



Darrin Fresh Water Institute

A Research Center of Rensselaer Polytechnic Institute

A SURVEY OF TRIBUTARIES TO LAKE GEORGE, NEW YORK

FOR THE PRESENCE OF EURASIAN WATERMILFOIL

prepared for
The Fund for Lake George

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EXECUTIVE SUMMARY

A survey of tributary deltas in the south basin of Lake George was conducted in 2004 to assess the extent of Eurasian watermilfoil (*Myriophyllum spicatum* L.) infestation. The Darrin Fresh Water Institute conducted the project with financial support from the Fund for Lake George. Similar surveys were completed in 1987, 1989, 1992, 1995, 1998 and 2001 as reference points. Delta areas were chosen as readily identifiable points that historically harbor diverse assemblages of native aquatic plants.

Results of these surveys can be used to approximate the rate of spread of milfoil through the Lake George basin. In 1987, when surveys were initiated, 16 percent of the sites were found to have milfoil. By 1989, this number had dropped to 11 percent due to harvesting of milfoil. In 1992, the percentage of infected sites in the central basin had tripled to 33 percent. Results from 1995 and 1998 surveys showed a slight reduction to 22% of the sites colonized by Eurasian watermilfoil. Eurasian watermilfoil was reported at 24% of the sites surveyed in 2001 and 2004. This stability is attributed to hand harvesting of milfoil in prior years. All of the new sites were restricted to only a few milfoil plants, which were removed.

Management efforts to date have been implemented at 136 of 148 known milfoil locations throughout Lake George. These efforts have reduced the milfoil biomass in these locations; however, milfoil has only been eliminated at a handful of sites and reintroduction at these locations is highly probable. Thus maintenance becomes critical following initial management. At this time, Eurasian watermilfoil is ranked 29th by relative abundance (a function of cumulative percent cover) in the central basin and 30th by frequency of occurrence for the 46 species found in this survey. The fact that milfoil has reached this level of abundance is testament to the plant's ability to spread rapidly and to outcompete native species. Maintenance will require site visits yearly or every other year to harvest regrowth of milfoil.

Although the number of replicates is limited for development of a statistically reliable rate of colonization, new sites continue to be colonized on a year-to-year basis. Expansion of Eurasian watermilfoil at the 45 tributary sites over the fifteen-year span of the study is approximately 3 new sites per year, or an 7% annual rate of colonization. The occurrence of milfoil at sites that had been cleared in previous years also indicates that continued surveillance and maintenance of milfoil sites is necessary. The more sobering indication from the recurrence of milfoil at previously harvested sites is that there are no sites or cases to indicate any natural mortality or demise of small populations of Eurasian watermilfoil in Lake George. Although these populations may not expand for several years, clearly they are not dying off on their own.

Tributary surveys demonstrate the need for continued management of Eurasian watermilfoil in Lake George. Management programs currently encompass several different techniques reflective of different stages of milfoil development. Tributary surveys provide a means of mapping milfoil colonization in Lake George, while management programs limit the spread of milfoil once sites have been located. Increased public awareness of the effects of growth and spread of Eurasian watermilfoil on the Lake George ecosystem can help reduce further introduction.

Introduction

Streams entering Lake George, with nutrients and suspended sediments derived from the terrestrial portion of the basin and deposited on their deltas, are prime locations for the continued establishment and re-establishment of Eurasian watermilfoil (*Myriophyllum spicatum* L.). Delta areas are also disturbed habitats, as a result of sedimentation of terrestrially derived materials and scouring of existing sediments at times of accelerated runoff. The combination of sediment conditions and habitat disruption make tributary deltas prime locations for Eurasian watermilfoil infestation. Because human activity in the Lake George basin has historically exacerbated water conditions in the south basin, the rate of establishment and spread of milfoil has been of particular concern in the management of Eurasian watermilfoil.

A survey of all the tributaries in the basin was performed as part of the 1987-88 Lake George Aquatic Plant Survey (Madsen et al, 1989). Around the entire lakeshore, there are 128 listed stream tributaries (Madsen et al, 1989). The survey provided a procedure for finding new sites with Eurasian watermilfoil, including establishment of a regular search pattern for milfoil sites to ascertain the relative distribution of milfoil among the native plant communities in Lake George.

In order to balance the number of tributary sites surveyed in each year and stabilize the cost of the survey, south basin tributaries were divided into two groups in 1991. With approximately 45 tributaries in each group, a three-year cycle of surveys was established with a south, central and north component of nearly equal number of tributaries. The tributaries in the southern half of the south basin were surveyed in 2003. Those in the northern half of the south basin (central) were the subject of the current survey.

The south basin tributary survey was repeated in 1989 in order to provide information on the rate of colonization of Eurasian watermilfoil (Madsen et al, 1990). Since these are readily located sites for which the presence or absence of Eurasian watermilfoil was known for 1987, 1989, 1992, 1995, 1998 and 2001, these sites were revisited in 2004 to determine whether appreciable new infestation, re-invasion or natural mortality of earlier infestation had occurred.

Methods

The shoreline adjacent to tributary outflows in the central basin was surveyed for the presence of Eurasian watermilfoil. The tributaries comprising this portion of the survey were visited between July 15 and October 7, 2004. Surveys consisted of swimming a 100 meter segment of shoreline from the water's edge to the outer edge of the littoral zone. Diver swimover transects were also completed at each site in order to characterize the macrophyte (aquatic plant) community present. Divers skilled in plant identification estimated the abundance of all aquatic plant species in each one meter (3 ft) depth interval using the following abundance classes:

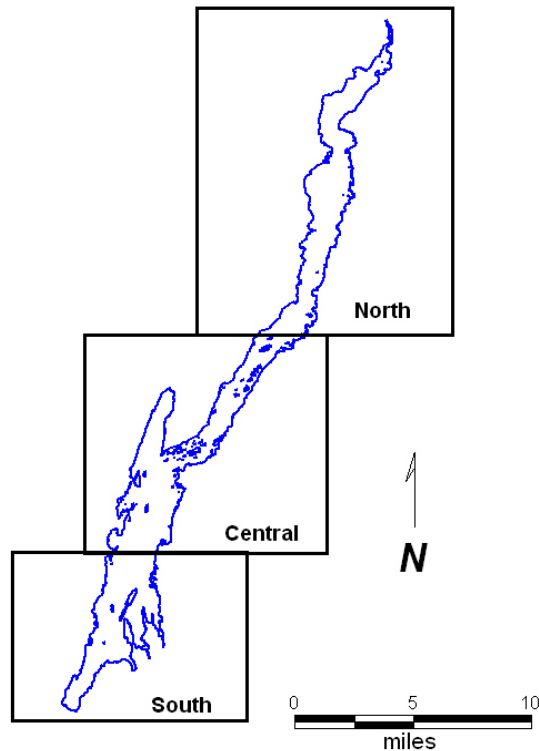
<u>Class</u>	<u>Code</u>	<u>% Cover Range</u>	<u>Centroid</u>
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Abundant	A	greater than 50% cover	75.0%
Common	C	25% to 50% cover	37.5%
Present	P	15% to 25% cover	20.0%
Occasional	O	5% to 15% cover	10.0%
Rare	R	less than 5% cover	2.5%

Percent cover data provides both average depth distribution of the plants present and an estimate of relative abundance of the species at the tributary sites. This information is also important for future management decisions concerning milfoil control alternatives and permit applications required as part of any control strategy.

A map showing the general location of this year's survey activity is shown in Figure 1. Specific tributary locations in the current survey are provided in Appendix A.

Figure 1. Map of Lake George showing the area of the Tributary surveys. The 2004 survey included the tributaries of the central section.



Results and Discussion

The current survey included the tributaries located in the central portion of the Lake George basin (45 sites). The northern and southern portions of the lake basin were completed in 2002 and 2003, respectively. The results of the central basin tributary surveys for 1987, 1989, 1992, 1995, 1998, 2001 and 2004 are presented in Table 1. Methodologies employed for the five surveys are the same. For each site, the tributary number and site name is given. If Eurasian watermilfoil was found, the milfoil site number is also indicated. Aquatic plant management efforts keyed to hand harvesting, suction harvesting and benthic barrier installation have been employed since 1987. All milfoil sites in the current survey have been the subject of management efforts, with specific efforts based on the extent of milfoil growth. Paradise Bay (M-41) has been excluded from management efforts in recent years, due to its selection as a potential experimental site for herbicide application. Maps depicting the locations for all sites are included in Appendix A.

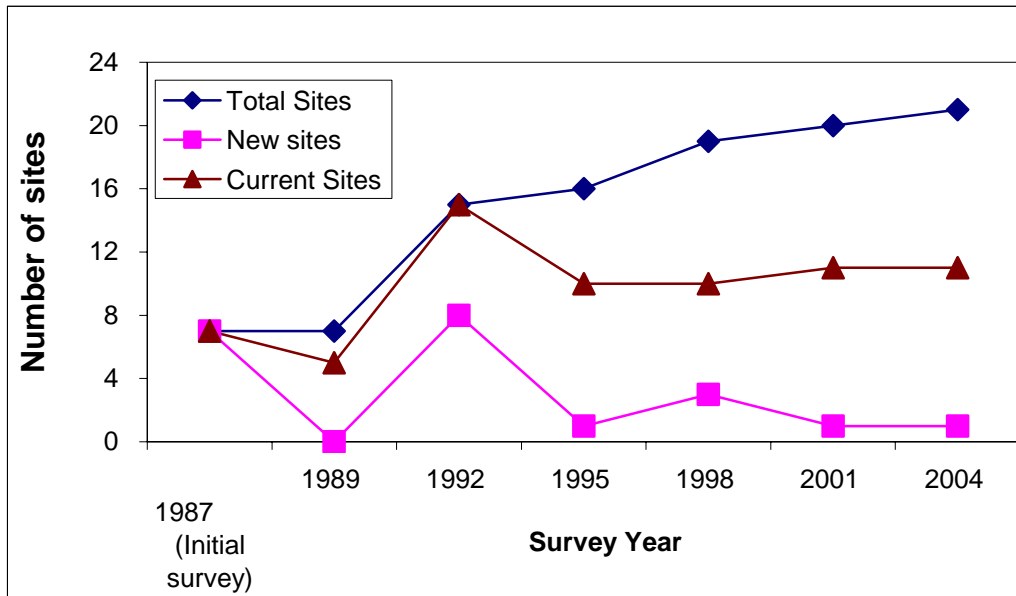
Table 1. Tributary survey sites and the presence (yes) or absence (no) of Eurasian watermilfoil. M # is a sequential coding of sites with Eurasian watermilfoil.

