

Darrin Fresh Water Institute

AT LAKE GEORGE

**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 2000 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, 1991, 1994 and 1997 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, 30 percent of the sites were found to have milfoil. By 1989, this percentage had dropped to 23 percent due to harvesting of milfoil, although three new locations were found in 1989. In 1991, over 45 percent of the tributary sites surveyed in the south basin had milfoil. Results from the 1994 survey showed a slight reduction to 41% of the sites colonized by Eurasian watermilfoil. The 1997 survey found this declining trend was continued from 1994, with 39% of the total sites infested, including one new infested site. In 2000, this decline continued with Eurasian watermilfoil present at 33% of sites surveyed. This reduction is attributed to hand harvesting of milfoil in prior years. A single new site was recorded, with only a single milfoil plant, which was removed.

Management efforts to date have been implemented at 128 of 136 known milfoil locations. Management 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 12th by relative abundance (a function of cumulative percent cover) and 27th by frequency of occurrence for the 48 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 samples 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 46 tributary sites over the thirteen year span of the study is approximately 2 new sites per year, or a 4% 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.

2000 TRIBUTARY SURVEY

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 habitats for the continued establishment and reestablishment 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 during times of accelerated runoff. The combination of changing sediment conditions and habitat disruption make tributary deltas prime locations for Eurasian watermilfoil infestation.

Around the entire lakeshore, there are 128 listed stream tributaries (Madsen et al. 1989¹). Because human activity in the Lake George basin has historically exacerbated water quality conditions, relative to disturbed areas, 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). The survey provided a procedure for finding new sites with Eurasian watermilfoil, including the 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 each year and to stabilize the cost of the survey, the south basin tributaries were divided into two groups in 1991. With approximately 45 tributaries in each group, a three-year cycle of surveys has been 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 1991, those in the northern half of the south basin (central) were the subject of the 1992, 1995 and 1998 surveys. The tributaries of the north basin were the subject of the 1993, 1996 and 1999 surveys.

The far south basin tributary survey was conducted in 1987, 1989, 1991, 1994 and in 1997 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 from the previous surveys noted above, these sites were revisited in 2000 to determine whether appreciable new infestation, re-invasion or natural mortality of earlier infestation had occurred.

¹ All cited literature is found in References on Page 12.

Methods

The shoreline adjacent to tributary outflows in the south basin was surveyed for the presence of Eurasian watermilfoil. The tributaries comprising this portion of the survey were visited between July 20th and September 25th, 2000. Surveys consisted of swimming a 100-meter segment of shoreline from the edge of the water to the outer edge of the littoral zone (maximum depth of rooted plant growth).

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 1-meter (3 ft) depth interval using the following abundance classes:

| <u>Class</u> | <u>Code</u> | <u>% Cover Range</u> | <u>Centroid</u> |
|--------------|-------------|------------------------|-----------------|
| 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 the average depth distribution of the plants present and an estimate of the relative abundance of 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 indicating the region included in the 2000 Tributary Survey.

Results and Discussion

The current survey included the southernmost portion of the lake basin tributaries (46 sites). The central and northern portions of the lake were completed in 1998 and 1999, respectively. Maps with the locations of the tributaries surveyed in 2000 are provided as Appendix A. Aquatic plant abundance data for the 44 sites compared in the 1987 and 1989 surveys, plus 2 additional sites that were included during the 1991 survey are provided as Appendix B. Methodologies employed by the three surveys were the same. The results of the south basin tributary surveys for all survey years are presented in Table 1. For each site, the tributary number and site name is given.

Table 1. Tributary survey sites in the south basin and the presence (Yes) or absence (No) of Eurasian watermilfoil. M # is a sequential listing of sites with Eurasian watermilfoil discovered since the survey began.

| TRIB # | M # | SITE DESCRIPTION | Map Quadrangle | MILFOIL PRESENT | | | | | |
|--------|-------|-----------------------------|----------------|-----------------|------|------|------|------|------|
| | | | | 2000 | 1997 | 1994 | 1991 | 1989 | 1987 |
| T-21 | M-81 | Butternut Brook | Bolton | no | no | no | yes | no | no |
| T-22 | M-82 | Barber Bay | Bolton | yes | yes | yes | yes | no | no |
| T-23 | | Isom, N of Echo Bay | Bolton | no | no | no | no | no | no |
| T-24 | M-107 | Van Warner-near Eliz. Is. | Lk George | no | no | yes | no | no | no |
| T-25 | | Van Warner Bay | Lk George | no | no | no | no | no | no |
| T-25a | M-83 | Van Warner Bay | Lk George | no | no | no | yes | no | no |
| T-26 | | Trout Pavilion Brook | Lk George | no | no | no | no | no | no |
| T-27 | M-11 | S Warner Bay-Wetland Trib | Lk George | yes | yes | yes | no | yes | no |
| T-27a | M-37 | S Warner Bay-Culvert | Lk George | yes | yes | yes | yes | yes | yes |
| T-27b | M-38 | S Warner Bay-Culvert | Lk George | yes | yes | yes | yes | yes | yes |
| T-27c | M-39 | S Kattskill Bay | Lk George | yes | yes | yes | yes | no | yes |
| T-28 | M-120 | N Warner Bay-culvert | Lk George | yes | yes | yes | yes | no | no |
| T-29a | M-108 | Harris Bay-culvert | Lk George | yes | yes | yes | no | no | no |
| T-29b | | Harris Bay-culvert | Lk George | no | No | no | no | no | No |
| T-29c | | Sandy Bay-culvert | Lk George | no | No | no | no | no | No |
| T-30 | M-109 | Bay SW Happy Family | Lk George | no | No | yes | no | no | No |
| T-30a | M-84 | Harris Bay Inlet | Lk George | no | yes | no | yes | | |
| T-32 | M-85 | Dunham Bay Inlet | Lk George | yes | yes | yes | yes | | |
| T-33 | M-36 | Bay E of Dark Bay | Lk George | yes | yes | yes | yes | no | yes |
| T-34 | | Dark Bay | Lk George | no | No | no | no | no | No |
| T-35a | M-33 | S of Plum Point | Lk George | no | No | no | no | no | yes |
| T-35b | M-34 | Bay between Plum & Woods PT | Lk George | no | No | no | yes | no | yes |
| T-36 | | East Shore | Lk George | no | No | no | no | no | No |
| T-36a | | East Shore | Lk George | no | No | no | no | no | No |
| T-36b | | East Shore-culvert | Lk George | no | No | no | no | no | No |
| T-36c | | East Shore | Lk George | no | No | no | no | no | No |
| T-36d | M-86 | East Shore | Lk George | no | No | no | yes | no | No |
| T-36e | M-121 | East Shore-culvert | Lk George | no | yes | no | no | no | No |
| T-36f | | East Shore | Lk George | no | No | no | no | no | No |
| T-37a | M-32 | Crosbyside-culvert | Lk George | no | No | no | yes | no | yes |
| T-37b | M-87 | Crosbyside | Lk George | no | No | yes | yes | no | No |
| T-37c | M-88 | Crosbyside | Lk George | no | No | no | yes | no | No |

