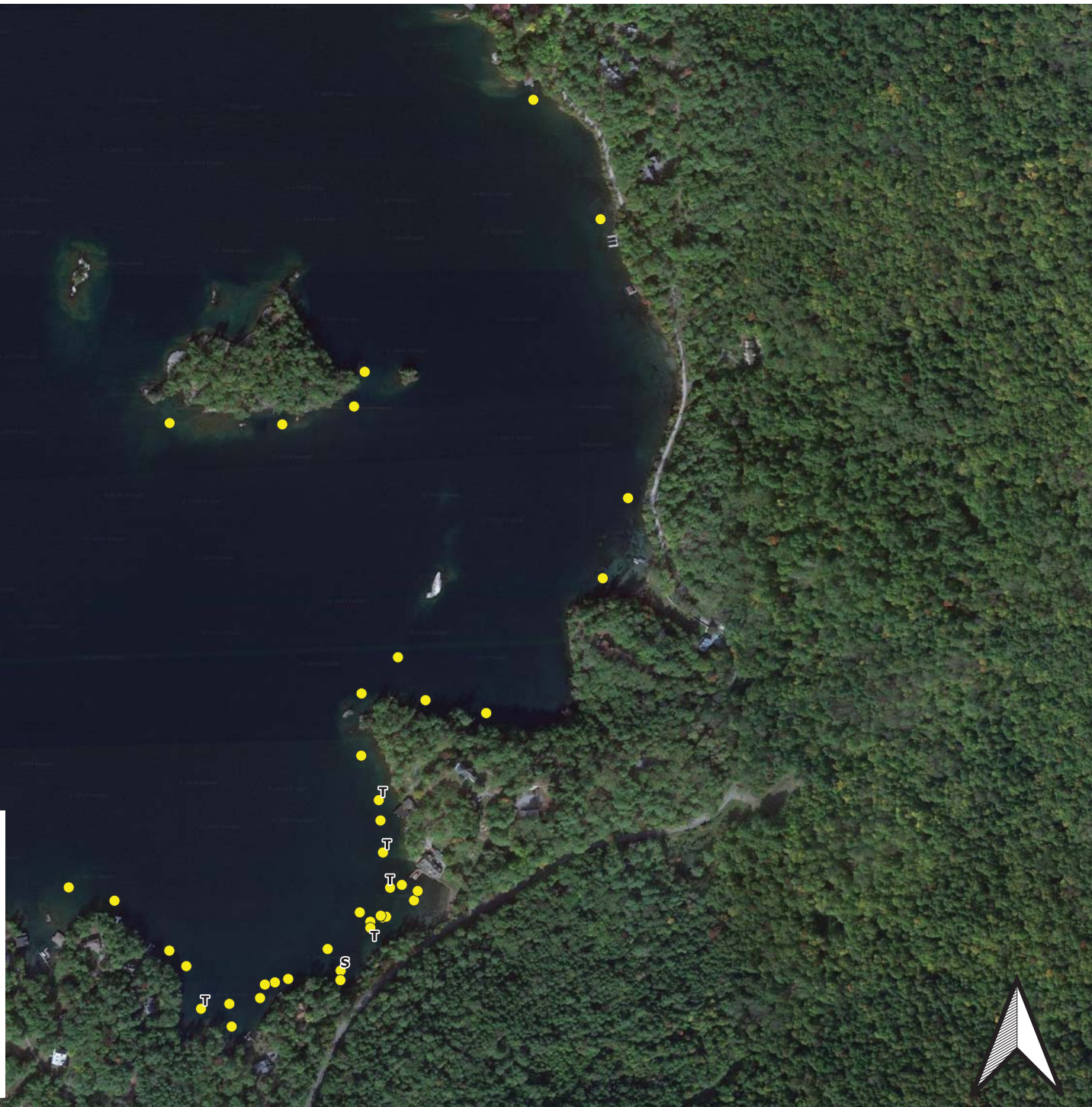
Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● Nitella