TRIB NUMBER	M #	SITE DESCRIPTION	Milfoil Present						
			2004	2001	1998	1995	1992	1989	1987
T-12		Bay SE of Duran Is.	no	no	no	no	no	no	no
T-12aa		SE of Duran Is.	no	no	no	no	no	no	no
T-12a		SE of Phenita Is.	no	no	no	no	no	no	no
T-12b		E of Phenita Is.	no	no	no	no	no	no	no
T-12c	M-125	E of Sagamore Is.	no	no	yes	no	no	no	no
T-12d	M-149	NE of Coopers Is.	yes	no	no	no	no	no	no
T-13		E. Floating Battery Is.	no	no	no	no	no	no	no
T-14		SE of Three Sirens Is.	no	no	no	no	no	no	no
T-15		NE of Black Mtn. Pt.	no	no	no	no	no	no	no
T-16		Bay S. Black Mtn. Pt.	no	no	no	no	no	no	no
T-17	M-41	Paradise Bay	yes	yes	yes	yes	yes	yes	yes
T-17a		Bay SE Hazel Is.	no	no	no	no	no	no	no
T-17b		Bay NE Hazel Is.	no	no	no	no	no	no	no
T-18		Shelving Rock Bay	no	no	no	no	no	no	no
T-18a	M-92	Bay E Hens & Chicks Is.	no	no	no	no	yes	no	no
T-18b		S. Watch Point	no	no	no	no	no	no	no
T-19		SW of Watch Point	no	no	no	no	no	no	no
T-19a	M-93	East of Refuge Is.	no	yes	no	yes	yes	no	no
T-20a		S. Phelps Is.	no	no	no	no	no	no	no
T-20b		SE Phelps Is.	no	no	no	no	no	no	no
T-20c		NE Phelps Is.	no	no	no	no	no	no	no
T-50		W-SW of Rush Is.	no	no	no	no	no	no	no
T-51		Basin Bay	no	no	no	no	no	no	no
T-52	M-25	Basin Bay	no	yes	yes	yes	yes	yes	yes
T-54a	M-43	Bolton Bay-Mohican Rd.	yes	yes	yes	yes	yes	yes	yes
T-55	M-42	Bolton Bay-Stewart Brook	no	no	no	no	yes	no	yes
T-56a		Sawmill Bay @ Braley Pt.	no	no	no	no	no	no	no

TRIB NUMBER	M #	SITE DESCRIPTION	Milfoil Present						
			2004	2001	1998	1995	1992	1989	1987
T-57		NWB-Braley & Pioneer Pt	no	no	no	no	no	no	no
T-60		NWB-Polehill Pond Br.	no	no	no	no	no	no	no
T-61		NWB-Wingpond Br.	no	no	no	no	no	no	no
T-62	M-111	NWB-NNE Walker Pt.	no	no	no	yes	no	no	no
T-63a	M-95	NWB- head of bay	no	no	no	no	yes	no	no
T-65	M-79	NWB-SE Bear Pt.	yes	yes	no	no	yes	no	no
T-66	M-80	NWB-SE of Bear Point	yes	no	no	yes	yes	no	no
T-68	M-24	NWB-between Bear & Fan Pt	yes	yes	yes	yes	yes	no	no
T-68a	M-35	NWB-South of Fan Pt	yes	no	yes	yes	yes	no	no
T-68b	M-139	NE Little Harbor Is.	no	yes	no	no	no	no	no
T-69	M-127	SW French Point	no	no	yes	no	no	no	no
T-70		N of E & W Dollar Is.	no	no	no	no	no	no	no
T-70a	M-126	N of E & W Dollar Is.	yes	yes	yes	no	no	no	no
T-70b	M-94	NW of Three Sirens Is.	no	no	no	no	yes	no	no
T-93		Bay S Black Mtn. Point	no	no	no	no	no	no	no
T-94	M-40	Bay S of Red Rock Bay	yes	yes	yes	yes	yes	yes	yes
T-100	M-138	NWB-Bay NE Fan Pt.	yes	yes	no	no	yes	no	yes
T-101	M-15	Finkle Brook-FWI	yes	yes	yes	yes	yes	yes	yes
Total sites with milfoil			11	11	10	10	15	5	7

The results of the seven surveys are further summarized in Figure 2. In the 1987 survey, a total of 7 (16%) of the 45 sites had Eurasian watermilfoil. By 1989, this number had been reduced to 5 (11%) of the 45 sites surveyed. No new milfoil sites were found in this portion of the 1989 survey; however, two sites which were cleared during the 1987 survey remained free of milfoil in the 1989 survey. In the 1992 survey, 15 (33%) of the sites had

Figure 2. Tributary Sites with Milfoil in the Central Basin of Lake George, NY



Eurasian watermilfoil. Of the 45 sites visited, milfoil was found for the first time at 8 (18%) of the tributary sites. Five (11%) of the sites at which milfoil occurred were positive for the invasive species since the initial survey in 1987. In 1995 and 1998, ten of the sites (22%) were positive for the presence of milfoil. In the 1998 survey, three of the ten tributaries were found to have milfoil for the first time, and five were consistent with previous surveys for the presence of milfoil. In 2001, eleven tributaries (23%) had Eurasian watermilfoil present, seven sites were consistent with previous surveys for the presence of milfoil and one new location (2%) was reported. In 2004, one site (2%) produced milfoil for the first time, and ten sites continued to support milfoil populations. Ten sites with historical milfoil populations have remained clear for at least one year and 6 sites have remained free of milfoil for 2 to 4 years.

The statistics of most interest are the number of sites that had Eurasian watermilfoil during one survey year, but not during the follow-up surveys. Eight sites had milfoil in only 1 of the 7 survey years supporting the contention that hand harvesting small populations of milfoil can eliminate this species. Four of the sites surveyed in 2004 had a milfoil population since the first tributary survey in 1987. Those sites are: Finkle Brook (M-15), Bay south of Red Rock Bay (M-40), Paradise Bay (M-41), and Bolton Bay-Mohican Rd. (M-43). Three of these sites were hand harvested for milfoil removal during each of the surveys. Paradise Bay (M-41) was selected as a candidate site for an experimental herbicide application and management efforts were discontinued in 1993. All of these sites have well established milfoil populations in the general vicinity from which the plants may have been reintroduced. Nine sites supported milfoil in 2 to 6 of the survey years, suggesting that not only initial colonization but also recolonization of tributary sites by Eurasian watermilfoil is occurring in Lake George. The rate of colonization, however, is variable from year to year and between the four portions of the survey. To date, we have no evidence that the loss of Eurasian watermilfoil populations at specific sites in Lake George can be attributed to natural mortality.

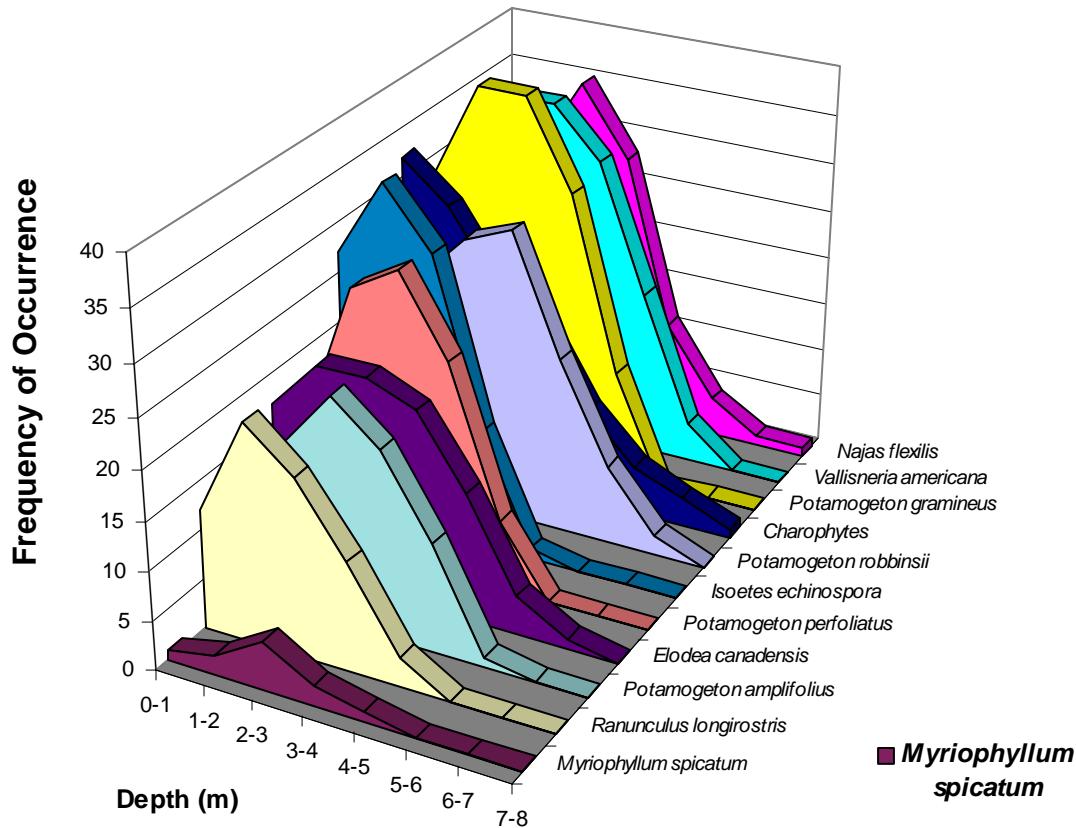
Of the 50 species of submersed aquatic plants identified for Lake George (Ogden et al, 1976, Madsen et al, 1989), 46 were found at the tributary sites in the central basin. Four of these species are on the New York State Rare Plant List (Young, 2004) or associated Watch Lists: *Isoetes lacustris*, *Subularia aquatica*, *Megalodonta beckii* and *Myriophyllum alterniflorum*. This is particularly important for plant management considerations given the impact that a given management technique may have on non-target species. The impact of the growth and spread of nuisance aquatic plants on the distribution of rare plants, however, must also be included in any management decisions. The diversity of species present at tributary sites is also indicative of the suitability of these sites for aquatic plant growth and conversely, the high probability of milfoil infestation at these sites.

Table 2. Frequency of occurrence of all macrophyte species at the tributary sites (n=45).
Species are listed in order of decreasing frequency.

Species	Depth Interval (m)								Totals
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	
<i>Vallisneria americana</i>	24	35	35	30	17	4	0	0	145
<i>Potamogeton gramineus</i>	28	38	38	29	11	0	0	0	144
<i>Najas flexilis</i>	19	27	35	28	11	4	1	1	126
<i>Charophytes</i>	32	28	21	18	10	5	3	1	118
<i>Potamogeton robbinsii</i>	8	23	28	30	18	8	2	0	117
<i>Isoetes echinospora</i>	27	35	29	12	1	0	0	0	104
<i>Elodea canadensis</i>	17	22	22	20	13	4	1	0	99
<i>Potamogeton perfoliatus</i>	13	27	30	22	7	0	0	0	99
<i>Potamogeton amplifolius</i>	3	17	23	19	11	1	0	0	74
<i>Ranunculus longirostris</i>	12	22	18	11	3	0	0	0	66
<i>Eriocaulon septangulare</i>	27	29	8	0	0	0	0	0	64
<i>Elatine minima</i>	28	30	4	0	0	0	0	0	62
<i>Myriophyllum tenellum</i>	26	29	4	1	0	0	0	0	60
<i>Juncus pelocarpus</i>	20	25	6	0	0	0	0	0	51
<i>Sparganium sp.</i>	18	20	9	2	0	0	0	0	49
<i>Potamogeton pusillus</i>	5	10	15	11	4	2	1	0	48
<i>Eleocharis acicularis</i>	22	23	2	0	0	0	0	0	47
<i>Zosterella dubia</i>	9	12	14	8	4	0	0	0	47
<i>Lobelia dortmanna</i>	20	20	0	0	0	0	0	0	40
<i>Sagittaria graminea</i>	13	17	8	2	0	0	0	0	40
<i>Potamogeton spirillum</i>	9	9	6	3	1	1	0	0	29
<i>Megalodonta beckii</i>	1	8	8	6	5	0	0	0	28
<i>Subularia aquatica</i>	11	13	0	0	0	0	0	0	24
<i>Potamogeton zosteriformis</i>	1	3	7	7	5	0	0	0	23
<i>Ranunculus reptans</i>	10	13	0	0	0	0	0	0	23
<i>Isoetes lacustris</i>	0	0	0	5	7	6	4	0	22
<i>Potamogeton foliosus</i>	2	5	6	3	2	0	0	0	18
<i>Potamogeton praelongus</i>	0	1	5	7	5	0	0	0	18
<i>Potamogeton vaseyi</i>	1	4	3	0	1	1	1	1	12
<i>Myriophyllum spicatum</i>	1	2	5	2	1	0	0	0	11
<i>Utricularia resupinata</i>	5	5	1	0	0	0	0	0	11
<i>Myriophyllum alterniflorum</i>	5	5	0	0	0	0	0	0	10
<i>Fontinalis sp.</i>	4	2	1	1	0	0	0	0	8
<i>Potamogeton epihydrus</i>	2	4	2	0	0	0	0	0	8
<i>Scirpus subterminalis</i>	4	3	1	0	0	0	0	0	8
<i>Nymphaea odorata</i>	3	2	0	0	0	0	0	0	5
<i>Utricularia vulgaris</i>	1	2	2	0	0	0	0	0	5
<i>Najas guadalupensis</i>	0	1	1	1	0	0	0	0	3
<i>Potamogeton crispus</i>	1	1	1	0	0	0	0	0	3
<i>Typha latifolia</i>	2	1	0	0	0	0	0	0	3
<i>Lindernia sp.</i>	0	1	1	0	0	0	0	0	2
<i>Neobeckia aquatica</i>	1	1	0	0	0	0	0	0	2
<i>Sagittaria cuneata</i>	1	0	1	0	0	0	0	0	2
<i>Sagittaria sp.</i>	1	1	0	0	0	0	0	0	2
<i>Nuphar variegata</i>	1	0	0	0	0	0	0	0	1
<i>Potamogeton friesii</i>	0	1	0	0	0	0	0	0	1

In Table 2, the species present and their depth distribution are ranked in order of the frequency for which they appeared at the tributary sites. The depth distribution of the ten most frequently occurring species is presented in Figure 3. Depth distribution and species richness remains comparable to that reported in previous surveys of the tributaries of the central basin.