| TRIB # | M # | SITE DESCRIPTION | Map Quadrangle | MILFOIL | | | | | |
|----------------------------|--------|------------------------|-------------------|---------|------|------|------|------|------|
| | | | | 2000 | 1997 | 1994 | 1991 | 1989 | 1987 |
| T-37d | M-89 | Crosbyside-culverts | Lk George | no | no | no | yes | no | no |
| T-40 | M-62 | Marine Village-culvert | Lk George | yes | yes | yes | yes | yes | no |
| T-41 | M-31 | English Brook | Lk George | no | yes | no | no | yes | yes |
| T-41a | M-90 | S. Tea Is. Bay-culvert | Lk George | no | yes | yes | yes | yes | no |
| T-41b | M-30 | N Tea Is. Bay | Lk George | yes | yes | yes | yes | yes | yes |
| T-42 | M-29 | Bay NE of Tea Is. | Lk George | no | yes | yes | yes | yes | yes |
| T-43 | M-28 | Bay S of Hearthstone | Lk George | no | no | no | no | no | yes |
| T-44 | M-27 | NW of Cooper Pt. | Lk George | yes | yes | yes | yes | yes | yes |
| T-45 | M-26 | SW of Cannon Pt. | Lk George | yes | yes | yes | yes | yes | yes |
| T-46 | | Diamond Point area | Lk George | no | no | no | no | no | no |
| T-47 | M-110 | Diamond Point area | Lk George | no | no | yes | no | no | no |
| T-48 | | Diamond Point area | Lk George | no | no | no | no | no | no |
| T-49 | | Edmund's Brook | Lk George | no | no | no | no | no | no |
| T-99 | M-136 | Assembly Point | Shelving Rk | yes | no | no | no | no | no |
| Total sites with milfoil | | | | 15 | 18 | 19 | 22 | 10 | 13 |
| Total percent with milfoil | | | | 33 | 39 | 41 | 48 | 23 | 30 |

The results of the six surveys are further summarized in Tables 2 and Figure 2. In the 1987 survey, 13 (30%) of the 44 sites had Eurasian watermilfoil (Table 1).

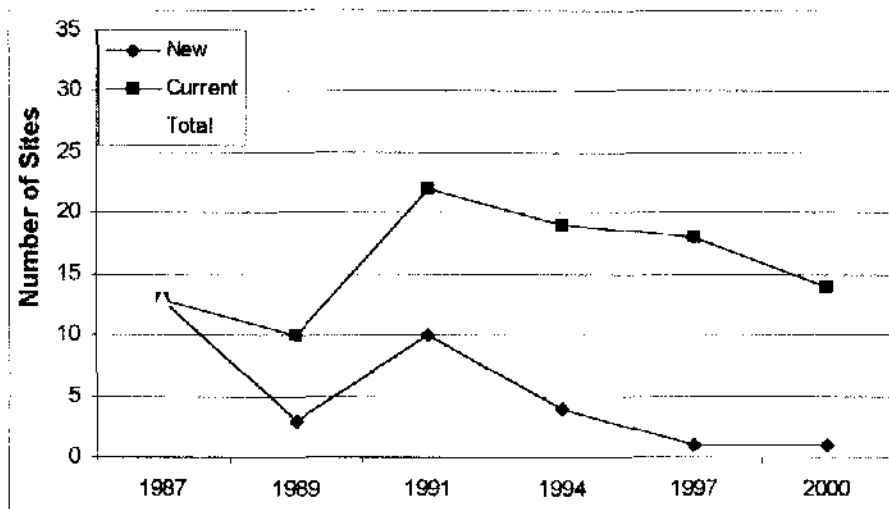
Table 2. Comparison of the presence of Eurasian watermilfoil between survey years 1987 and 2000. Numbers in () represent row percentages, numbers in [] represent column percentages.

| | Eurasian watermilfoil in 1987 | | |
|-------------------------------|-------------------------------|---------------------|----------------------|
| | Present | Absent | Total |
| Eurasian Watermilfoil in 2000 | | | |
| Present | 7 (54) [54] | 6 (46) [19] | 13 (100) [36] |
| Absent | 6 (19) [46] | 25 (81) [81] | 31 (100) [64] |
| Total | 13 (30) [100] | 31 (70) [100] | 44 (100) [100] |

In 1989, the total had decreased to 10 (23%) of the 44 sites surveyed (Table 1). Eight new milfoil sites were found among the original 44 sites, and the two additional sites were also positive for milfoil during the 1991 survey. In the 1994 tributary survey, 19 (41%) of the sites had Eurasian watermilfoil (Table 4), four of which (9%) had not previously been found to have milfoil populations. Of the 46 sites visited in 1997, milfoil was found for the

first time at one location (2%). Six (14%) of the sites at which milfoil occurred were positive for the invasive species in every survey since the initial survey in 1987. Four sites (21%) had milfoil present in 1994, but not in 1997. All four sites were hand harvested during the 1994 tributary survey or in subsequent years between surveys. Twelve of the 46 sites (26%) have had milfoil during at least one of the three previous tributary surveys, but not in the 1997 survey. In the 2000 survey, milfoil was found for the first time at one location (2%). Six (14%) of the sites at which milfoil occurred were positive for the invasive species in every survey since the initial survey in 1987. Five sites (11%) had milfoil present in 1997, but not in 2000. All five sites were hand harvested during the 1997 tributary survey or in subsequent years between surveys. Fifteen of the 46 sites (33%) have had milfoil during at least one of the three previous tributary surveys, but not in the 1997 survey. Of the 46 tributary sites in the far south basin, 32 (70%) sites have had milfoil present during at least one of the surveys performed since 1987. 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 three portions of the survey.

Figure 2. Comparison of the number of sites currently with Eurasian watermilfoil versus the number of sites which have had milfoil during any of the surveys (cumulative), of the south basin.



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. Two sites, South of Plum Point (T-35a, M-33) and Bay south of Hearthstone (T-43, M-28) have not had Eurasian watermilfoil since the 1987 survey. Seven sites which were cleared during the 1991 survey remained clear through the 2000 tributary survey, those being Crosbyside-culvert (T-37a, M-32), Bay between Plum and Woods Point (T-35b, M-34), Butternut Brook (T-21, M-81), Van Warmer Bay (T-25a, M-83), East Shore (T-36d, M-86), Crosbyside (T-37c, M-88), and Crosbyside-culverts (T-37d, M-89). One site, Harris Bay inlet (T-30a, M-84, was cleared of milfoil in 1991, did not have Eurasian watermilfoil during the survey in 1994, but was found to be repopulated with scattered growth in 1997 and clear of milfoil in 2000. The milfoil was removed by hand harvesting in the years following or during the 1991 survey. Four sites cleared of milfoil in 1997 remained clear in the 2000 survey, including

East Shore Culvert (M-121), English Brook (M-31), S. Tea Island Bay Culvert (M-90), Bay NE of Tea Island (M-29). These results indicate that hand harvesting activities can eliminate small populations of Eurasian watermilfoil. There is little or no evidence, however, to suggest that the loss of Eurasian watermilfoil populations at specific sites in Lake George can be attributed to natural mortality.

The following is a breakdown of the fifteen sites that had milfoil during the 2000 tributary survey. Seven of the fifteen milfoil sites were found to have eleven or fewer plants, all of which were hand harvested. In the 2000 survey, one new site, T-99 on Assembly Point, was found to have milfoil for the first time. This new site had one milfoil plant, which was removed. The remaining eight sites that had milfoil during the 2000 survey all had milfoil populations in one or more of the earlier tributary surveys.