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● *Potamogeton amplifolius*

Google Satellite

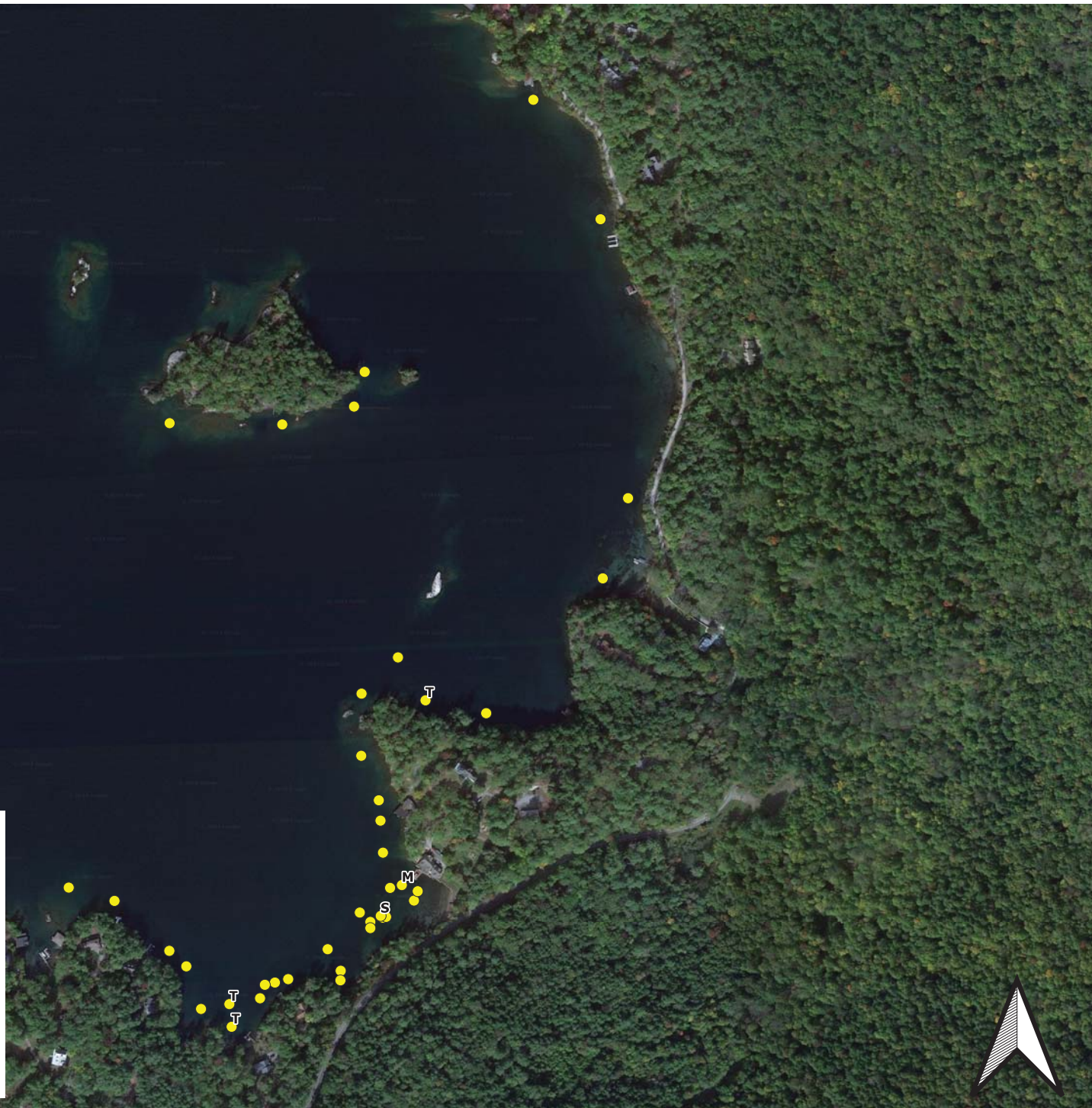
Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