Figure 3. Frequency and depth distribution of the 10 most common macrophyte species and Eurasian watermilfoil (*Myriophyllum spicatum*).



Frequency of occurrence, or the number of tributaries where each species was present, is an important measure of the distribution of a species but does not consider the relative abundance of that species within the overall population. Table 3 lists the species present and their depth distribution ranked in order of mean percent cover. This ranking is a better measure of the dominance of certain plants, and in conjunction with frequency data, provides a more complete picture of aquatic plant community structure. In Figure 4, the depth distribution of the 10 most abundant species is presented. A comparison of Figures 3 and 4 indicates that the 10 most abundant species by frequency of occurrence are not the same as the 10 most abundant species by mean percent cover. Seven of the ten species on the two lists, however, are the same. The notable exceptions are species of the genus *Isoetes*. *Isoetes lacustris*, while not a common species by frequency of occurrence, forms a nearly monospecific carpet in depths of 5 to 7 meters at a number of sites. This density of growth makes it a common member of the plant community by

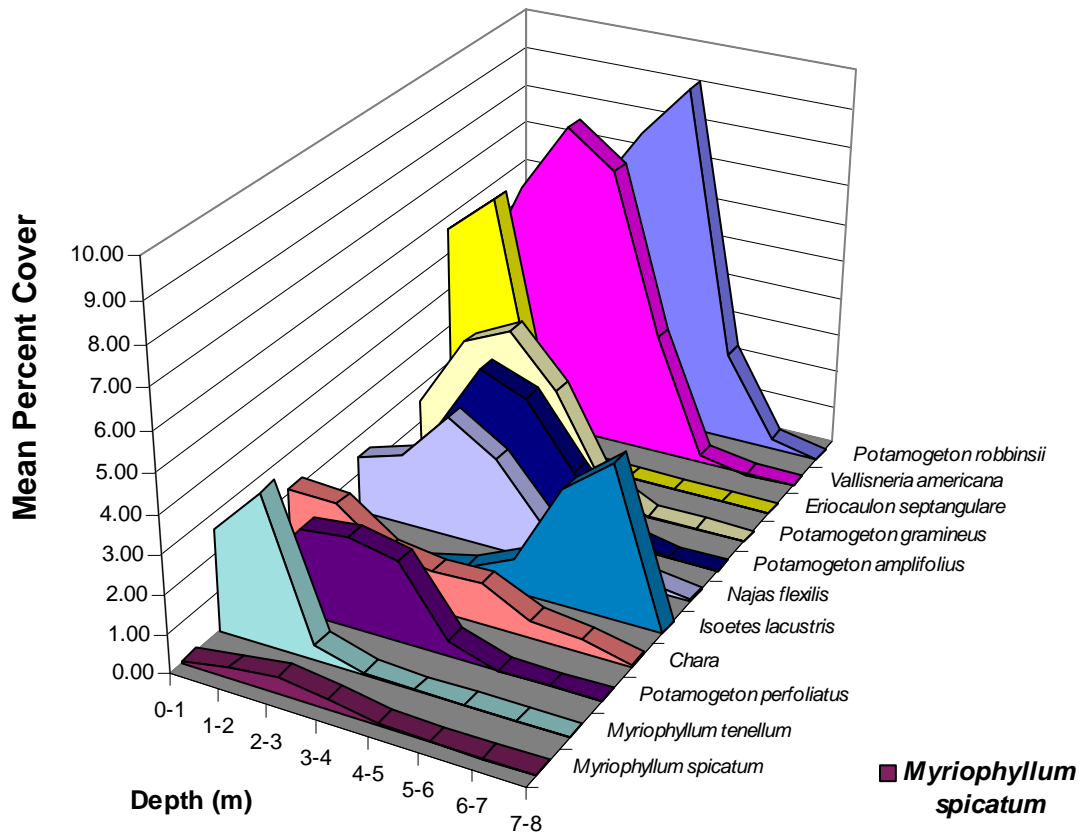
Table 3. Mean percent cover of all macrophyte species at the tributary sites. Species are listed in order of decreasing abundance.

Species	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	Totals
<i>Vallisneria americana</i>	2.11	2.06	8.22	7.33	3.17	0.22	0.00	0.00	2.89
<i>Potamogeton robbinsii</i>	0.44	2.39	6.06	7.78	9.17	2.33	0.28	0.00	3.56
<i>Eriocaulon septangulare</i>	5.61	6.67	1.17	0.00	0.00	0.00	0.00	0.00	1.68
<i>Potamogeton gramineus</i>	1.56	3.50	4.11	2.78	0.61	0.00	0.00	0.00	1.57
<i>Potamogeton amplifolius</i>	0.17	1.78	3.72	3.28	1.61	0.22	0.00	0.00	1.35
<i>Najas flexilis</i>	1.44	1.83	3.17	2.39	0.94	0.39	0.22	0.06	1.31
Charophytes	2.11	2.06	1.17	1.00	1.06	0.44	0.33	0.06	1.03
<i>Isoetes lacustris</i>	0.00	0.00	0.00	0.28	0.89	3.06	4.00	0.00	1.03
<i>Potamogeton perfoliatus</i>	0.72	2.17	2.33	2.06	0.39	0.00	0.00	0.00	0.96
<i>Myriophyllum tenellum</i>	2.61	3.89	0.39	0.06	0.00	0.00	0.00	0.00	0.87
<i>Isoetes echinospora</i>	1.67	2.11	1.94	0.67	0.06	0.00	0.00	0.00	0.81
<i>Elodea canadensis</i>	0.94	1.39	1.39	1.28	0.72	0.22	0.06	0.00	0.75
<i>Juncus pelocarpus</i>	1.78	3.61	0.33	0.00	0.00	0.00	0.00	0.00	0.72
<i>Sagittaria graminea</i>	1.39	2.67	1.00	0.11	0.00	0.00	0.00	0.00	0.65
<i>Ranunculus longirostris</i>	0.83	1.39	1.67	0.78	0.17	0.00	0.00	0.00	0.60
<i>Eleocharis acicularis</i>	1.89	2.28	0.44	0.00	0.00	0.00	0.00	0.00	0.58
<i>Elatine minima</i>	1.56	1.67	0.22	0.00	0.00	0.00	0.00	0.00	0.43
<i>Heteranthera dubia</i>	0.50	1.00	1.11	0.61	0.22	0.00	0.00	0.00	0.43
<i>Potamogeton pusillus</i>	0.28	0.56	0.83	0.78	0.39	0.11	0.06	0.00	0.38
<i>Sparganium sp.</i>	1.00	1.28	0.50	0.11	0.00	0.00	0.00	0.00	0.36
<i>Megalodonta beckii</i>	0.06	0.61	0.94	0.33	0.44	0.00	0.00	0.00	0.30
<i>Lobelia dortmanna</i>	1.11	1.11	0.00	0.00	0.00	0.00	0.00	0.00	0.28
<i>Potamogeton spirillus</i>	0.50	0.67	0.33	0.17	0.06	0.06	0.00	0.00	0.22
<i>Potamogeton praelongus</i>	0.00	0.06	0.28	0.89	0.28	0.00	0.00	0.00	0.19
<i>Potamogeton</i>	0.06	0.17	0.56	0.39	0.28	0.00	0.00	0.00	0.18
<i>Subularia aquatica</i>	0.61	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.17
<i>Ranunculus reptans</i>	0.56	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.16
<i>Utricularia resupinata</i>	0.61	0.61	0.06	0.00	0.00	0.00	0.00	0.00	0.16
<u>Myriophyllum spicatum</u>	0.06	0.28	0.44	0.28	0.06	0.00	0.00	0.00	0.14
<i>Potamogeton foliosus</i>	0.11	0.28	0.33	0.17	0.11	0.00	0.00	0.00	0.13
<i>Myriophyllum alterniflorum</i>	0.44	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.11
<i>Scirpus subterminalis</i>	0.39	0.33	0.06	0.00	0.00	0.00	0.00	0.00	0.10
<i>Potamogeton vaseyi</i>	0.06	0.22	0.17	0.00	0.06	0.06	0.06	0.06	0.08
<i>Fontinalis sp.</i>	0.22	0.11	0.06	0.06	0.00	0.00	0.00	0.00	0.06
<i>Nymphaea odorata</i>	0.33	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.06
<i>Potamogeton epihydrus</i>	0.11	0.22	0.11	0.00	0.00	0.00	0.00	0.00	0.06
<i>Sagittaria cuneata</i>	0.06	0.00	0.22	0.00	0.00	0.00	0.00	0.00	0.03
<i>Utricularia vulgaris</i>	0.06	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.03
<i>Najas guadalupensis</i>	0.00	0.06	0.06	0.06	0.00	0.00	0.00	0.00	0.02
<i>Potamogeton crispus</i>	0.06	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.02
<i>Typha latifolia</i>	0.11	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.02
<i>Lindernia sp.</i>	0.00	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.01
<i>Neobeckia aquatica</i>	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01
<i>Sagittaria sp.</i>	0.06	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01
<i>Nuphar variegata</i>	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
<i>Potamogeton friesii</i>	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01

mean percent cover. This demonstrates that certain species, while not appearing as often as others, can tend to dominate at the locations where they do occur. This species is also listed on the rare plant list for New York State, however it is a common member of the Lake George aquatic plant community. *Isoetes echinospora*, is a common species by frequency of occurrence due to its wide distribution, however this species is rarely

present in large numbers, thus its absence on the list of dominant species by percent cover.

Figure 4. Mean percent cover and depth distribution for the 10 most common macrophyte species and Eurasian watermilfoil (*Myriophyllum spicatum*).