Since the 1987 survey, the number of tributary sites in this portion of the Lake George basin with milfoil present during subsequent surveys has increased by nineteen. The addition of two tributary sites in 1991, Harris Bay Inlet (T-30a) and Dunham Bay Inlet (T-32) raised the total to 31 of the 46 sites which have had a milfoil population since the survey began in 1987. The small number of plants found at most tributary sites indicates recent colonization. Six of the sites surveyed in 1997 had a milfoil population since the first tributary survey in 1987. Those sites being South Warner Bay - Culvert (M-37), South Warner Bay - Culvert (M-38), North Tea Island Bay (M-30), Bay Northeast of Tea Island (M-29), Northwest of Cooper Point (M-27), and Southwest of Cannon Point (M-26). One of these sites, Bay Northeast of Tea Island, was free of milfoil in 2000, reducing the number of sites with continuous milfoil sites to five. Five of the six sites have been the subject of management activities in the last four years. The sites in South Warner Bay - Culvert (M-37), South Warner Bay - Culvert (M-38), Bay Northeast of Tea Island (M-30), and Southwest of Cannon Point (M-26) have been either suction harvested, covered with benthic barrier, hand harvested or a combination of the three (e.g. Cannon Point, M-26). Hand harvesting was conducted at all of the above sites at least once since they were discovered. Hand harvesting of low density milfoil infestations and the use of suction harvesting and benthic barrier on denser growth have been used as a means for maintaining milfoil at low density levels (Madsen et al, 1988). The remaining site North Tea Island Bay (M-30) has had no management activity to this point.

Of the 15 tributary sites in this section of the south basin with milfoil present, hand harvesting was employed to clear 12 sites. Hand harvesting was not attempted at the remaining three sites due to the size of the infested area.

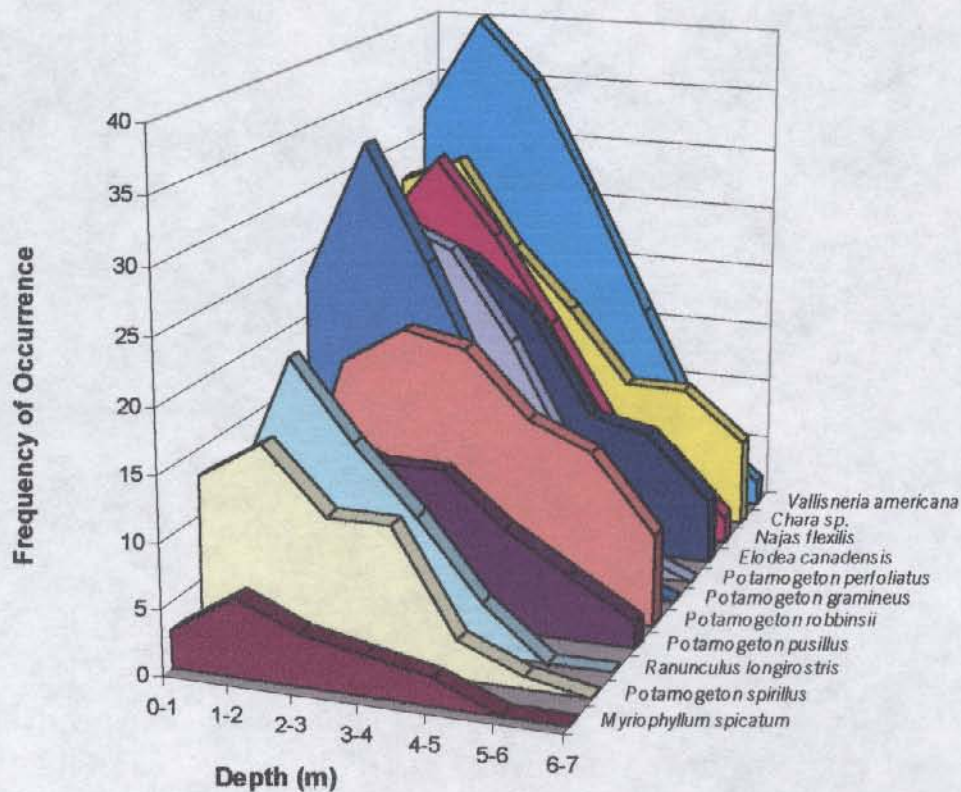
Table 5. Frequency of occurrence of all macrophyte species at the tributary sites.
Species are ranked in order of frequency of occurrence.

| Species | Depth Interval (m) | | | | | | | Total Frequency |
|-------------------------------------|--------------------|----------|----------|----------|----------|----------|----------|-----------------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | |
| <i>Vallisneria americana</i> | 32 | 40 | 35 | 26 | 16 | 6 | 2 | 157 |
| <i>Chara</i> sp. | 27 | 29 | 22 | 17 | 11 | 11 | 7 | 124 |
| <i>Najas flexilis</i> | 24 | 30 | 24 | 17 | 9 | 7 | 2 | 113 |
| <i>Elodea canadensis</i> | 17 | 25 | 23 | 19 | 11 | 10 | 5 | 110 |
| <i>Potamogeton gramineus</i> | 23 | 34 | 25 | 15 | 4 | 2 | 0 | 103 |
| <i>Potamogeton perfoliatus</i> | 22 | 27 | 25 | 18 | 9 | 2 | 0 | 103 |
| <i>Potamogeton robbinsii</i> | 3 | 18 | 21 | 20 | 15 | 13 | 7 | 97 |
| <i>Potamogeton pusillus</i> | 8 | 14 | 12 | 12 | 8 | 5 | 2 | 61 |
| <i>Ranunculus longirostris</i> | 9 | 21 | 15 | 10 | 4 | 0 | 0 | 59 |
| <i>Potamogeton spirillus</i> | 13 | 16 | 11 | 11 | 3 | 1 | 0 | 55 |
| <i>Sagittaria graminea</i> | 18 | 20 | 12 | 2 | 0 | 0 | 0 | 52 |
| <i>Isoetes macrospora</i> | 0 | 0 | 5 | 9 | 13 | 13 | 7 | 47 |
| <i>Potamogeton amplifolius</i> | 3 | 7 | 16 | 12 | 4 | 2 | 1 | 45 |
| <i>Isoetes echinospora</i> | 8 | 15 | 14 | 6 | 1 | 0 | 0 | 44 |
| <i>Eleocharis acicularis</i> | 16 | 18 | 7 | 1 | 0 | 0 | 0 | 42 |
| <i>Myriophyllum tenellum</i> | 15 | 18 | 4 | 2 | 0 | 0 | 0 | 39 |
| <i>Elatine minima</i> | 15 | 15 | 8 | 0 | 0 | 0 | 0 | 38 |
| <i>Potamogeton zosteriformis</i> | 3 | 6 | 9 | 8 | 6 | 4 | 0 | 36 |
| <i>Bidens beckii</i> | 0 | 5 | 7 | 9 | 6 | 1 | 0 | 28 |
| <i>Eriocaulon septangulare</i> | 11 | 14 | 3 | 0 | 0 | 0 | 0 | 28 |
| <i>Heteranthera dubia</i> | 4 | 8 | 7 | 5 | 3 | 0 | 0 | 27 |
| <i>Sparganium</i> sp. | 10 | 12 | 5 | 0 | 0 | 0 | 0 | 27 |
| <i>Juncus pelocarpus</i> | 11 | 9 | 4 | 0 | 0 | 0 | 0 | 24 |
| <i>Ranunculus reptans</i> | 7 | 10 | 4 | 0 | 0 | 0 | 0 | 21 |
| <i>Potamogeton foliosus</i> | 3 | 7 | 6 | 4 | 0 | 0 | 0 | 20 |
| <i>Najas quadalupensis</i> | 1 | 1 | 2 | 4 | 6 | 3 | 2 | 19 |
| <u>Myriophyllum spicatum</u> | 3 | 6 | 4 | 3 | 2 | 0 | 0 | 18 |
| <i>Lobelia dortmanna</i> | 5 | 9 | 2 | 0 | 0 | 0 | 0 | 16 |
| <i>Utricularia resupinata</i> | 4 | 5 | 4 | 2 | 1 | 0 | 0 | 16 |
| <i>Potamogeton vaseyii</i> | 4 | 4 | 2 | 3 | 1 | 0 | 0 | 14 |
| <i>Potamogeton praelongus</i> | 1 | 0 | 2 | 4 | 3 | 2 | 1 | 13 |
| <i>Nuphar lutem</i> | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 12 |
| <i>Subularia aquatica</i> | 3 | 5 | 3 | 0 | 0 | 0 | 0 | 11 |
| <i>Myriophyllum alterniflorum</i> | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 8 |
| <i>Myriophyllum sibiricum</i> | 0 | 3 | 3 | 1 | 0 | 0 | 0 | 7 |
| <i>Nymphaea odorata</i> | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 7 |
| <i>Utricularia vulgaris</i> | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 6 |
| <i>Brasenia schreberi</i> | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 5 |
| <i>Potamogeton crispus</i> | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 4 |
| <i>Potamogeton friesii</i> | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 4 |
| <i>Potamogeton richardsonii</i> | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 4 |
| <i>Ceratophyllum demersum</i> | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 3 |
| <i>Potamogeton ephedrus</i> | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| <i>Pontederia cordata</i> | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| <i>Potamogeton obtusifolius</i> | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 |
| <i>Potamogeton pectinatus</i> | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 |
| <i>Fontinalis</i> sp. | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| <i>Utricularia purpurea</i> | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |