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n uT un hl chuMi I rc



Lake George: Sheep Meadow Bay

● Potamogeton narrow-leaf 1

Google Satellite

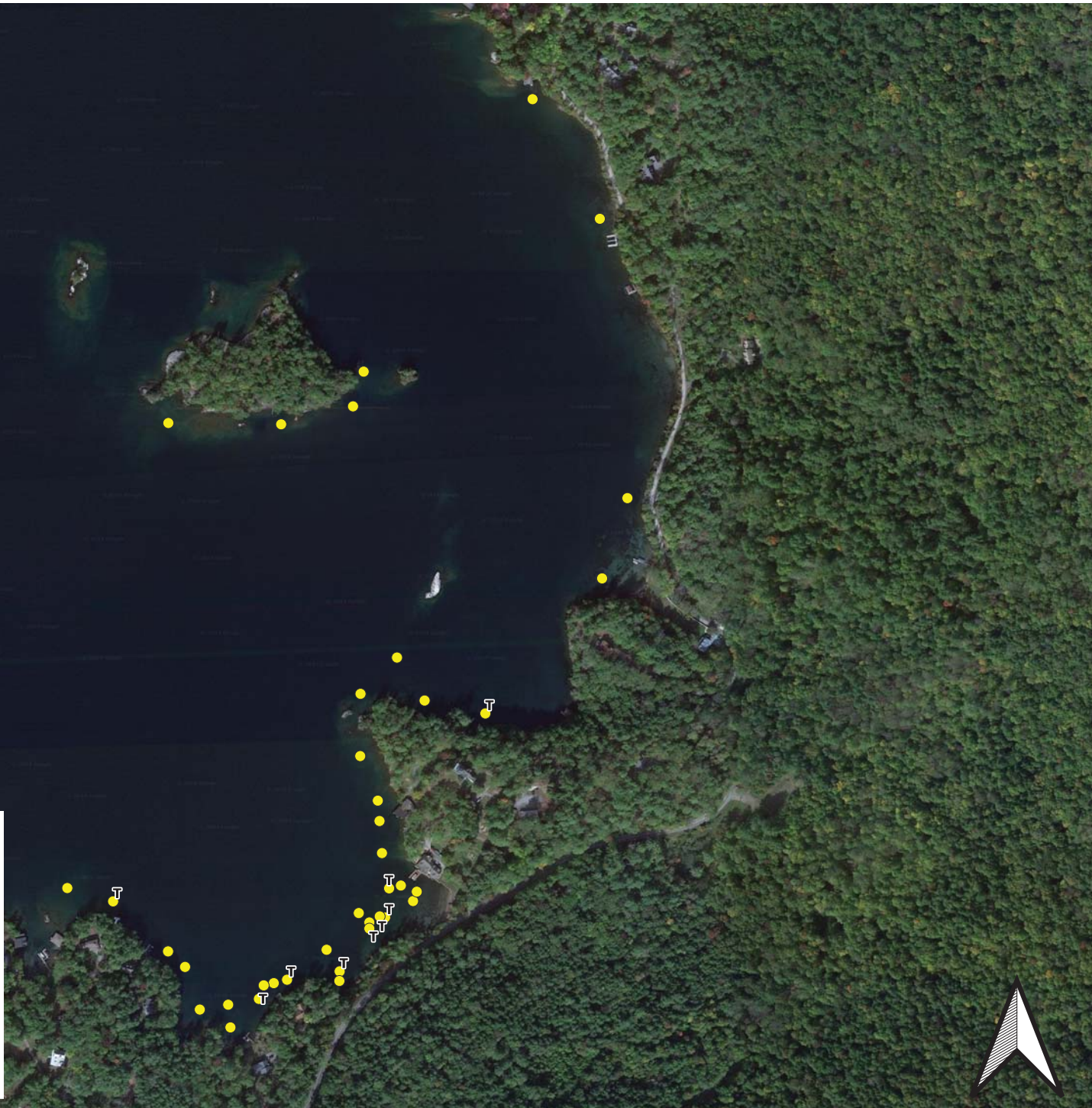
Plant Density