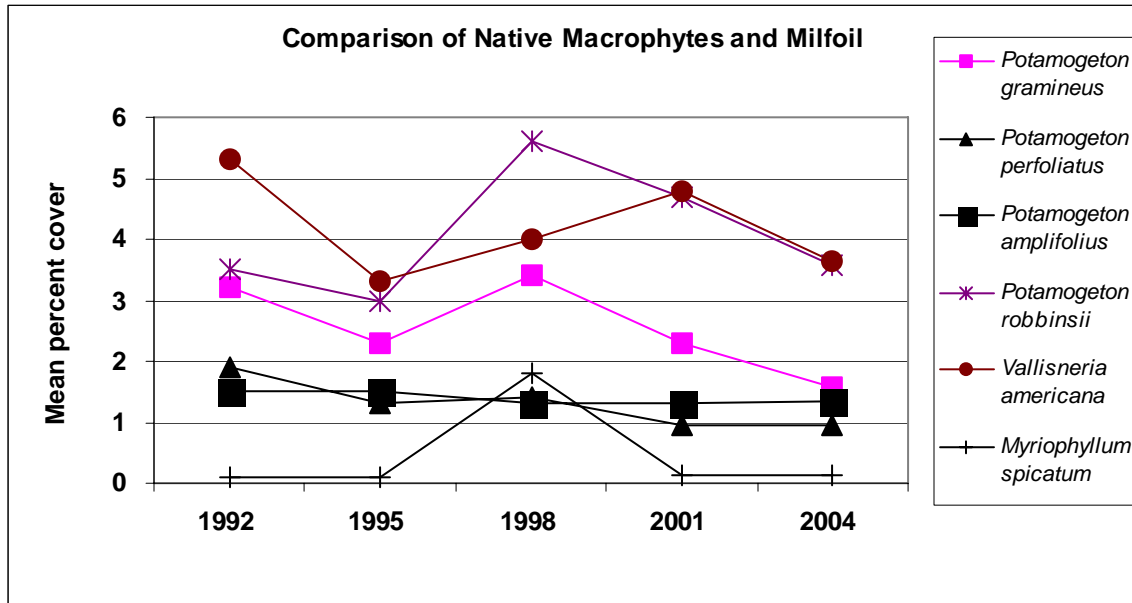


A comparison of the major species by frequency of occurrence reported during the 1995, 1998 and 2001 tributary surveys (Eichler et al. 1996; 1999; 2002) with the current list (Table 2) shows few differences. Eight of the ten most abundant species are the same. *Isoetes echinospora* and *Lobelia dortmanna* were not among the top ten species during the 1995 survey, but were ranked eight and ninth respectively in the 1998 survey. *Isoetes echinospora* ranked sixth in 2001 and 2004. Eurasian watermilfoil was ranked 31st and 29th by frequency of occurrence in the 1995 and 1998 surveys, respectively. In 2001 and 2004, Eurasian watermilfoil ranked 30th by frequency of occurrence. While Eurasian watermilfoil frequency of occurrence has not declined appreciably by frequency of occurrence, the fact that it has not expanded its coverage is encouraging. This relationship also coincides with the mean percent cover between survey years. In 1995, milfoil is listed as fourth in terms of percent cover, and by 1998 milfoil had dropped to eleventh on the list. This decline continued in 2001, with Eurasian watermilfoil ranked 31st. In 2004, Eurasian watermilfoil was ranked 29th by mean percent cover. While the number of locations where Eurasian watermilfoil is found in this section of the lake has

remained stable, its effect on the native plant community (mean percent cover) has declined. Hand harvesting scattered populations of Eurasian watermilfoil and suction harvesting or application of benthic barrier for areas of dense growth of Eurasian watermilfoil appears to have slowed the expansion of this species.

Although the number of replicates is too few to suggest a statistically reliable rate of colonization, new sites continue to be colonized on a year-to-year basis. The occurrence of milfoil at sites that had been cleared in previous years also indicates that continued surveillance of milfoil sites is necessary. The more sobering indication from the recurrence of milfoil at previously harvested sites is that there are no sites or cases to indicate any natural mortality or demise of small populations of Eurasian watermilfoil in Lake George. Although these populations may not expand for several years, clearly they are not dying off on their own.

Figure 5. Mean percent cover of common native aquatic plant species and Eurasian watermilfoil.



Analysis of long-term data of species richness indicates a trend developing in its relationship to frequency of occurrence of milfoil. Since 1992, the number of tributary sites in the central basin with milfoil present has decreased by 9%. This decrease is most probably due to management efforts employed to control Eurasian watermilfoil. Over this same time frame, the total number of species observed has increased by 22% (from 36 to 46 species present). This developing trend may be an indicator of the effect that the presence of milfoil can have on native aquatic plant communities, or conversely the impact of milfoil removal on native species richness. Variability in the growth of aquatic plants however is also attributed to climactic conditions and cyclical growth patterns. From Figure 5, it is apparent that mean percent cover results for most species have varied consistently over the years of survey, with 1998 a particularly good growing year for all

species and 1995 a poor one. Seasonal variability and cyclic growth patterns place limits on the ability to detect impacts associated with the growth of Eurasian watermilfoil. In order to understand the impact of Eurasian watermilfoil growth on native species abundance, long-term evaluations are necessary.

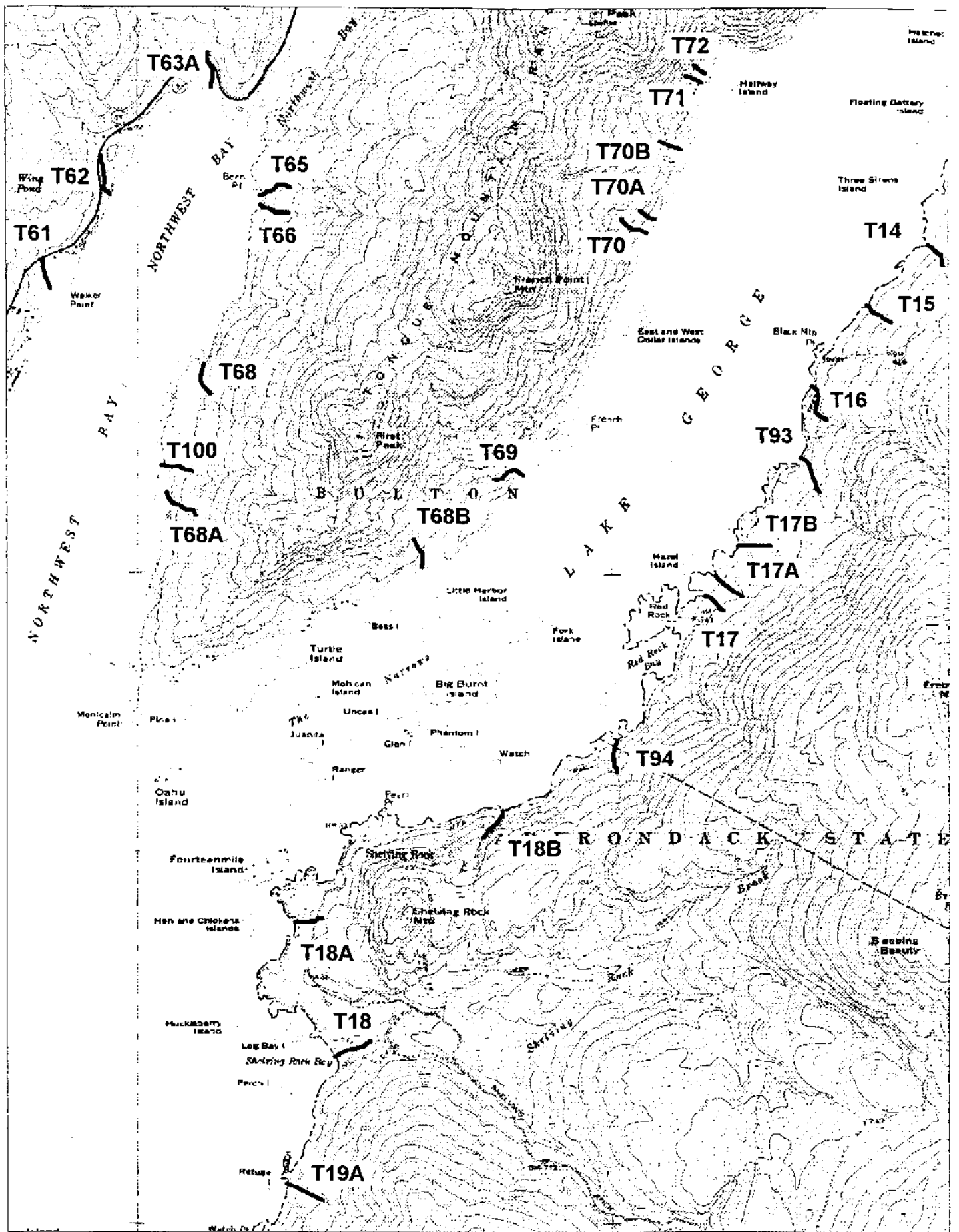
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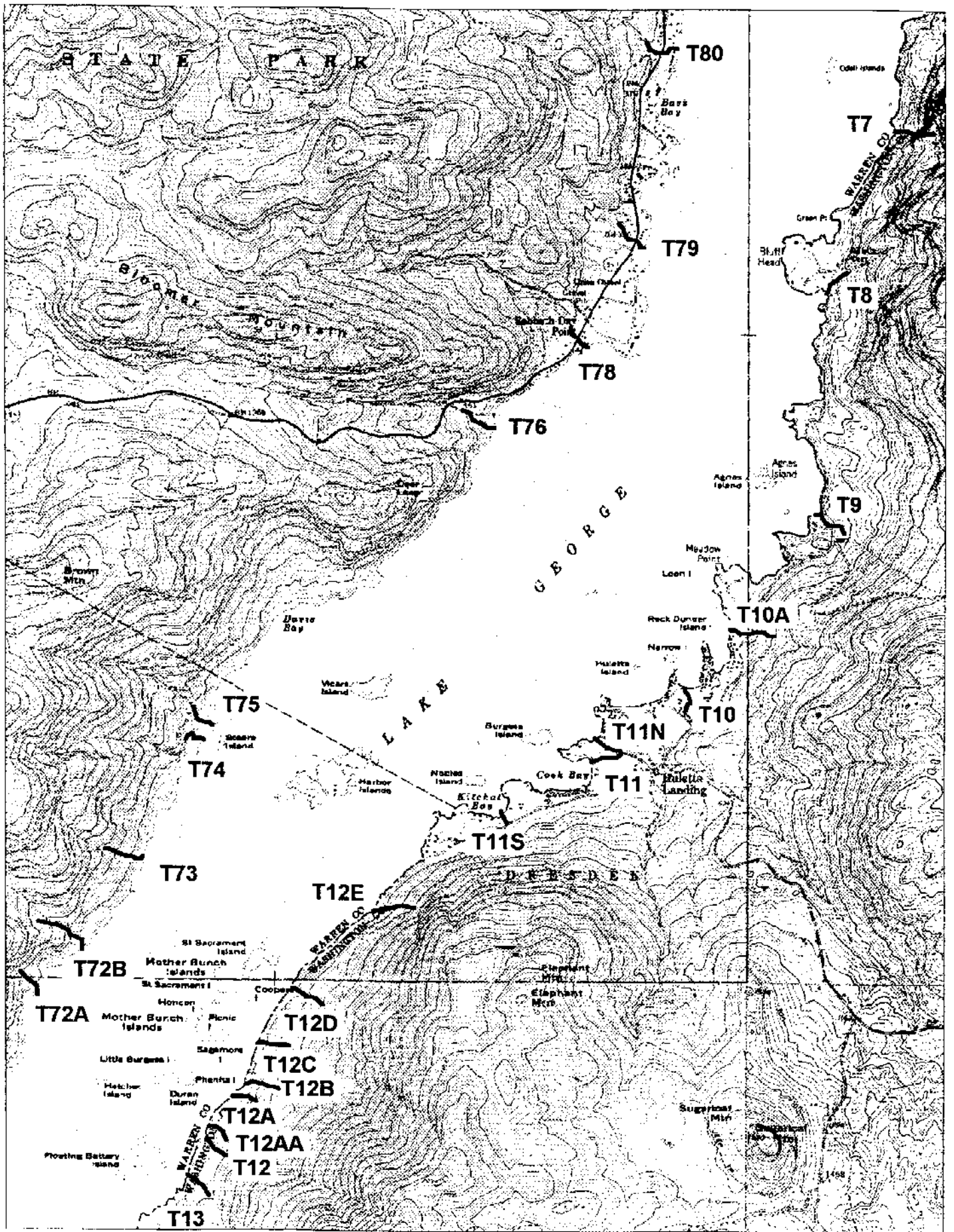
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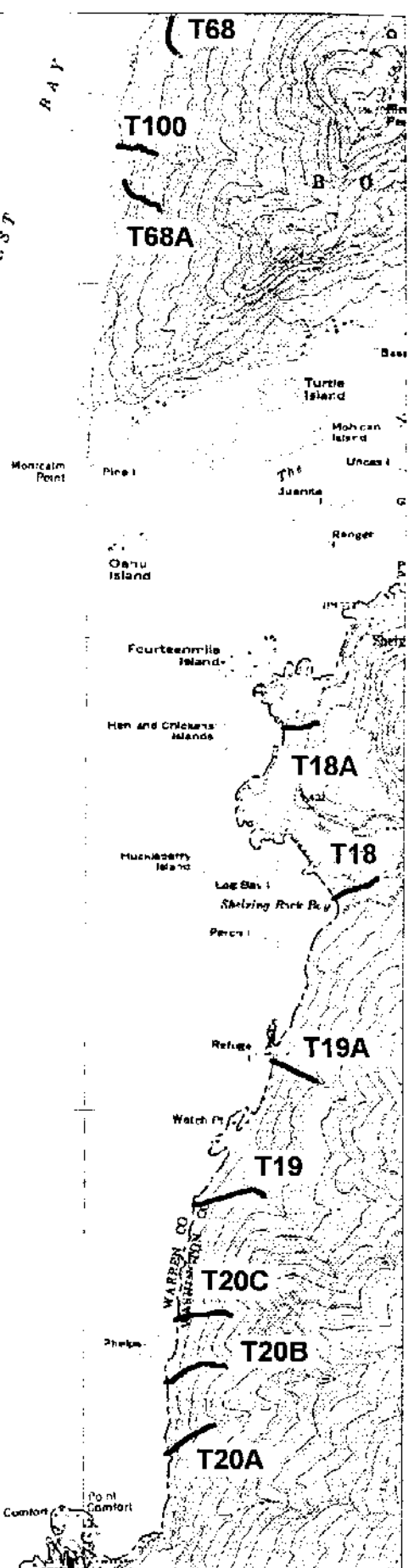
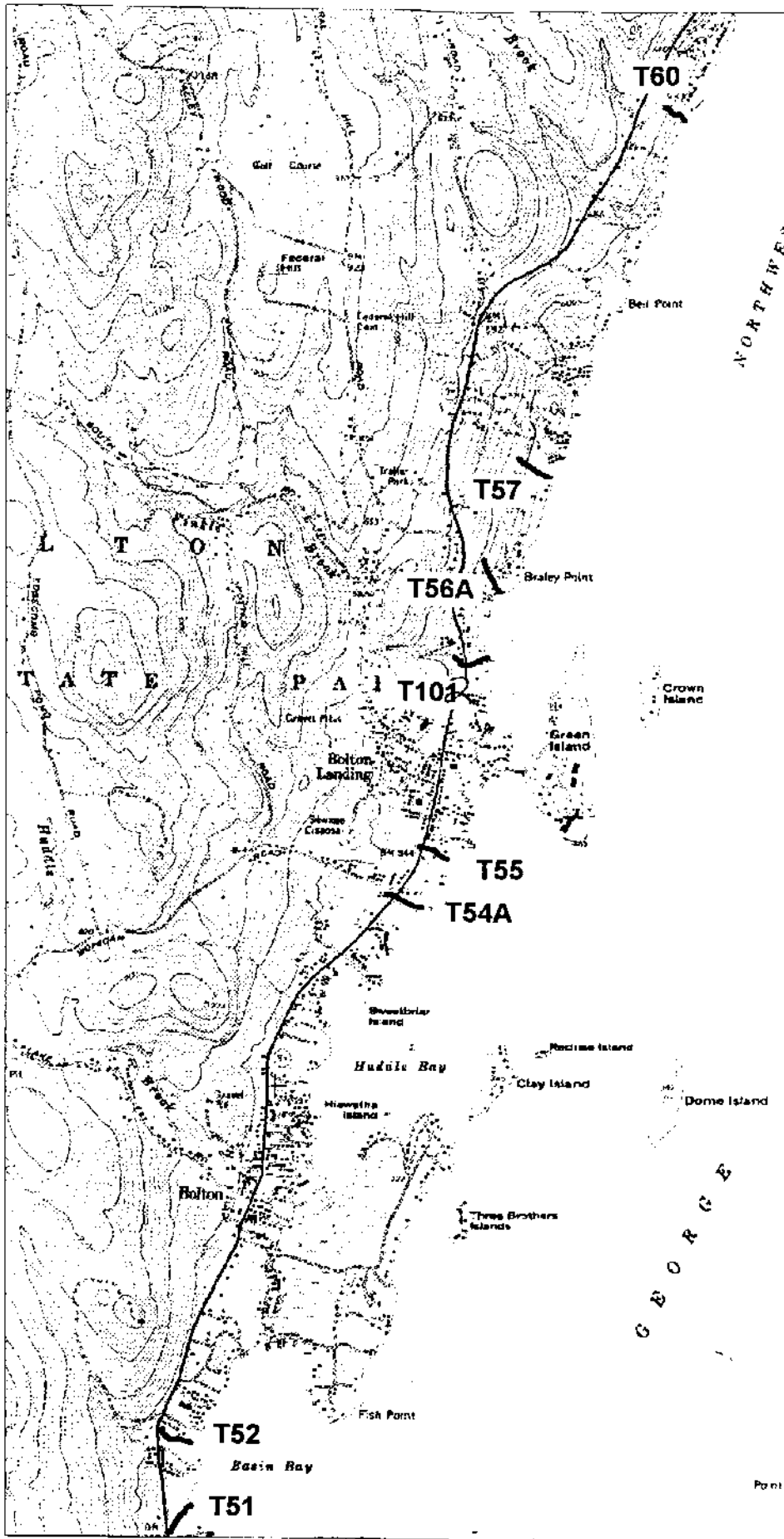
ACKNOWLEDGMENTS