Percent cover data for all sites is provided in Appendix B. Of the 48 species of submersed aquatic plants identified for Lake George (Ogden et al. 1976), 46 species were found at the tributary sites. Two species not reported in Ogden et al., 1976 were also found. These included *Myriophyllum spicatum* and *Najas guadalupensis*. Three of these species reported for the 2000 Tributary Survey, *Isoetes macrospora*, *Myriophyllum alterniflorum*, and *Subularia aquatica*, are on the New York State Rare Plant List (Young, 1999). These species are listed in italics in Table 5. 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 indicative of the suitability of these sites for aquatic plant growth and conversely, the high probability of milfoil infestation at these sites.

In Table 5, the species present and their depth distribution are ranked in order of the frequency with which they appeared at the tributary sites. The depth distribution of the ten most frequently occurring species is presented in Figure 3. Eurasian watermilfoil, ranked 27th by frequency of occurrence, is also included in the plot. Depth distribution and species diversity remains comparable to that reported in surveys conducted in the south basin of Lake George in 1987 and 1988 (Madsen et al. 1989).

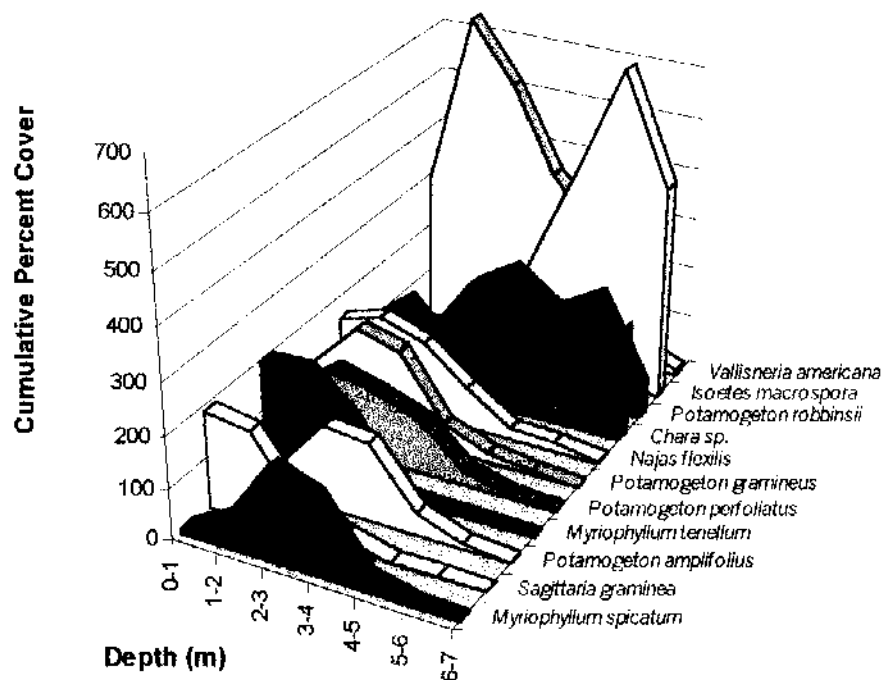
Figure 3. Frequency and depth distribution of the 10 most common macrophyte species and Eurasian watermilfoil.



Frequency, or the number of tributaries where each species was present, is an important measure of the distribution of species but does not consider the relative abundance of

species within the overall population. Table 6 contains the species present and their depth distribution ranked in order of cumulative percent cover. This ranking is a better measure of the dominance of certain species 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. Eurasian watermilfoil is ranked 12th by relative abundance. A comparison of Figures 3 and 4 indicates nine species are ranked in the top 10 for both frequency of occurrence and relative percent cover.

Figure 4. Cumulative percent cover and depth distribution of the 10 most common macrophyte species and Eurasian watermilfoil.



Comparisons of the major species by frequency of occurrence reported during the 1997 tributary survey (Fichler et al. 1995) with the current list (Table 5) show few differences. Six of the ten most abundant species are the same. *Ranunculus reptans* was not within the top ten species during the 1994 survey, but was ranked tenth in the 1997 survey. This species dropped to 24th in 2000. Eurasian watermilfoil was ranked 16th and 18th by frequency of occurrence in the 1991 and 1994 surveys, respectively. In 1997, Eurasian watermilfoil was ranked 24th by frequency of occurrence and declined to 27th in 2000. The decline in frequency of occurrence of milfoil over the survey years can be attributed to the removal of milfoil by hand harvesting and other management techniques, and thus a reduction in the number of sites with milfoil.

Although the number of samples is limited for development of a statistically reliable rate of colonization, new sites continue to be colonized on a year-to-year basis. The rate of

Table 6. Cumulative percent cover of all macrophyte species at the tributary sites. Species are listed in order of decreasing abundance.