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S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● Potamogeton narrow-leaf 2

Google Satellite

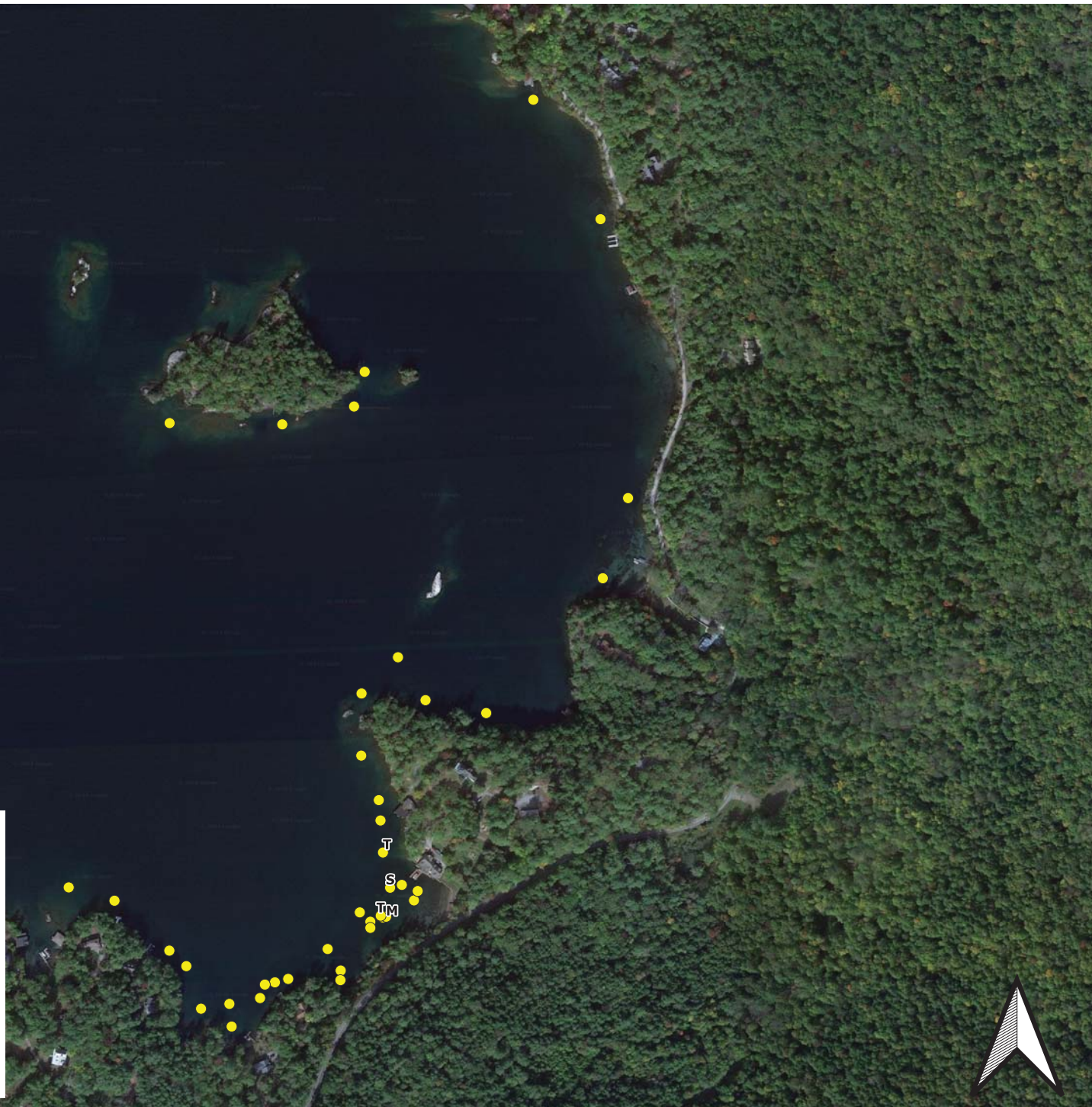
Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● Potamogeton narrow-leaf 3