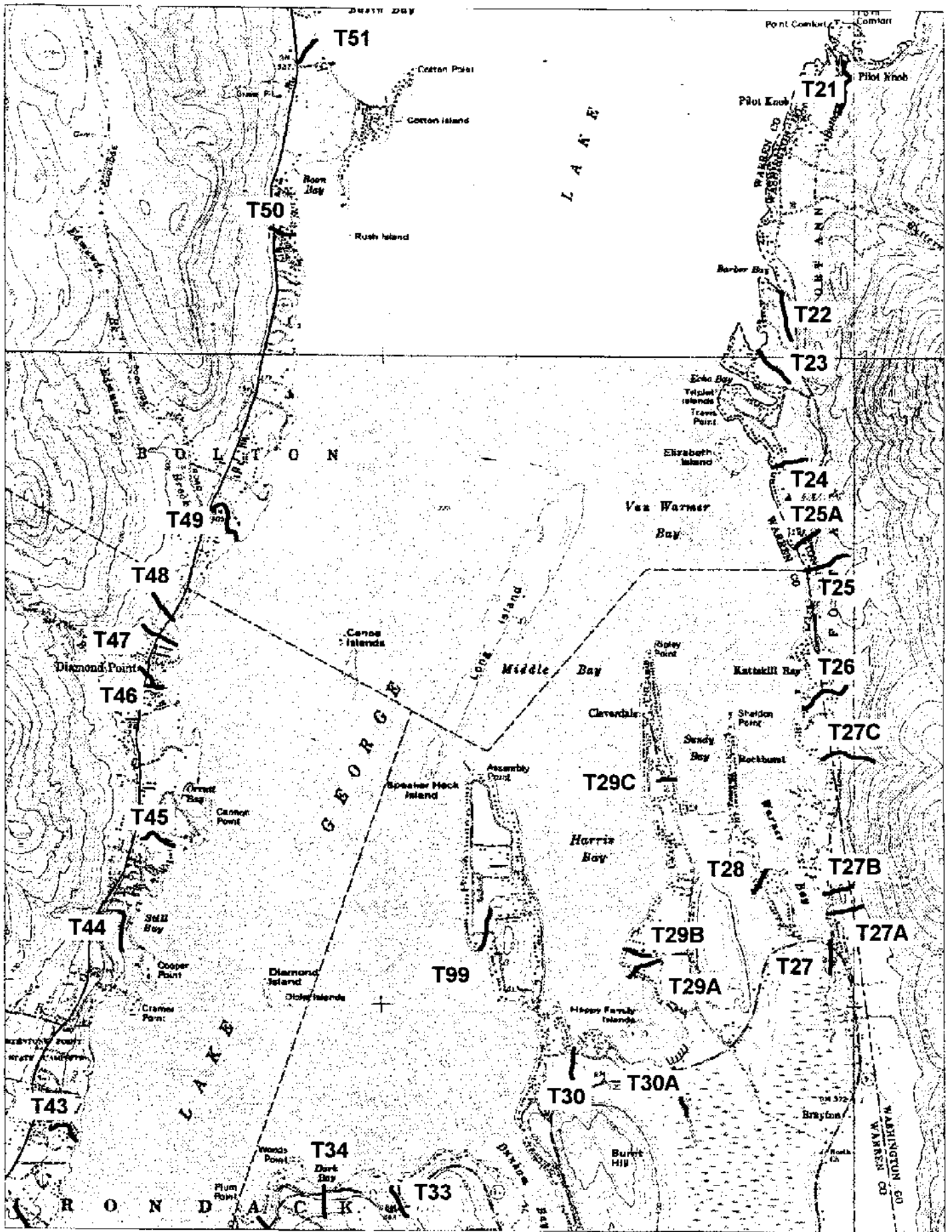
This project was supported by the FUND for Lake George through a grant to the Darrin Fresh Water Institute. We gratefully acknowledge their support. Field assistance for this project was provided by Tiffini Burlingame and R.J. Moon.

APPENDIX A
SITE LOCATIONS









APPENDIX B

PERCENT COVER DATA

Eurasian Watermilfoil (*Myriophyllum spicatum*) is shaded.

Site: T-12

Bay SE of Duran Isl.

5-Aug-04

<u>Species</u>	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	10	2.5	2.5			
Elatine minima	2.5	2.5	2.5				
Eleocharis acicularis	10	2.5					
Elodea canadensis	2.5	2.5					
Eriocaulon septangulare	2.5	10	2.5				
Isoetes echinospora	2.5	2.5	2.5	2.5			
Juncus pelocarpus	2.5	10	2.5				
Myriophyllum tenellum	2.5	20	2.5				
Najas flexilis	2.5	2.5	10	10			
Potamogeton amplifolius		2.5	10	10			
Potamogeton foliosus			2.5	2.5			
Potamogeton gramineus	2.5	10					
Potamogeton perfoliatus		10	2.5	2.5			
Potamogeton pusillus		2.5	2.5	10			
Potamogeton robbinsii		2.5	2.5	10			
Potamogeton spirillus	2.5						
Ranunculus longirostris		2.5	2.5	2.5			
Ranunculus reptans		2.5					
Sparganium sp.	2.5						
Subularia aquatica	2.5	2.5					
Vallisneria americana		10	10	10			

Site: T-12aa

Bay SE of Duran Isl.