| Species | Depth Interval (m) | | | | | | | Total |
|-------------------------------------|--------------------|--------------------|-------------------|-------------------|--------------------|-----------------|-----------------|---------------------|
| | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | |
| <i>Vallisneria americana</i> | 297.5 | 635 | 520 | 358 | 263 | 45 | 12.5 | 2130 |
| <i>Isoetes macrospora</i> | 0 | 0 | 20 | 225 | 423 | 633 | 423 | 1722.5 |
| <i>Potamogeton robbinsii</i> | 15 | 67.5 | 187.5 | 243 | 180 | 230 | 67.5 | 990 |
| <i>Chara</i> sp. | 105 | 175 | 87.5 | 72.5 | 65 | 100 | 223 | 827.5 |
| <i>Najas flexilis</i> | 152.5 | 177.5 | 147.5 | 80 | 22.5 | 17.5 | 5 | 602.5 |
| <i>Potamogeton gramineus</i> | 110 | 195 | 172.5 | 52.5 | 17.5 | 5 | 0 | 552.5 |
| <i>Potamogeton perfoliatus</i> | 100 | 157.5 | 137.5 | 105 | 30 | 5 | 0 | 535 |
| <i>Myriophyllum tenellum</i> | 197.5 | 200 | 117.5 | 5 | 0 | 0 | 0 | 520 |
| <i>Potamogeton amplifolius</i> | 7.5 | 65 | 162.5 | 155 | 42.5 | 12.5 | 2.5 | 447.5 |
| <i>Sagittaria graminea</i> | 187.5 | 175 | 55 | 22.5 | 0 | 0 | 0 | 440 |
| <i>Elodea canadensis</i> | 57.5 | 120 | 117.5 | 55 | 42.5 | 32.5 | 12.5 | 437.5 |
| <u>Myriophyllum spicatum</u> | <u>7.5</u> | <u>57.5</u> | <u>180</u> | <u>150</u> | <u>22.5</u> | <u>0</u> | <u>0</u> | <u>417.5</u> |
| <i>Eleocharis acicularis</i> | 132.5 | 192.5 | 40 | 2.5 | 0 | 0 | 0 | 367.5 |
| <i>Eriocaulon septangulare</i> | 200 | 75 | 50 | 0 | 0 | 0 | 0 | 325 |
| <i>Utricularia resupinata</i> | 107.5 | 100 | 32.5 | 5 | 2.5 | 0 | 0 | 247.5 |
| <i>Ranunculus reptans</i> | 85 | 135 | 17.5 | 0 | 0 | 0 | 0 | 237.5 |
| <i>Isoetes echinospora</i> | 20 | 70 | 90 | 37.5 | 2.5 | 0 | 0 | 220 |
| <i>Potamogeton pusillus</i> | 35 | 57.5 | 37.5 | 30 | 20 | 12.5 | 5 | 197.5 |
| <i>Ranunculus longirostris</i> | 22.5 | 52.5 | 52.5 | 47.5 | 10 | 0 | 0 | 185 |
| <i>Nuphar luteum</i> | 137.5 | 17.5 | | | | | | 155 |
| <i>Potamogeton spirillus</i> | 40 | 40 | 35 | 27.5 | 7.5 | 2.5 | 0 | 152.5 |
| <i>Juncus pelocarpus</i> | 50 | 60 | 17.5 | 0 | 0 | 0 | 0 | 127.5 |
| <i>Sparganium</i> sp. | 40 | 55 | 12.5 | 0 | 0 | 0 | 0 | 107.5 |
| <i>Potamogeton zosteriformis</i> | 7.5 | 15 | 30 | 20 | 15 | 17.5 | 0 | 105 |
| <i>Najas guadalupensis</i> | 2.5 | 2.5 | 5 | 17.5 | 30 | 40 | 5 | 102.5 |
| <i>Elatine minima</i> | 37.5 | 37.5 | 20 | 0 | 0 | 0 | 0 | 95 |
| <i>Heteranthera dubia</i> | 17.5 | 20 | 25 | 12.5 | 7.5 | 0 | 0 | 82.5 |
| <i>Bidens beckii</i> | | 15 | 25 | 22.5 | 15 | 2.5 | | 80 |
| <i>Potamogeton praelongus</i> | 2.5 | | 20 | 25 | 22.5 | 5 | 2.5 | 77.5 |
| <i>Potamogeton foliosus</i> | 7.5 | 17.5 | 22.5 | 17.5 | 0 | 0 | 0 | 65 |
| <i>Potamogeton vaseyiii</i> | 17.5 | 17.5 | 5 | 7.5 | 2.5 | 0 | 0 | 50 |
| <i>Lobelia dortmanna</i> | 12.5 | 30 | 5 | 0 | 0 | 0 | 0 | 47.5 |
| <i>Nymphaea odorata</i> | 30 | 10 | | | | | | 40 |
| <i>Myriophyllum alterniflorum</i> | 7.5 | 15 | 5 | 0 | 0 | 0 | 0 | 27.5 |
| <i>Subularia aquatica</i> | 7.5 | 12.5 | 7.5 | | | | | 27.5 |
| <i>Myriophyllum sibiricum</i> | | 7.5 | 7.5 | 2.5 | 0 | 0 | 0 | 17.5 |
| <i>Potamogeton crispus</i> | | 10 | 5 | 2.5 | | | | 17.5 |
| <i>Potamogeton richardsonii</i> | 2.5 | 2.5 | 10 | 2.5 | | | | 17.5 |
| <i>Potamogeton epihydrus</i> | 5 | 10 | | | | | | 15 |
| <i>Utricularia vulgaris</i> | 2.5 | 10 | 2.5 | 0 | 0 | 0 | 0 | 15 |
| <i>Brasenia schreberi</i> | 5 | 7.5 | | | | | | 12.5 |
| <i>Pontedaria cordata</i> | 12.5 | | | | | | | 12.5 |
| <i>Potamogeton friesii</i> | 5 | 5 | | | | | | 10 |
| <i>Ceratophyllum demersum</i> | | 5 | | 2.5 | | | | 7.5 |
| <i>Potamogeton obtusifolius</i> | | 2.5 | | 2.5 | | | | 5 |
| <i>Potamogeton peclinatus</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Fontinalis</i> sp. | 2.5 | | | | | | | 2.5 |
| <i>Utricularia purpurea</i> | 2.5 | | | | | | | 2.5 |

increase of the presence of Eurasian watermilfoil at the 46 tributary sites over the thirteen year span of the study is approximately 2 new sites per year, or an 4% annual rate of colonization. At the current rate, all remaining tributaries would be colonized by Eurasian watermilfoil over the course of the next three to four years. The occurrence of milfoil at sites which 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.

Results of tributary surveys in combination with the Eurasian watermilfoil management program (Eichler et al., 1997) demonstrate the need for continued management of Eurasian watermilfoil in Lake George. The management program encompasses several different techniques reflective of different stages of milfoil development. Tributary surveys provide a means of mapping the rate of milfoil colonization, and the management program provides a means of limiting the rate of spread once these sites have been located. Increasing public awareness of the effects that milfoil has on the Lake George ecosystem, and how the public can help reduce further introduction into the Lake George watershed is an additional benefit.