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● Potamogeton narrow-leaf 4

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



kar e Seolge: Lheep Meadow Bay

● Potamogeton peliofatsG

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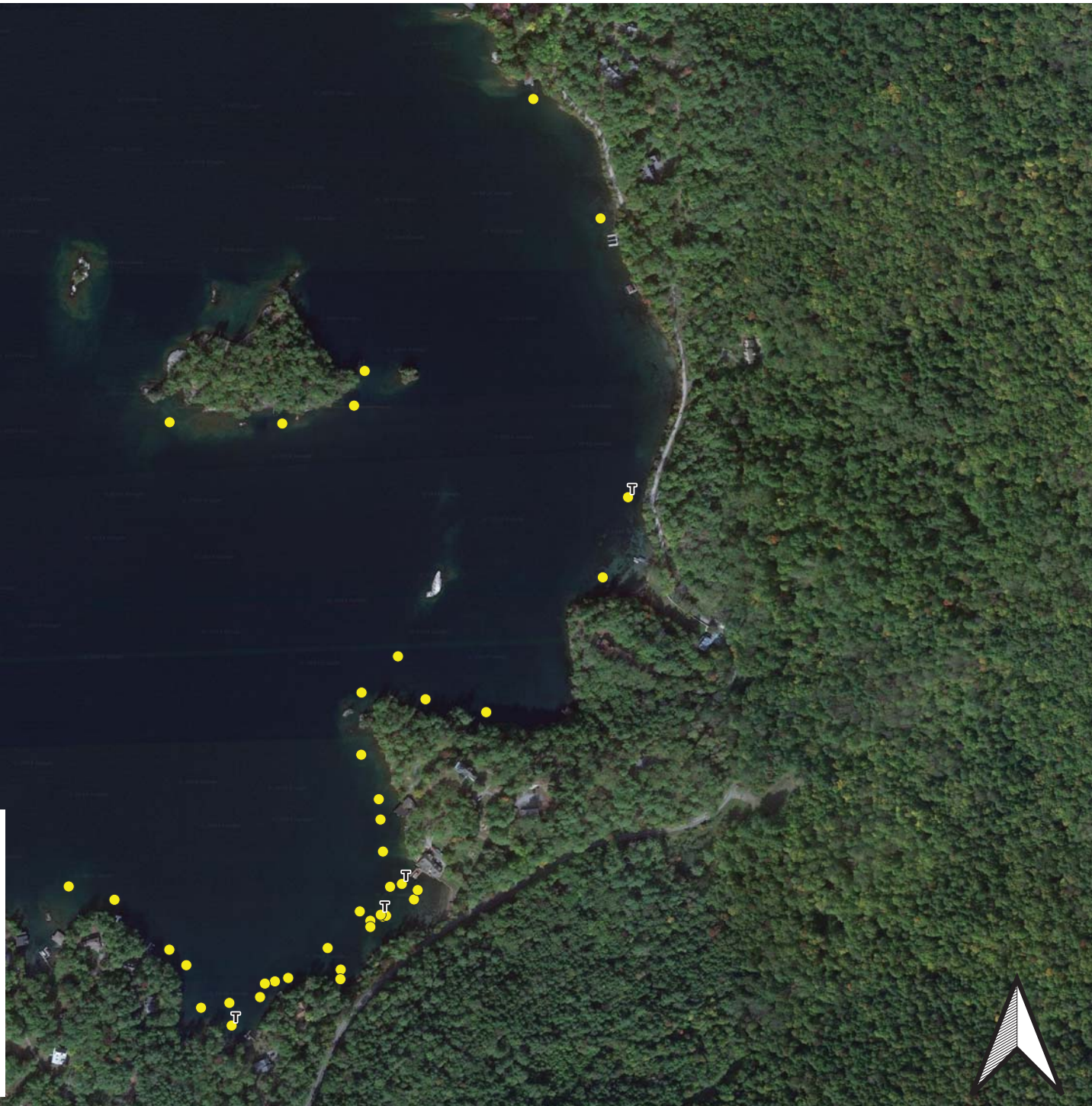
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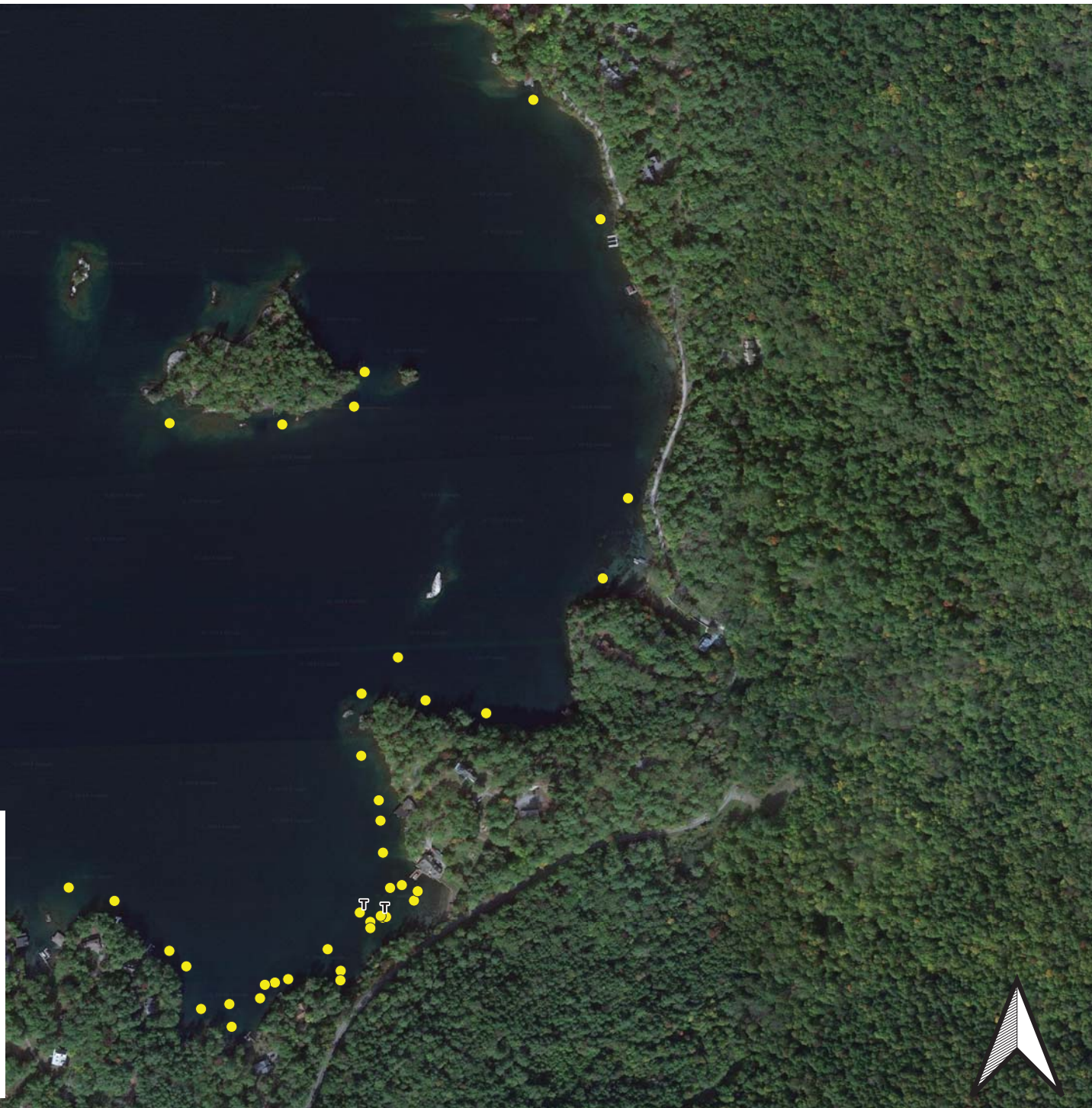
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Lake George: Sheep Meadow Bay