5-Aug-04

<u>Species</u>	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Eleocharis acicularis		10					
Eriocaulon septangulare		10	2.5				
Heteranthera dubia	2.5	2.5					
Isoetes echinospora	2.5	2.5	2.5	2.5			
Juncus pelocarpus		10	2.5				
Myriophyllum tenellum		10					
Najas flexilis			2.5	10			
Potamogeton foliosus		2.5					
Potamogeton gramineus		2.5	2.5	2.5			
Potamogeton robbinsii		2.5	2.5	10			
Potamogeton spirillus		2.5					
Ranunculus longirostris		2.5	2.5				
Sagittaria graminea		2.5					
Vallisneria americana		10	10	2.5			

Site: T-12a &b
5-Aug-04

SE Phenita Island

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5						
Elatine minima	2.5	2.5					
Eleocharis acicularis		10	10				
Eriocaulon septangulare	2.5	10					
Isoetes echinospora	2.5	2.5	10				
Juncus pelocarpus	2.5	10					
Najas flexilis	2.5	2.5	2.5				
Potamogeton amplifolius		10	2.5				
Potamogeton foliosus		2.5					
Potamogeton gramineus		2.5	10				
Potamogeton perfoliatus		2.5	2.5				
Potamogeton pusillus			2.5				
Potamogeton robbinsii		2.5	2.5				
Ranunculus longirostris		2.5	10				
Sagittaria graminea		10	2.5				
Vallisneria americana	2.5	20	2.5				

Site: T-12c
5-Aug-04

E. of Sagamore Island

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara						2.5	2.5
Heteranthera dubia			10				
Isoetes macrospora				2.5			7.5
Najas flexilis			10	10	10	2.5	
Potamogeton amplifolius			20				
Potamogeton perfoliatus			2.5	2.5			
Potamogeton pusillus			2.5	2.5	2.5		
Potamogeton robbinsii			2.5	2.5	2.5	2.5	2.5
Potamogeton spirillus			2.5				
Vallisneria americana			10	2.5	10	2.5	

Site: T-12d

NE of Cooper Island

5-Aug-04

Species	Depth Interval (m)							
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>	<u>7-8</u>
Chara	2.5	2.5	2.5	2.5				
Elatine minima	2.5	2.5						
Eriocaulon septangulare	10	10						
Fontinalis			2.5	2.5				
Isoetes echinospora	2.5	2.5	2.5	2.5				
Lobelia dortmanna	2.5	2.5						
Myriophyllum spicatum			2.5					
Myriophyllum tenellum	2.5	10						
Najas flexilis	2.5	10	10	2.5				
Potamogeton amplifolius				2.5	2.5			
Potamogeton foliosus			2.5	2.5	2.5			
Potamogeton gramineus	2.5	2.5	2.5	2.5				
Potamogeton robbinsii				2.5	2.5			
Potamogeton spirillus				2.5				
Sparganium sp.	2.5	2.5						
Vallisneria americana		10	10	10	10			

Site T-12 E

Elephant

5-Aug-04

Species	Depth Interval (m)							
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>	<u>7-8</u>
Chara/Nitella	2.5	2.5	2.5	2.5	10	10	10	2.5
Elatine minima	2.5	2.5						
Eleocharis acicularis	2.5	10						
Elodea canadensis			2.5	2.5	2.5	2.5	2.5	
Eriocaulon septangulare	2.5	10						
Heteranthera dubia		2.5	2.5					
Isoetes echinospora	2.5	2.5						
Isoetes macrospora				2.5	2.5	10	20	
Lobelia dortmanna	2.5							
Najas flexilis			10	10	10	10	10	2.5
Potamogeton amplifolius			2.5	10	10	10		
Potamogeton foliosus			2.5					
Potamogeton gramineus		2.5	10	2.5				
Potamogeton pusillus				2.5	10	2.5	2.5	
Potamogeton robbinsii				2.5	10	10	10	
Potamogeton spirillus	2.5							
Potamogeton vaseyii					2.5	2.5	2.5	2.5
Sparganium sp.	2.5							
Vallisneria americana		2.5	10	10				

Site: T-13
14-Sep-04

E of Floating Battery Island

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5	10	2.5	2.5
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	2.5					
Elodea canadensis		2.5	2.5	2.5			
Eriocaulon septangulare	10	10					
Fontinalis	2.5	2.5					
Isoetes echinospora	2.5	2.5	2.5	2.5			
Isoetes macrospora					2.5	37.5	10
Lobelia dortmanna	2.5	2.5					
Myriophyllum tenellum	2.5	10	2.5	2.5			
Najas flexilis		2.5	10	2.5	2.5	2.5	
Potamogeton amplifolius		2.5	2.5	10	10		
Potamogeton foliosus		2.5					
Potamogeton gramineus	2.5	2.5	2.5	2.5			
Potamogeton perfoliatus		2.5	2.5	2.5			
Potamogeton pusillus	2.5	2.5	2.5	2.5	2.5	2.5	
Potamogeton robbinsii		2.5	10	10	20	2.5	
Potamogeton spirillus	2.5	2.5	2.5				
Ranunculus longirostris		2.5	2.5	2.5			
Utricularia resupinata		2.5	2.5				
Vallisneria americana	2.5	2.5	10	10	10		

Site: T-14
14-Sep-04

SE of Three Sirens Island

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5	2.5	2.5	
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	2.5					
Elodea canadensis			2.5	2.5	2.5		
Eriocaulon septangulare	10	2.5					
Isoetes echinospora	2.5	2.5					
Isoetes lacustris						10	
Juncus polocarpus	10	10					
Myriophyllum tenellum	2.5	2.5					
Najas flexilis	2.5	2.5	2.5	2.5	2.5	2.5	
Potamogeton amplifolius				10	2.5		
Potamogeton foliosus			2.5				
Potamogeton gramineus	2.5	2.5	10	10	2.5		
Potamogeton perfoliatus	2.5	2.5					
Potamogeton pusillus			2.5	2.5			
Potamogeton robbinsii			2.5	2.5	20	10	
Potamogeton spirillus	2.5						
Ranunculus reptans	2.5						
Sagittaria cuneata			10				
Sparganium sp.	2.5	10	2.5				
Vallisneria americana	2.5	2.5	10	20	10		

Site: T-15
14-Sep-04

NE of Black Mt. Point

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5	2.5	2.5	
Elatine minima	2.5	2.5					
Eriocaulon septangulare	2.5	2.5					
Isoetes echinospora	2.5	2.5	2.5	2.5	2.5		
Isoetes lacustris						2.5	
Juncus pelocarpus		2.5					
Lobelia dortmanna	2.5	2.5					
Najas flexilis				2.5	2.5		
Potamogeton foliosus			2.5	2.5	2.5		
Potamogeton gramineus	2.5	2.5	2.5	2.5	2.5		
Potamogeton perfoliatus		2.5					
Potamogeton spirillus			2.5	2.5	2.5	2.5	
Ranunculus reptans		2.5					
Subularia aquatica		2.5					
Utricularia resupinata		10					

Site: T-16
14-Sep-04

Bay S of Black Mt. Point

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5						
Elatine minima	2.5	2.5					
Elodea canadensis	2.5	10.0	10.0	2.5			
Isoetes echinospora	2.5	2.5	2.5				
Juncus pelocarpus	2.5	2.5					
Myriophyllum tenellum	2.5	2.5					
Potamogeton amplifolius		2.5	10.0	2.5			
Potamogeton epiphydrous		2.5	2.5				
Potamogeton gramineus	2.5	10.0	10.0	10.0			
Potamogeton perfoliatus	2.5	2.5	2.5	2.5			
Sparganium sp.	2.5	2.5	2.5				
Vallisneria americana	2.5	10.0	20	10			

Site: T-17
1-Oct-04

Paradise Bay

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5	2.5		
Elatine minima	2.5	2.5	2.5				
Eleocharis acicularis	2.5	2.5					
Elodea canadensis	2.5	2.5	2.5	2.5	2.5		
Eriocaulon septangulare	20	37.5	10				
Heteranthera dubia	2.5	2.5	2.5	2.5			
Isoetes echinospora	2.5	2.5	2.5				
Juncus pelocarpus	2.5	20	2.5				
Megalodonta beckii		2.5	10	2.5	2.5		
Myriophyllum tenellum	2.5	2.5					
Najas flexilis	2.5	10	2.5	2.5			
Potamogeton amplifolius			2.5	10	2.5		
Potamogeton gramineus	2.5	2.5	10	2.5	2.5		
Potamogeton perfoliatus	2.5	10	10	2.5			
Potamogeton praelongus			2.5	10			
Potamogeton pusillus	2.5	2.5	2.5	2.5			
Potamogeton robbinsii	2.5	2.5	10	20	37.5		
Potamogeton spirillus	2.5	2.5					
Potamogeton vaseyii		2.5	2.5				
Potamogeton zosteriformis			2.5	2.5	2.5		
Ranunculus longirostris	2.5	2.5	2.5	2.5			
Utricularia resupinata	2.5	2.5					
Vallisneria americana	10	10	20	20	10		

Site: T-17a
1-Oct-04

Bay SE Hazel Island

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5			
Elatine minima	2.5	2.5	2.5				
Eleocharis acicularis	2.5	10					
Elodea canadensis	2.5	2.5	2.5	2.5	2.5		
Eriocaulon septangulare	10	37.5	10				
Heteranthera dubia			10	2.5	2.5		
Isoetes echinospora	2.5	2.5	2.5				
Juncus pelocarpus	2.5	10					
Megalodonta beckii		2.5	2.5	2.5	2.5		
Myriophyllum tenellum	2.5	10					
Najas flexilis	2.5	2.5	2.5				
Potamogeton amplifolius		2.5	20	10	2.5		
Potamogeton gramineus		20	10	10	2.5		
Potamogeton perfoliatus			10	10			
Potamogeton pusillus	2.5	2.5	2.5				
Potamogeton robbinsii	2.5	2.5	10	10	37.5		
Ranunculus longirostris	2.5	2.5					
Sagittaria graminea	2.5	10					
Scirpus subterminalis	2.5	10					
Utricularia resupinata	2.5	2.5					
Vallisneria americana	2.5	10	10	10	2.5		

Site: T-17b
1-Oct-04

Bay NE Hazel Island

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5						
Elatine minima	2.5	2.5					
Elodea canadensis	2.5						
Eriocaulon septangulare	20	10	2.5				
Isoetes echinospora	2.5	2.5	2.5	2.5			
Juncus pelocarpus	10	2.5					
Lobelia dortmanna	2.5						
Myriophyllum tenellum	2.5	2.5					
Najas flexilis	2.5	2.5	2.5	2.5	2.5		
Potamogeton gramineus	2.5	2.5	10	10	2.5		
Potamogeton perfoliatus	2.5	2.5	2.5	2.5	2.5		
Potamogeton robbinsii		2.5	2.5	10	20		
Potamogeton zosteriformis			2.5	2.5	2.5		
Ranunculus longirostris	2.5	2.5	10	10	2.5		
Ranunculus reptans	2.5						
Scirpus subterminalis	10						
Sparganium sp.	2.5	2.5					
Subularia aquatica	2.5	2.5					
Utricularia resupinata	10						
Vallisneria americana	2.5	10	10	37.5	20		

Site: T-18
7-Oct-04

Shelving Rock Bay

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5						
Eriocaulon septangulare	2.5						
Nuphar luteum	2.5						
Sagittaria graminea	2.5						
Vallisneria americana	2.5	2.5					

Site: T-18a
7-Oct-04

Bay E Hens and Chicks Islands

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5			
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	2.5					
Elodea canadensis		2.5	2.5				
Eriocaulon septangulare	2.5	10					
Isoetes echinospora		2.5	2.5				
Juncus pelocarpus	2.5	10					
Lobelia dortmanna	2.5	2.5					
Myriophyllum tenellum	2.5	2.5					
Najas flexilis	2.5	2.5	2.5	2.5			
Potamogeton amplifolius		10	2.5	2.5			
Potamogeton gramineus	2.5	2.5	2.5	2.5			
Potamogeton perfoliatus		2.5	2.5				
Potamogeton robbinsii				2.5			
Ranunculus longirostris		2.5	2.5				
Ranunculus reptans	2.5	2.5					
Sagittaria graminea		2.5	2.5	2.5			
Sparganium sp.		2.5					
Subularia aquatica	2.5	2.5					
Vallisneria americana	2.5	2.5	2.5	2.5			

Site: T-18b
4-Oct-04

S Watch Point

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5	10		
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	2.5					
Eriocaulon septangulare	10	2.5					
Isoetes echinospora	2.5	2.5	2.5				
Isoetes lacustris				2.5	10		
Juncus pelocarpus		2.5	2.5				
Lobelia dortmanna	2.5	2.5					
Myriophyllum tenellum	2.5	2.5					
Najas flexilis	2.5	2.5	2.5	2.5	2.5		
Potamogeton amplifolius		2.5	2.5	2.5			
Potamogeton gramineus	2.5	10	2.5				
Potamogeton perfoliatus			2.5	2.5	2.5		
Potamogeton robbinsii				2.5	10		
Sagittaria graminea	2.5	2.5					
Sparganium sp.	2.5	2.5	2.5	2.5			
Vallisneria americana	2.5	10	2.5	2.5	2.5		

Site: T-19
6-Oct-04

SW Watch Pt.