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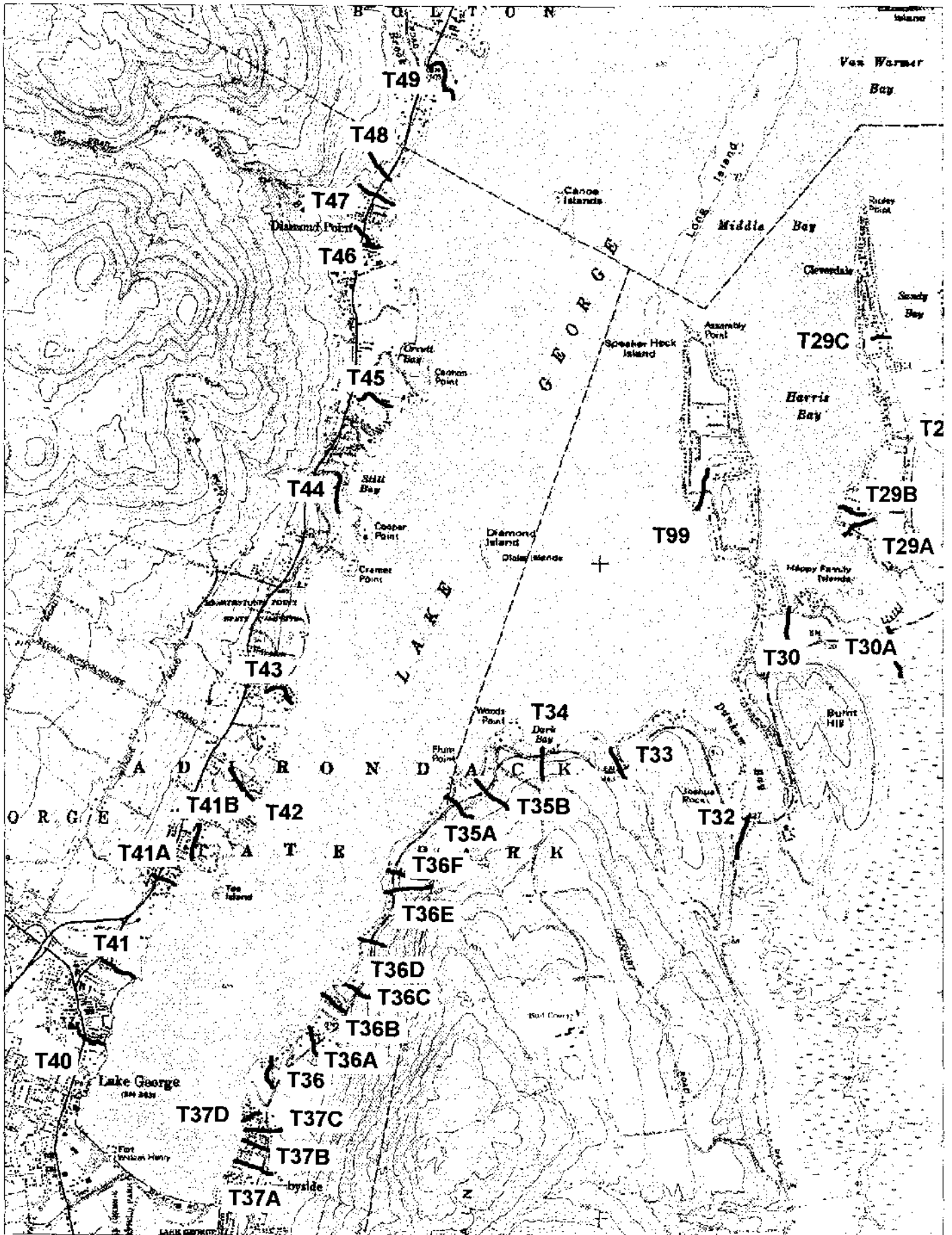
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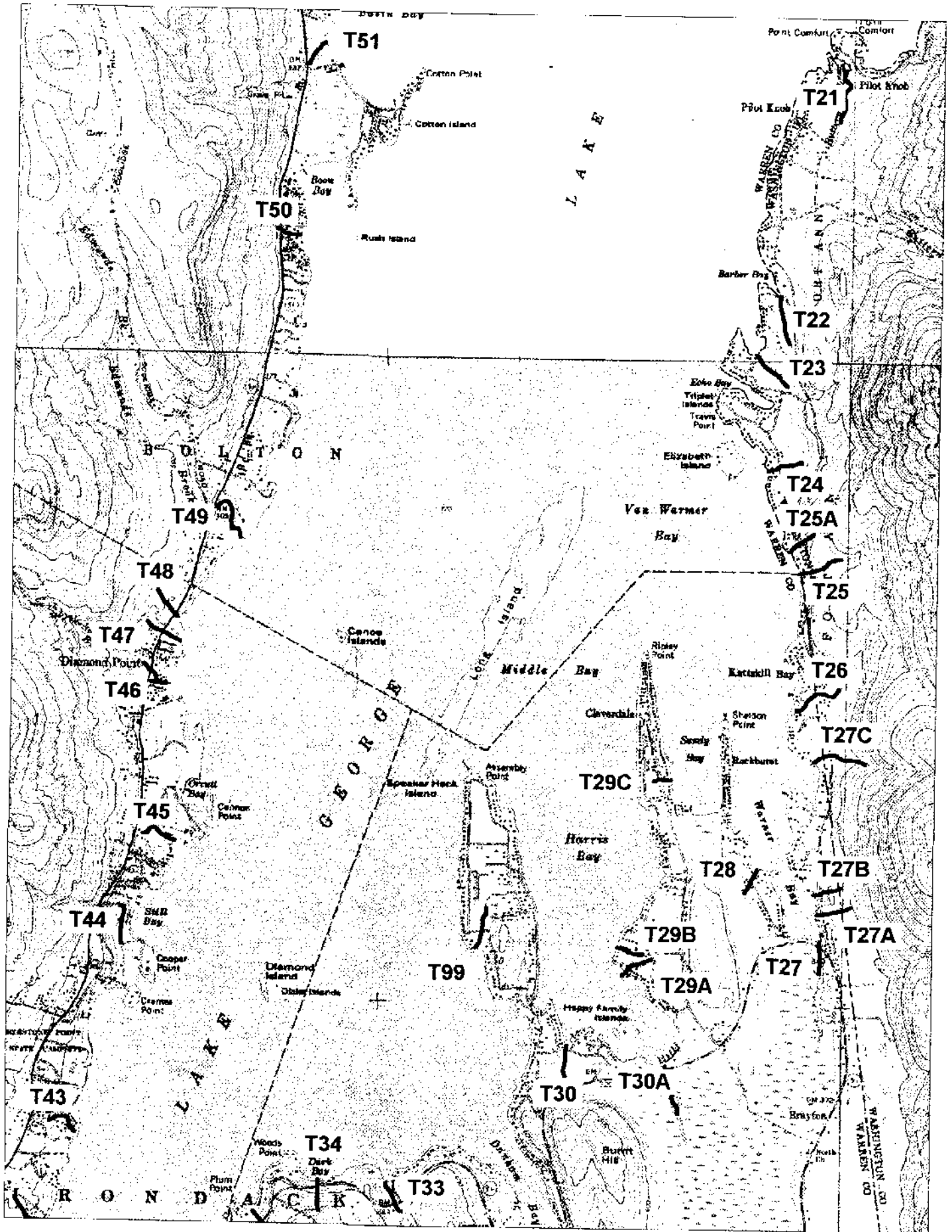
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APPENDIX A
SITE LOCATIONS





APPENDIX B

MACROPHYTE COMMUNITY ASSESSMENT DATA

2000 Lake George Tributary Survey
Date: 7/21/00

Site: T-21

Butternut Brook

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| <i>Brasenia schreberi</i> | | 2.5 | | | | | | 2.5 |
| <i>Chara</i> sp. | 2.5 | 10 | 20 | | | | | 32.5 |
| <i>Eleocharis acicularis</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Elodea canadensis</i> | | 2.5 | | | | | | 2.5 |
| <i>Isoetes echinospora</i> | 2.5 | | | | | | | 2.5 |
| <i>Lobelia dortmanna</i> | 2.5 | | | | | | | 2.5 |
| <i>Myriophyllum tenellum</i> | 2.5 | | | | | | | 2.5 |
| <i>Najas flexilis</i> | 2.5 | | | | | | | 2.5 |
| <i>Nuphar luteum</i> | 10 | | | | | | | 10 |
| <i>Potamogeton pectinatus</i> | | | 2.5 | | | | | 2.5 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 10 | 2.5 | | | | | 15 |
| <i>Potamogeton gramineus</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Ranunculus reptans</i> | | 2.5 | | | | | | 2.5 |
| <i>Sagittaria graminea</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Sparganium</i> sp. | 10 | 20 | | | | | | 30 |
| <i>Utricularia resupinata</i> | | | 10 | | | | | 10 |
| <i>Utricularia vulgaris</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Vallisneria americana</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |

Date: 7/21/00

Site: T-22

Barber Bay

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|----------------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| <i>Chara</i> sp. | 2.5 | 10 | 10 | | | | | 22.5 |
| <i>Elatine minima</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Elodea canadensis</i> | | | 2.5 | 2.5 | 2.5 | | | 7.5 |
| <i>Eriocaulon septangulare</i> | 10 | 2.5 | | | | | | 12.5 |
| <i>Heteranthera dubia</i> | | | 10 | 2.5 | | | | 12.5 |
| <i>Juncus pelocarpus</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Lobelia dortmanna</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Myriophyllum tenellum</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton gramineus</i> | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | | 12.5 |
| <i>Potamogeton perfoliatus</i> | | | 10 | 10 | 2.5 | | | 22.5 |
| <i>Potamogeton praelongus</i> | | | 10 | 10 | 10 | | | 30 |
| <i>Potamogeton pusillus</i> | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| <i>Potamogeton robbinsii</i> | | | 10 | 10 | 20 | | | 40 |
| <i>Potamogeton spirillus</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Potamogeton zosteriformes</i> | | | | | 2.5 | | | 2.5 |
| <i>Potamogeton amplifolius</i> | | | 10 | 10 | 20 | | | 40 |
| <i>R. reptans</i> | | 2.5 | | | | | | 2.5 |
| <i>Ranunculus longirostris</i> | | 2.5 | 2.5 | 2.5 | 2.5 | | | 10 |
| <i>Utricularia resupinata</i> | 2.5 | 2.5 | 10 | | | | | 15 |
| <i>Vallisneria americana</i> | 2.5 | 10 | 10 | 20 | 20 | | | 62.5 |
| | | | | | | | | 0 |

| | | | | | | | | |
|--------------------------------|---------|-----|-----|-----|-----|-----|-----|-------|
| Date: | 7/21/00 | | | | | | | |
| Site: | T-23 | | | | | | | |
| Isom Bay | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| <i>Bidens beckii</i> | | 2.5 | | | | | | 2.5 |
| <i>Brasenia schreberi</i> | 2.5 | | | | | | | 2.5 |
| <i>Chara</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Elatine minima</i> | 2.5 | | | | | | | 2.5 |
| <i>Elodea canadensis</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Eriocaulon septangulare</i> | 20 | 2.5 | | | | | | 22.5 |
| <i>Juncus pelocarpus</i> | 10 | | | | | | | 10 |
| <i>Najas flexilis</i> | 2.5 | | | | | | | 2.5 |
| <i>Nuphar luteum</i> | 10 | | | | | | | 10 |
| <i>Potamogeton gramineus</i> | 2.5 | 10 | | | | | | 12.5 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton pusillus</i> | | 2.5 | | | | | | 2.5 |
| <i>Potamogeton robbinsii</i> | | 2.5 | | | | | | 2.5 |
| <i>Ranunculus longirostris</i> | | 2.5 | | | | | | 2.5 |
| <i>Sagittaria graminea</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Vallisneria americana</i> | 10 | 10 | | | | | | 20 |

| | | | | | | | | |
|--------------------------------|---------|-----|-----|------|-----|-----|-----|-------|
| Date: | 7/21/00 | | | | | | | |
| Site: | T-24 | | | | | | | |
| Elizabeth Isl. | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| <i>Bidens beckii</i> | | | 2.5 | 2.5 | | | | 5 |
| <i>Chara</i> | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| <i>Eleocharis acicularis</i> | 2.5 | | | | | | | 2.5 |
| <i>Elodea canadensis</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Myriophyllum tenellum</i> | 2.5 | | | | | | | 2.5 |
| <i>Najas flexilis</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton epihydrus</i> | 2.5 | | | | | | | 2.5 |
| <i>Potamogeton gramineus</i> | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Potamogeton pusillus</i> | | | 2.5 | 2.5 | | | | 5 |
| <i>Potamogeton robbinsii</i> | | 10 | 20 | 37.5 | | | | 67.5 |
| <i>Potamogeton amplifolius</i> | | 10 | 10 | 2.5 | | | | 22.5 |
| <i>Ranunculus longirostris</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Sagittaria graminea</i> | 2.5 | 10 | | | | | | 12.5 |
| <i>Sparganium sp.</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Vallisneria americana</i> | 10 | 10 | 2.5 | 2.5 | | | | 25 |

Date: 9/25/00
 Site: T-25

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|---------------------------|-----|-----|-----|-----|------|-----|------|-------|
| Bidens beckii | | | | | 2.5 | | | 2.5 |
| Chara sp. | 2.5 | 2.5 | 2.5 | 2.5 | 10 | 10 | 37.5 | 67.5 |
| Heteranthera dubia | | | | 2.5 | 2.5 | | | 5 |
| Isoetes echinospora | | 2.5 | 2.5 | | | | | 5 |
| Isoetes macrospora | | | | | 20 | 75 | | 95 |
| Najas flexilis | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | 15 |
| Najas guadalupensis | | | 2.5 | 2.5 | 2.5 | | | 7.5 |
| Potamogeton perfoliatus | | | | | 2.5 | | | 2.5 |
| Potamogeton pusillus | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | 12.5 |
| Potamogeton robbinsii | | | | | | 2.5 | 2.5 | 5 |
| Potamogeton spirillus | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton zosteriformes | | | | | 2.5 | 10 | | 12.5 |
| Potamogeton amplifolius | | | | 2.5 | 10 | 10 | 2.5 | 25 |
| Potamogeton gramineus | | 2.5 | 10 | 10 | 2.5 | 2.5 | | 27.5 |
| Sparganium sp. | | 2.5 | | | | | | 2.5 |
| Vallisneria americana | | 2.5 | 10 | 10 | 37.5 | 10 | | 70 |

Date: 9/25/00
 Site: T-25a

Bombard's camp

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Eleocharis acicularis | 2.5 | 2.5 | | | | | | 5 |
| Elodea canadensis | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Heteranthera dubia | | 2.5 | 2.5 | | | | | 5 |
| Isoetes macrospora | | | | 2.5 | 10 | | | 12.5 |
| Najas flexilis | | | 2.5 | 10 | 2.5 | | | 15 |
| Potamogeton amplifolius | | 20 | 20 | 10 | | | | 50 |
| Potamogeton robbinsii | | 2.5 | 10 | 20 | | | | 32.5 |
| Potamogeton perfoliatus | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| Potamogeton gramineus | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| R. reptans | 20 | | | | | | | 20 |
| Sparganium sp. | 2.5 | | | | | | | 2.5 |
| Vallisneria americana | 10 | 20 | 10 | 10 | 2.5 | | | 52.5 |

| | | | | | | | | |
|--------------------------------|---------|------|-----|-----|-----|-----|-----|-------|
| Date: | 9/25/00 | | | | | | | |
| Site: T-26 | | | | | | | | |
| Trout Pavilion | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| <i>Elatine minima</i> | 2.5 | | | | | | | 2.5 |
| <i>Eriocaulon septangulare</i> | 2.5 | | | | | | | 2.5 |
| <i>Isoetes macrospora</i> | | | 2.5 | | | | | 2.5 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton gramineus</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Sparganium sp.</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Vallisneria americana</i> | | 37.5 | 10 | | | | | 47.5 |

| | | | | | | | | |
|----------------------------------|---------|-----|-----|-----|-----|-----|-----|-------|
| Date: | 7/20/00 | | | | | | | |
| Site: T 27 | | | | | | | | |
| S. Warner Bay Trib wetland | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| <i>Bidens beckii</i> | | | 2.5 | | | | | 2.5 |
| <i>Chara sp.</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Fontinalis sp.</i> | 2.5 | | | | | | | 2.5 |
| <i>Myriophyllum sibiricum</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Najas flexilis</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Nuphar luteum</i> | 10 | 2.5 | | | | | | 12.5 |
| <i>Potamogeton gramineus</i> | 2.5 | 2.5 | 10 | | | | | 15 |
| <i>Potamogeton perfoliatus</i> | | | 2.5 | | | | | 2.5 |
| <i>Potamogeton pusillus</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton robbinsii</i> | 10 | 10 | 10 | | | | | 30 |
| <i>Potamogeton zosteriformes</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Potamogeton amplifolius</i> | 2.5 | 2.5 | 10 | | | | | 15 |
| <i>Sagittaria graminea</i> | 20 | 20 | 20 | | | | | 60 |
| <i>Sparganium sp.</i> | 2.5 | | | | | | | 2.5 |
| <i>Vallisneria americana</i> | 2.5 | 10 | 10 | | | | | 22.5 |