● *Potamogeton robbinsii*

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● *Potamogeton zosteriformis*

Google Satellite

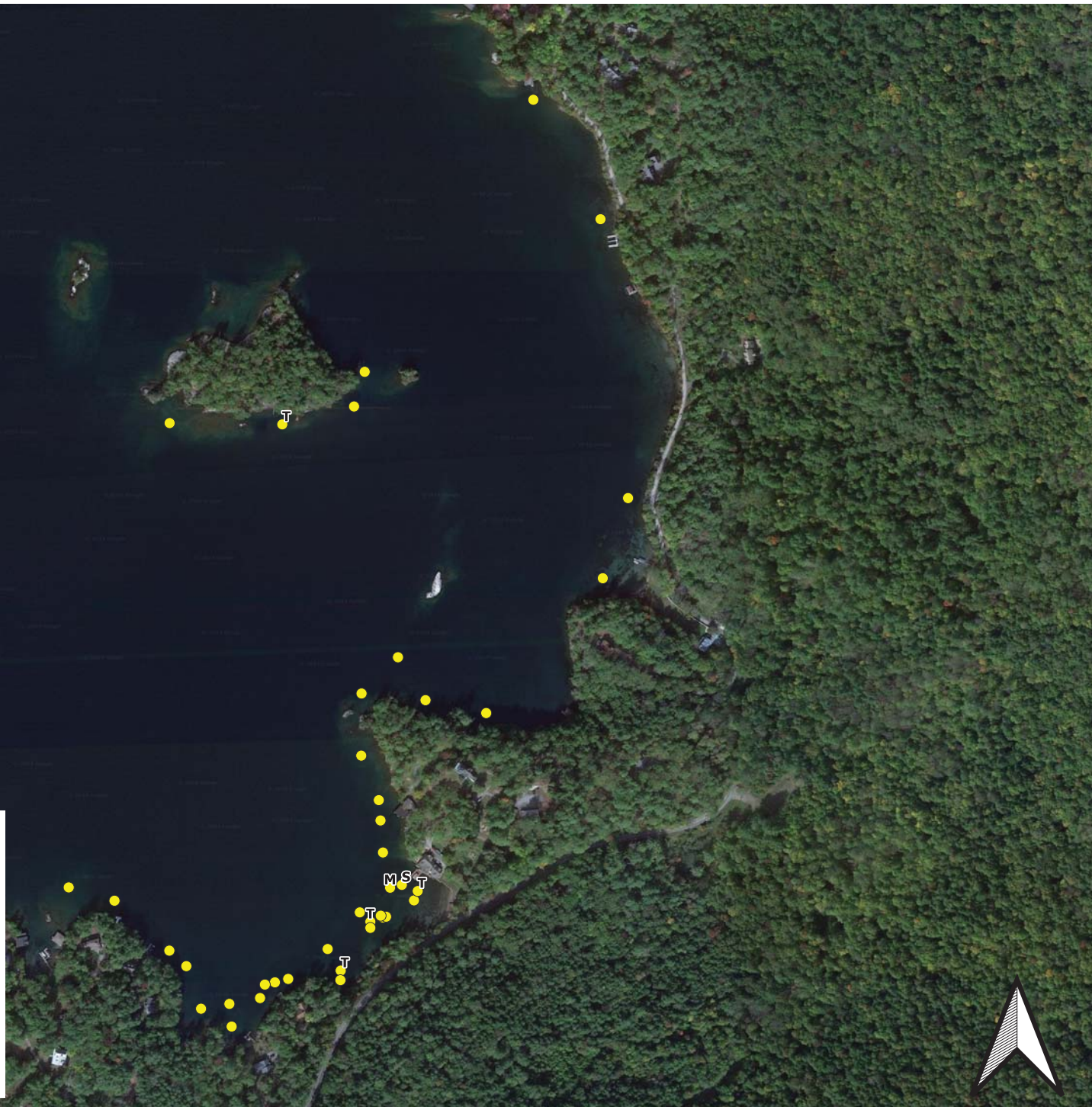
Plant Density

T = Trace Plants

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M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● *Ranunculus longirostris*