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5					
Elatine minima	2.5	2.5					
Eriocaulon septangulare	10	2.5					
Isoetes echinospora	2.5	2.5					
Lobelia dortmanna	2.5	2.5					
Myriophyllum tenellum	2.5	2.5					
Potamogeton gramineus	2.5	2.5	2.5				
Sparganium sp.	2.5	2.5					

Site: T-19a
7-Oct-04

E Refuge Island

<u>Species</u>	<u>Depth Interval (m)</u>					
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>
Chara	2.5	2.5	2.5			
Elatine minima	2.5	2.5				
Eleocharis acicularis	2.5	2.5				
Elodea canadensis	2.5	2.5	2.5			
Eriocaulon septangulare	10	10				
Juncus pelocarpus	2.5	2.5				
Lobelia dortmanna	2.5	2.5				
Myriophyllum tenellum	10	2.5				
Najas flexilis	2.5	2.5	2.5			
Potamogeton amplifolius			2.5			
Potamogeton gramineus	2.5	10	10			
Potamogeton perfoliatus		2.5	2.5			
Potamogeton robbinsii	2.5		2.5			
Ranunculus longirostris		2.5	2.5			
Sagittaria graminea	2.5	2.5				
Sagittaria sp.	2.5	2.5				
Scirpus subterminalis	2.5	2.5				
Sparganium sp.	2.5	2.5				
Utricularia vulgaris		2.5	2.5			
Vallisneria americana		2.5	2.5			

Site: T-20a
6-Oct-04

S Phelps Island

<u>Species</u>	<u>Depth Interval (m)</u>							
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>	<u>7-8</u>
Chara	2.5	2.5						
Elatine minima	2.5	2.5						
Eriocaulon septangulare	2.5	2.5						
Isoetes echinospora	2.5	2.5	2.5					
Juncus pelocarpus	2.5	10.0						
Lobelia dortmanna	2.5	2.5						
Myriophyllum tenellum	2.5	2.5						
Najas flexilis	2.5	2.5	2.5					
Potamogeton gramineus	2.5	2.5	10.0					
Potamogeton perfoliatus		2.5	2.5					
Potamogeton spirillus	2.5	2.5						
Ranunculus reptans		2.5						
Sparganium sp.	2.5	2.5	2.5					
Subularia aquatica	2.5	2.5						

Site: T-20b
6-Oct-04

SE Phelps Island

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5					
Elatine minima	2.5	2.5					
Eriocaulon septangulare	2.5	2.5					
Isoetes echinospora	2.5	2.5	2.5	2.5			
Juncus pelocarpus	2.5	2.5					
Lobelia dortmanna	2.5	2.5					
Myriophyllum tenellum	10	2.5					
Najas flexilis	2.5	2.5	2.5	2.5			
Potamogeton gramineus	2.5	10	2.5	2.5			
Potamogeton robbinsii			2.5	2.5			
Sparganium sp.	2.5	2.5					
Vallisneria americana		2.5	2.5	2.5			

Site: T-20c
6-Oct-04

NE Phelps Island

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Heteranthera dubia			2.5				
Isoetes echinospora			10	2.5			
Najas flexilis			2.5	2.5	2.5		
Potamogeton gramineus			2.5	2.5			
Potamogeton perfoliatus			2.5	2.5			
Potamogeton robbinsii				2.5	2.5		
Potamogeton spirillus			2.5				
Vallisneria americana			10	10	2.5		

Site: T-50
6-Oct-04

WSW Rush Island, Boon Bay

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5			
Elatine minima	2.5	2.5					
Elodea canadensis	2.5	2.5	2.5	2.5			
Eriocaulon septangulare	10	2.5					
Juncus pelocarpus	2.5	10					
Lobelia dortmanna	2.5	2.5					
Myriophyllum tenellum	2.5	2.5					
Najas flexilis		2.5	2.5	2.5			
Potamogeton gramineus	2.5	2.5	10	2.5			
Potamogeton perfoliatus	2.5	2.5	2.5	2.5			
Potamogeton robbinsii		2.5	10	10			
Ranunculus reptans	2.5	2.5					
Sparganium sp.	2.5	2.5					
Subularia aquatica	2.5	2.5					
Vallisneria americana	2.5	2.5	10	10			

Site: T-51
6-Oct-04

Basin Bay

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5				
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	10					
Elodea canadensis	2.5	2.5	2.5				
Eriocaulon septangulare	2.5	2.5					
Heteranthera dubia	2.5	2.5	2.5				
Isoetes echinospora	2.5	2.5					
Juncus pelocarpus	2.5	2.5					
Lobelia dortmanna	2.5	2.5					
Megalodonta beckii		2.5	2.5				
Myriophyllum tenellum	10	2.5					
Potamogeton gramineus	2.5	2.5	2.5				
Potamogeton perfoliatus	2.5	2.5	2.5				
Potamogeton pusillus		2.5	2.5				
Potamogeton robbinsii		2.5	20				
Ranunculus longirostris	2.5	2.5					
Ranunculus reptans	2.5	2.5					
Sagittaria graminea	2.5	2.5					
Sparganium sp.	2.5	2.5					
Subularia aquatica	2.5	2.5					
Vallisneria americana	10	10	10				

Site: T-52

Basin Bay - South

6-Oct-04

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5			
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5						
Elodea canadensis	2.5	2.5	2.5	2.5	2.5		
Heteranthera dubia	2.5	10	2.5	2.5	2.5		
Isoetes echinospora	2.5	2.5					
Megalodonta beckii		2.5	2.5	2.5	2.5		
Myriophyllum alterniflorum	10	2.5					
Myriophyllum tenellum	2.5	10					
Najas flexilis		2.5	2.5	2.5			
Najas guadalupensis		2.5	2.5	2.5			
Potamogeton amplifolius		10	20	20	10		
Potamogeton gramineus	2.5	2.5	2.5	2.5	2.5		
Potamogeton perfoliatus	2.5	2.5	2.5	2.5			
Potamogeton praelongus			2.5	2.5	2.5		
Potamogeton robbinsii		10	10	10	37.5		
Potamogeton zosteriformis		2.5	10	2.5	2.5		
Ranunculus longirostris	2.5	2.5	2.5	2.5			
Ranunculus reptans	2.5						
Sagittaria graminea	10	10	2.5				
Typha latifolia	2.5						
Utricularia vulgaris			2.5				
Vallisneria americana	75	10	20	20	10		

Site: T-54a

Bolton Bay - Mohican Rd.

6-Oct-04

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	10	2.5	2.5	2.5		
Elodea canadensis	2.5	2.5	2.5	10	2.5		
Eriocaulon septangulare	10	2.5					
Heteranthera dubia	2.5	2.5	2.5	10	2.5		
Isoetes echinospora	2.5	2.5	2.5				
Juncus pelocarpus	10	10	2.5				
Lobelia dortmanna	2.5	2.5					
Myriophyllum alterniflora	2.5	2.5					
Myriophyllum tenellum	2.5	10					
Najas flexilis	2.5	2.5	2.5	2.5	2.5		
Potamogeton amplifolius			2.5	10	10		
Potamogeton gramineus	2.5	2.5	2.5	2.5	2.5		
Potamogeton perfoliatus		2.5	2.5	10	2.5		
Potamogeton praelongus				10	2.5		
Potamogeton robbinsii		2.5	10	37.5	37.5		
Potamogeton zosteriformis				2.5			
Ranunculus longirostris		2.5	2.5	2.5	2.5		
Ranunculus reptans	2.5	2.5					
Sparganium sp	2.5	2.5					
Subularia aquatica	2.5	2.5					
Vallisneria americana	2.5	10	10	10	10		

Site: T-55
6-Oct-04

Bolton Bay - Stewart Brook

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	10	2.5	2.5				
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	2.5					
Elodea canadensis	2.5	2.5	2.5	2.5			
Isoetes echinospora	10	2.5	2.5				
Juncus pelocarpus	2.5	2.5					
Lobelia dortmanna	2.5	2.5					
Myriophyllum alterniflorum	2.5	2.5					
Myriophyllum tenellum	10	10					
Najas flexilis	2.5	2.5	2.5	2.5			
Potamogeton amplifolius			2.5	2.5			
Potamogeton gramineus	2.5	2.5	2.5	2.5			
Potamogeton perfoliatus			10	2.5			
Potamogeton robbinsii		2.5	2.5	37.5			
Potamogeton spirillum	2.5	2.5					
Ranunculus longirostris		2.5					
Ranunculus reptans	2.5	2.5					
Sagittaria graminea	10	10					
Subularia aquatica	2.5	2.5					
Vallisneria americana	2.5	2.5	10	10			

Site: T-56a
7-Oct-04

Sawmill Bay @ Braley Point

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5					
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	2.5					
Elodea canadensis	2.5	2.5	2.5	2.5	2.5		
Heteranthera dubia	2.5	10	2.5				
Isoetes echinospora		10	2.5				
Isoetes lacustris					10		
Lobelia dortmanna		2.5					
Myriophyllum alterniflorum	2.5	10					
Myriophyllum tenellum	2.5	2.5					
Potamogeton amplifolius		2.5	2.5				
Potamogeton gramineus		2.5	2.5	2.5			
Potamogeton perfoliatus	2.5	2.5	2.5				
Potamogeton praelongus					2.5		
Potamogeton robbinsii		10	75	75	20		
Ranunculus longirostris	2.5	2.5	2.5				
Ranunculus reptans		2.5					
Sagittaria graminea	2.5	10	2.5				
Sparganium sp.		2.5					
Subularia aquatica		2.5					
Vallisneria americana		10	2.5	2.5	10		

Site: T-57
7-Oct-04

NWB - Braley and Pioneer Point

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Elodea canadensis		2.5	2.5	2.5	2.5	2.5	
Isoetes echinospora		2.5	2.5	2.5			
Najas flexilis		2.5	2.5	2.5			
Potamogeton amplifolius		10	20	10	2.5		
Potamogeton gramineus	2.5	10	2.5	10	2.5		
Potamogeton perfoliatus		2.5	10	10	2.5		
Potamogeton pusillus			2.5	2.5			
Potamogeton robbinsii		2.5	37.5	10	75	37.5	
Ranunculus longirostris		2.5	2.5	2.5			
Sagittaria graminea	10	20	20	2.5			
Sparganium sp.		2.5	2.5	2.5			
Vallisneria americana	2.5	10	20	10	2.5	2.5	

Site: T-60
7-Oct-04

NWB - Polehill Pond Brook

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Elatine minima		2.5					
Eleocharis acicularis	2.5	2.5					
Eriocaulon septangulare		10					
Isoetes echinospora		2.5	2.5				
Juncus pelocarpus		10					
Lindernia		2.5	2.5				
Lobelia dortmanna		2.5					
Myriophyllum tenellum		10	2.5				
Najas flexilis			2.5	2.5			
Potamogeton gramineus		2.5	2.5	2.5			
Potamogeton perfoliatus		2.5	2.5	10			
Potamogeton pusillus		2.5	2.5	2.5			
Potamogeton robbinsii			2.5	10			
Ranunculus longirostris			2.5	2.5			
Ranunculus reptans		2.5					
Sparganium sp.		2.5					
Vallisneria americana		2.5	10	10			

Site: T-61
15-Jul-04

NWB - Wingpond Brook

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5					
Elatine minima	2.5	2.5					
Eriocaulon septangulare	20	10					
Fontinalis	2.5						
Heteranthera dubia	2.5	2.5					
Isoetes echinospora	2.5	2.5					
Juncus pelocarpus	2.5	10					
Lobelia dortmanna	2.5	2.5					
Najas flexilis	2.5	2.5					
Potamogeton gramineus	2.5	2.5					
Potamogeton perfoliatus	2.5	2.5					
Potamogeton pusillus	2.5	2.5					
Potamogeton robbinsii	2.5	2.5					
Ranunculus longirostris		2.5					
Ranunculus reptans	2.5	2.5					
Sagittaria graminea		2.5					
Subularia aquatica	2.5	2.5					
Utricularia resupinata	10	10					
Vallisneria americana	2.5	10					