Google Satellite

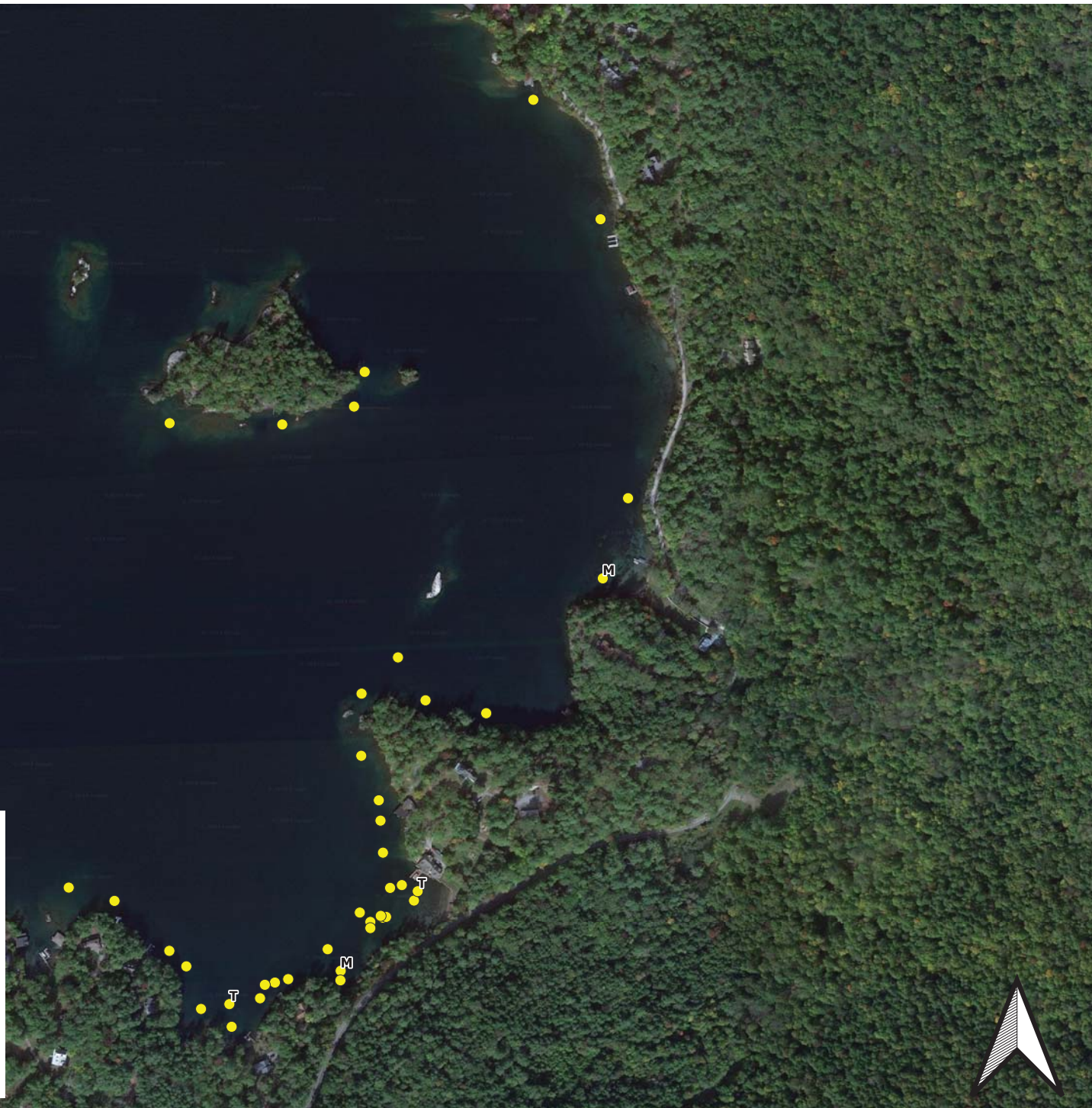
Plant Density

T = Trace Plants

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D = Dense Plants



Lake George: Sheep Meadow Bay

● *Utricularia resupinata*

Google Satellite

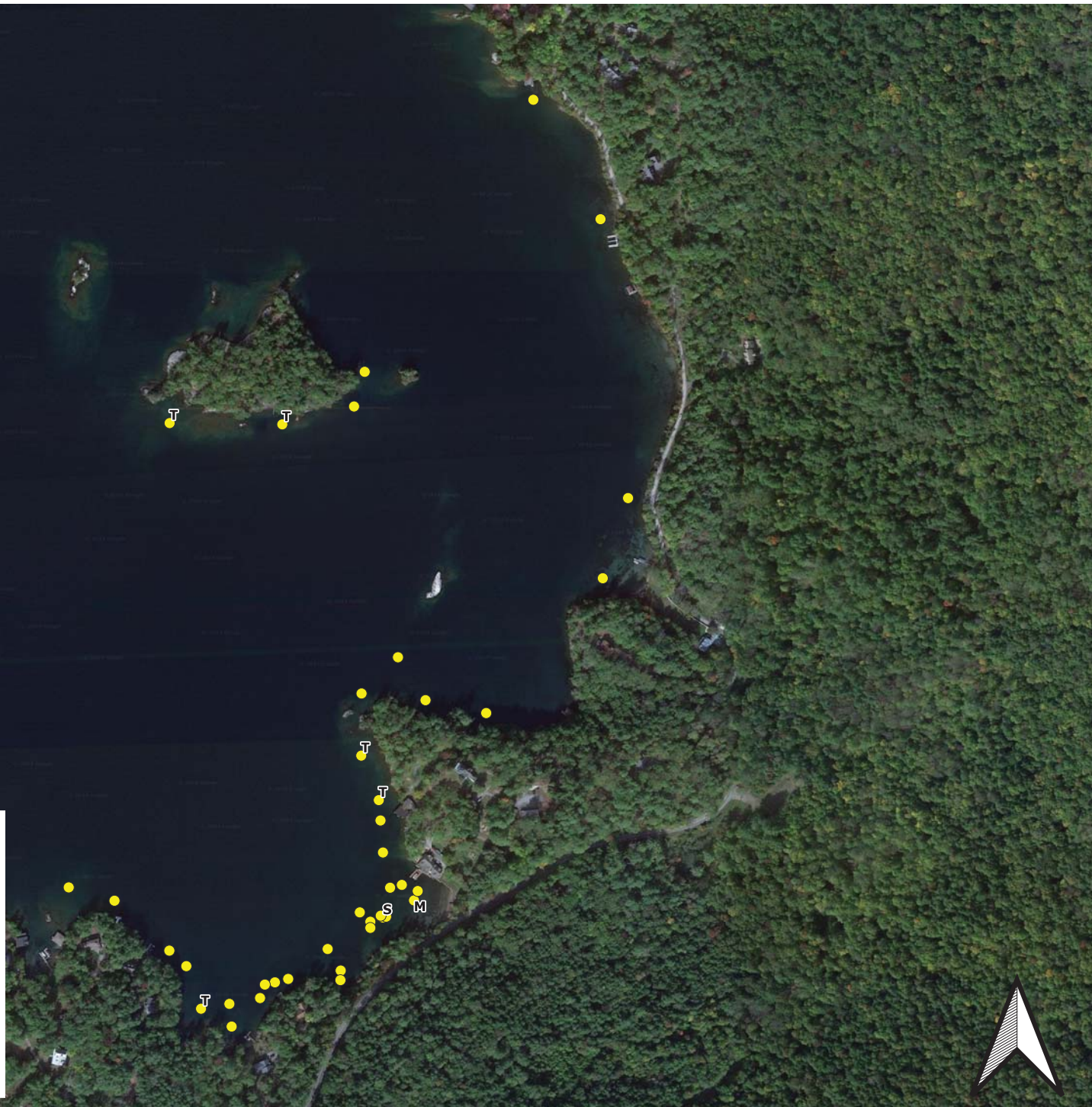
Plant Density

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M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● *Vallisneria americana*

Google Satellite

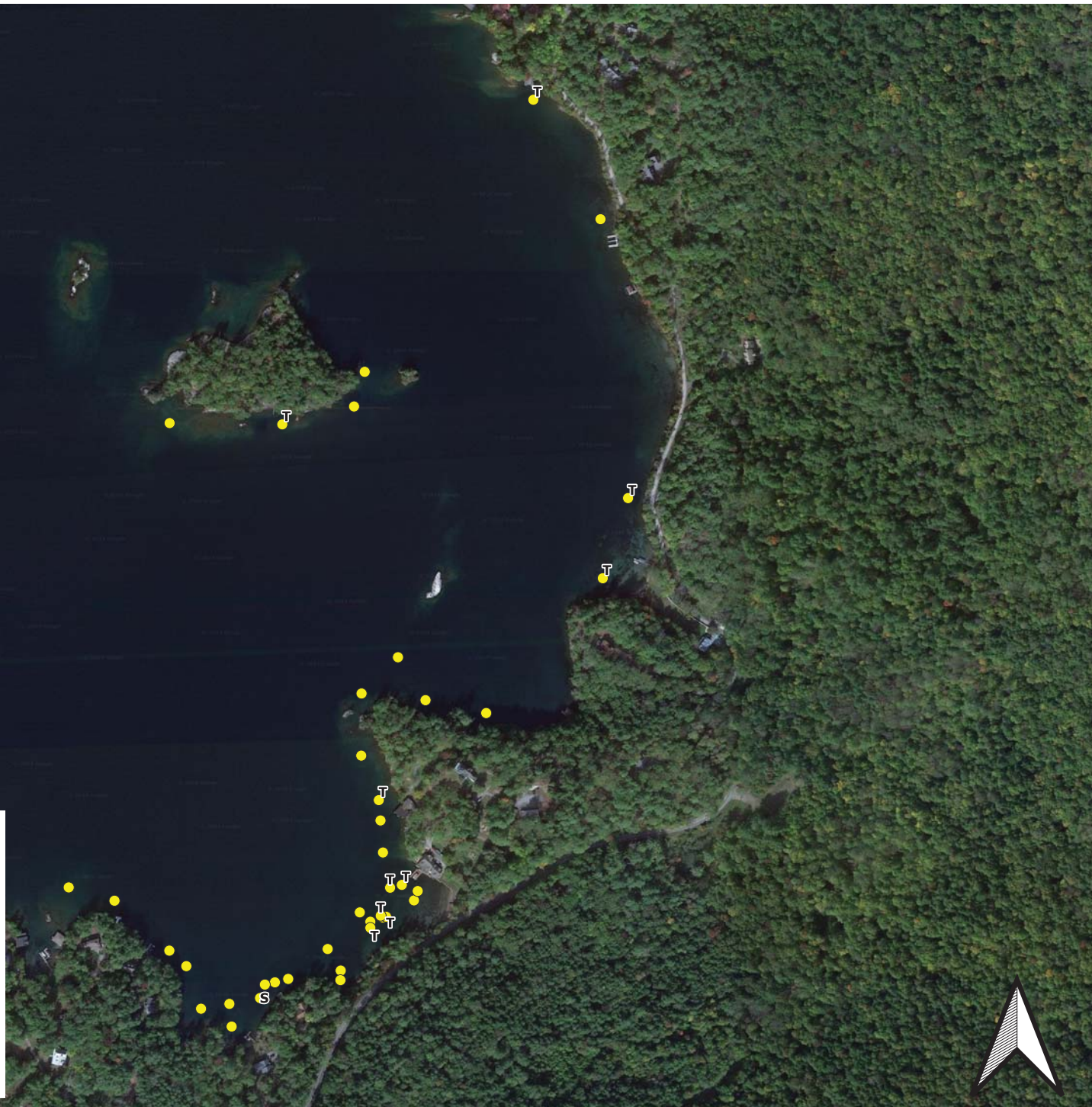
Plant Density

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M = Moderate Plants

D = Dense Plants



Lake George: Sheep Meadow Bay

● *Zosterella dubia*

Google Satellite

Plant Density

T = Trace Plants

S = Sparse Plants

M = Moderate Plants

D = Dense Plants