Site: T-62
15-Sep-04

NWB - NNE Walker Point

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Charophytes	10	10	10	10	10	10	
Elodea canadensis			2.5				
Eriocaulon septangulare	2.5	10					
Isoetes echinospora			2.5				
Juncus pelocarpus		10					
Lindernia sp.	2.5	10					
Lobelia dortmanna	2.5	2.5	10				
Najas flexilis							
Potamogeton gramineus	10	10	10				
Potamogeton robbinsii						37.5	37.5
Ranunculus reptans				10	10	10	10

Site: T-63a
15-Jul-04

NWB - head of bay

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5	2.5		
Isoetes echinospora			2.5				
Najas flexilis		2.5	2.5	2.5			
Potamogeton epihydrous		2.5					
Potamogeton gramineus		2.5	2.5	2.5			
Potamogeton pusillus		2.5	2.5				
Sparganium sp.	2.5	2.5	2.5				
Vallisneria americana		10	10	2.5			

Site: T-65+66
15-Jul-04

NWB - SE Bear Point

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5			
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	2.5					
Elodea canadensis	2.5	2.5					
Eriocaulon septangulare	10	10					
Isoetes echinospora		2.5	2.5	2.5			
Juncus pelocarpus	2.5	2.5					
Lobelia dortmanna	2.5	2.5					
Megalodonta beckii		2.5					
Myriophyllum tenellum	2.5	10					
Najas flexilis			2.5	2.5			
Potamogeton ampliifolius		2.5	2.5				
Potamogeton epihydrous	2.5	2.5					
Potamogeton foliosus	2.5						
Potamogeton gramineus	2.5	2.5	2.5	2.5			
Potamogeton perfoliatus	2.5	2.5	2.5	2.5			
Potamogeton praelongus			2.5	2.5			
Potamogeton robbinsii	2.5	2.5	2.5	2.5			
Potamogeton zosteriformis			2.5	2.5			
Ranunculus longirostris	2.5	2.5					
Sagittaria cuneata	2.5						
Sagittaria graminea	2.5	10	10				
Scirpus subterminalis	2.5	2.5	2.5				
Sparganium sp.	2.5	2.5	2.5				
Utricularia vulgaris	2.5	2.5					
Vallisneria americana	2.5	2.5	2.5	2.5			

Site: T-68
15-Jul-04

NWB - between Bear & Fan Point

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	10	10					
Eleocharis acicularis	10	2.5					
Elodea canadensis	2.5	2.5	2.5	2.5			
Heteranthera dubia	2.5	2.5	2.5	2.5			
Isoetes echinospora		2.5	2.5	2.5			
Megalodonta beckii	2.5	10	10	2.5			
Myriophyllum spicatum	2.5	10	10	10			
Myriophyllum tenellum		2.5	10				
Najas flexilis		2.5	20	10			
Neobeckia aquatica	2.5	2.5					
Nymphaea odorata	10						
Potamogeton crispus	2.5	2.5	2.5				
Potamogeton amplifolius	2.5	2.5	10	10			
Potamogeton epihydrous	2.5	2.5	2.5				
Potamogeton foliosus	2.5	2.5	2.5				
Potamogeton gramineus	2.5	2.5	2.5	10			
Potamogeton perfoliatus	2.5	10	2.5	2.5			
Potamogeton praelongus		2.5	2.5	2.5			
Potamogeton robbinsii	2.5	37.5	20	20			
Potamogeton spirillus	2.5	10	2.5	2.5			
Potamogeton vaseyi	2.5	2.5	2.5				
Potamogeton zosteriformis	2.5	2.5	2.5				
Ranunculus longirostris	10	2.5	10	2.5			
Sagittaria graminea	10	2.5					
Vallisneria americana	10	10	10	10			

Site: T-68a
15-Jul-04

NWB - S of Fan Point

Species	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Eleocharis acicularis	10	2.5					
Elodea canadensis		2.5		2.5			
Eriocaulon septangulare	37.5	10	2.5				
Heteranthera dubia			2.5				
Isoetes echinospora	2.5	2.5	2.5				
Juncus pelocarpus		2.5					
Megalodonta beckii			2.5				
Myriophyllum spicatum			2.5				
Najas flexilis	2.5	2.5	2.5				
Nymphaea odorata	2.5	2.5					
Potamogeton amplifolius		2.5	2.5	2.5			
Potamogeton perfoliatus		10	2.5				
Potamogeton pusillus			2.5	2.5			
Potamogeton robbinsii		2.5	2.5	10			
Ranunculus longirostris	2.5	2.5	2.5				
Sagittaria graminea		10	2.5				
Sparganium sp.	2.5	2.5	2.5				
Vallisneria americana	2.5	10	20	2.5			

Site: T-68b

4-Oct-04

NE Little Harbor Island

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Elodea canadensis			2.5	2.5			
Isoetes echinospora		2.5	2.5				
Isoetes lacustris				2.5	2.5		
Myriophyllum spicatum			2.5				
Najas flexilis		2.5	2.5	2.5			
Potamogeton gramineus		2.5	2.5	2.5			
Potamogeton pusillus			2.5				
Potamogeton robbinsii		2.5	2.5	2.5			
Potamogeton spirillus		2.5					

Site: T-69

4-Oct-04

SW French Point

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara		2.5	2.5	2.5	2.5		
Elatine minima		2.5	2.5				
Eleocharis acicularis		2.5					
Elodea canadensis		2.5		2.5	2.5		
Eriocaulon septangulare		2.5	2.5				
Heteranthera dubia		2.5	2.5	2.5			
Isoetes echinospora		2.5	2.5	2.5			
Isoetes lacustris				2.5	10		
Najas flexilis		2.5	2.5	2.5			
Potamogeton amplifolius		2.5	2.5	2.5			
Potamogeton gramineus		2.5	2.5	2.5			
Potamogeton perfoliatus		2.5	2.5	2.5			
Potamogeton praelongus			2.5	2.5			
Potamogeton pusillus		2.5	2.5	2.5			
Potamogeton robbinsii				2.5	20	37.5	
Vallisneria		2.5	2.5	2.5	2.5		

Site: T-70

4-Oct-04

N of E & W Dollar Islands

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Isoetes echinospora		2.5	2.5				
Najas flexilis			2.5	2.5			
Potamogeton gramineus		2.5	2.5				

Site: T-70a
4-Oct-04

N of E & W Dollar Islands

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5					
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	2.5					
Eriocaulon septangulare	2.5	10					
Fontinalis	2.5						
Isoetes echinospora	2.5	2.5					
Lobelia dortmanna	2.5	2.5					
Myriophyllum tenellum	2.5	2.5					
Najas flexilis	2.5	2.5	2.5				
Potamogeton gramineus	2.5	2.5	2.5				
Sparganium sp.			2.5				
Subularia aquatica	2.5	2.5					
Vallisneria americana		2.5	2.5				

Site: T-70b
4-Oct-04

NW of Three Sirens Islands

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Isoetes echinospora			2.5				
Najas flexilis			2.5				
Potamogeton gramineus			2.5	2.5			
Potamogeton perfoliatus			2.5	2.5			
Potamogeton robbinsii			2.5	2.5			

Site: T-93
14-Sep-04

Bay S of Black Mt. Point

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5	2.5		
Elatine minima	2.5	2.5					
Elodea canadensis			2.5	2.5	2.5	2.5	
Eriocaulon septangulare	10	20					
Isoetes echinospora	2.5	2.5					
Isoetes lacustris						2.5	75
Juncus pelocarpus	2.5	2.5					
Lobelia dortmanna	2.5	2.5					
Myriophyllum tenellum	10	2.5					
Najas flexilis			2.5	2.5	2.5		
Potamogeton gramineus	2.5	2.5	10	10	2.5		
Potamogeton perfoliatus		2.5	2.5	2.5	2.5		
Potamogeton praelongus					2.5		
Potamogeton robbinsii		2.5	10	10	20	2.5	
Potamogeton vaseyii		2.5	2.5				
Vallisneria americana	2.5	10	10	20	10	2.5	

Site: T-94

Bay S of Red Rock Bay

1-Oct-04

<u>Species</u>	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5	2.5	2.5	2.5			
Elatine minima	2.5	2.5					
Eleocharis acicularis	10	2.5					
Elodea canadensis	2.5	2.5	2.5	2.5	2.5		
Eriocaulon septangulare	10	2.5					
Heteranthera dubia	2.5	2.5	2.5	2.5			
Isoetes echinospora	2.5	2.5	2.5				
Juncus sp.	10	2.5					
Megalodonta beckii		2.5	10	2.5	2.5		
Myriophyllum tenellum	2.5	2.5					
Potamogeton amplifolius	2.5	10	20	10	10		
Potamogeton freesii		2.5					
Potamogeton gramineus	2.5	2.5	2.5	2.5	2.5		
Potamogeton perfoliatus	2.5	2.5	2.5	2.5	2.5		
Potamogeton pusillus	2.5	2.5	2.5	2.5	2.5		
Potamogeton robbinsii	2.5	2.5	10	10	20		
Potamogeton spirillus		2.5					
Potamogeton vaseyii		2.5					
Potamogeton zosteriformis		2.5	2.5	2.5	2.5		
Ranunculus longirostris	2.5	2.5	2.5	2.5			
Ranunculus reptans		2.5					
Sagittaria graminea	2.5	10	2.5				
Typha	2.5	2.5					
Utricularia resupinata	2.5						
Vallisneria americana	2.5	10	20	20	10		

Site: T-100

NWB Bay NE of Fan Point

16-Jul-04

<u>Species</u>	Depth Interval (m)						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Eleocharis acicularis	2.5	10	10				
Elodea canadensis	2.5	2.5	2.5				
Eriocaulon septangulare	10	37.5	20				
Fontinalis	2.5	2.5					
Isoetes echinospora	2.5						
Juncus pelocarpus	2.5	2.5	2.5				
Megalodonta beckii		2.5	2.5				
Myriophyllum tenellum	10	2.5					
Najas flexilis	20	2.5	2.5				
Nymphaea odorata	2.5	2.5					
Potamogeton amplifolius	2.5	2.5	2.5				
Potamogeton foliosus		2.5					
Potamogeton gramineus	2.5	2.5	10				
Potamogeton perfoliatus	2.5	2.5	2.5				
Potamogeton robbinsii	2.5	2.5	2.5				
Potamogeton spirillus	2.5	2.5	2.5				
Ranunculus longirostris	2.5	10	10				
Sparganium sp.	2.5	2.5					
Vallisneria americana	10	10	10				

Site: T-102

Finkle Brook - FWI

4-Oct-04

<u>Species</u>	<u>Depth Interval (m)</u>						
	<u>0-1</u>	<u>1-2</u>	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>
Chara	2.5						
Elatine minima	2.5	2.5					
Eleocharis acicularis	2.5	2.5					
Elodea canadensis	2.5	2.5	2.5	2.5	2.5	2.5	
Heteranthera dubia		2.5	2.5	2.5	2.5		
Isoetes echinospora	2.5	2.5					
Isoetes lacustris					2.5	75	
Lobelia dortmanna	2.5	2.5					
Megalodonta beckii				2.5	10		
Myriophyllum alterniflorum	2.5	2.5					
Myriophyllum spicatum		2.5	2.5	2.5	2.5		
Myriophyllum tenellum	10	20					
Najas flexilis	2.5	2.5	2.5	2.5	2.5		
Potamogeton amplifolius		2.5	2.5	10	10		
Potamogeton gramineus	2.5	2.5	2.5	2.5	2.5		
Potamogeton perfoliatus		2.5	2.5	10	2.5		
Potamogeton praelongus				10	2.5		
Potamogeton robbinsii		2.5	2.5	10	20	2.5	
Potamogeton zosteriformis			2.5	2.5	2.5		
Ranunculus longirostris	2.5	2.5	2.5	2.5	2.5		
Ranunculus reptans	2.5	2.5					
Sagittaria graminea	2.5	2.5					
Subularia aquatica	2.5	2.5					
Vallisneria americana	10	37.5	37.5	37.5	10	2.5	