Date: 7/20/00
 Site: T-27a

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|----------------------------------|-----|-----|------|-----|-----|-----|-----|-------|
| <i>Bidens beckii</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Brasenia schreberi</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Chara</i> sp. | 10 | | | | | | | 10 |
| <i>Eleocharis acicularis</i> | 2.5 | | | | | | | 2.5 |
| <i>Elodea canadensis</i> | | 10 | 2.5 | | | | | 12.5 |
| <i>Isoetes echinospora</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Myriophyllum sibiricum</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Najas flexilis</i> | 20 | 10 | 2.5 | | | | | 32.5 |
| <i>Nuphar luteum</i> | 10 | | | | | | | 10 |
| <i>Nymphaea odorata</i> | 10 | | | | | | | 10 |
| <i>Potamogeton friesii</i> | 2.5 | | | | | | | 2.5 |
| <i>Potamogeton gramineus</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Potamogeton pusillus</i> | | 10 | 2.5 | | | | | 12.5 |
| <i>Potamogeton robbinsii</i> | | 2.5 | 10 | | | | | 12.5 |
| <i>Potamogeton spirillus</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton vaseyiii</i> | 10 | 2.5 | | | | | | 12.5 |
| <i>Potamogeton zosteriformis</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Potamogeton amplifolius</i> | | 10 | 20 | | | | | 30 |
| <i>Ranunculus longirostris</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Sagittaria graminea</i> | 2.5 | 10 | 2.5 | | | | | 15 |
| <i>Sparganium</i> sp. | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Vallisneria americana</i> | | 20 | 37.5 | | | | | 57.5 |

Date: 7/20/00
 Site: T-27b

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|----------------------------------|-----|-----|------|-----|-----|-----|-----|-------|
| <i>Bidens beckii</i> | | 2.5 | | 2.5 | | | | 5 |
| <i>Elodea canadensis</i> | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| <i>Myriophyllum sibiricum</i> | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| <i>Najas flexilis</i> | 20 | 10 | | 2.5 | | | | 32.5 |
| <i>Nuphar luteum</i> | 2.5 | | | | | | | 2.5 |
| <i>Nymphaea odorata</i> | 2.5 | | | | | | | 2.5 |
| <i>Potamogeton friesii</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton perfoliatus</i> | | | 2.5 | 2.5 | | | | 5 |
| <i>Potamogeton pusillus</i> | 2.5 | 10 | | 2.5 | | | | 15 |
| <i>Potamogeton robbinsii</i> | | | 10 | 20 | | | | 30 |
| <i>Potamogeton spirillus</i> | 10 | 2.5 | | | | | | 12.5 |
| <i>Potamogeton vaseyiii</i> | 2.5 | 10 | | 2.5 | | | | 15 |
| <i>Potamogeton zosteriformis</i> | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| <i>Potamogeton amplifolius</i> | | | 37.5 | 7.5 | | | | 112.5 |
| <i>Ranunculus longirostris</i> | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| <i>Sagittaria graminea</i> | 2.5 | 2.5 | 2.5 | 20 | | | | 27.5 |
| <i>Utricularia vulgaris</i> | | 2.5 | | | | | | 2.5 |
| <i>Vallisneria americana</i> | 10 | 20 | 37.5 | 10 | | | | 77.5 |

Date: 20-Jul-00
 Site: T-27c
 S. of Fishers Marina

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|------|-----|-----|-----|-----|-----|-----|-------|
| Chara | 2.5 | 2.5 | | | | | | 5 |
| Eleocharis acicularis | 10 | 10 | | | | | | 20 |
| Elodea canadensis | 2.5 | 2.5 | | | | | | 5 |
| Eriocaulon septangulare | 37.5 | 10 | | | | | | 47.5 |
| Heteranthera dubia | 2.5 | 2.5 | | | | | | 5 |
| Juncus pelocarpus | 10 | 10 | | | | | | 20 |
| Myriophyllum tenellum | 20 | 2.5 | | | | | | 22.5 |
| Najas flexilis | 2.5 | 10 | | | | | | 12.5 |
| Nuphar luteum | 10 | 2.5 | | | | | | 12.5 |
| Nymphaea odorata | 2.5 | | | | | | | 2.5 |
| Potamogeton gramineus | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton perfoliatus | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton pusillus | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton robbinsii | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton spirillus | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton vaseyii | 2.5 | 2.5 | | | | | | 5 |
| Pontedaria cordata | 10 | | | | | | | 10 |
| Potamogeton amplifolius | 2.5 | | | | | | | 2.5 |
| R. reptans | 2.5 | 10 | | | | | | 12.5 |
| Ranunculus longirostris | 2.5 | 2.5 | | | | | | 5 |
| Sagittaria graminea | 10 | 2.5 | | | | | | 12.5 |
| Sparganium sp. | 2.5 | 2.5 | | | | | | 5 |
| U. vulgaris | 2.5 | 2.5 | | | | | | 5 |
| Vallisneria americana | 10 | 10 | | | | | | 20 |

Date: 20-Jul-00
 Site: T-28
 N. Warner bay

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Chara sp. | 10 | 10 | 10 | 10 | | | | 40 |
| Elatine minima | 2.5 | 2.5 | | | | | | 5 |
| Elodea canadensis | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| Isoetes echinospora | | 2.5 | 2.5 | | | | | 5 |
| Juncus pelocarpus | 2.5 | 10 | 10 | | | | | 22.5 |
| Najas flexilis | 10 | 2.5 | 10 | 2.5 | | | | 25 |
| Potamogeton perfoliatus | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| Potamogeton spirillus | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| Potamogeton gramineus | 10 | 10 | 10 | 2.5 | | | | 32.5 |
| R. reptans | 10 | 10 | 10 | | | | | 30 |
| Ranunculus longirostris | | 2.5 | | | | | | 2.5 |
| Sparganium | | | 2.5 | | | | | 2.5 |
| Vallisneria americana | 2.5 | 2.5 | 10 | 2.5 | | | | 17.5 |

| Date: | 9/22/00 | | | | | | | |
|----------------------------------|---------|-----|-----|------|-----|-----|-----|-------|
| Site: | T-29a | | | | | | | |
| Harris Bay culvert | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| <i>Bidens beckii</i> | | 2.5 | 10 | 2.5 | | | | 15 |
| <i>Elodea canadensis</i> | 2.5 | 10 | 2.5 | 2.5 | | | | 17.5 |
| <i>Eriocaulon septangulare</i> | | 2.5 | | | | | | 2.5 |
| <i>Heteranthera dubia</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Myriophyllum spicatum</i> | 2.5 | 10 | 20 | 37.5 | | | | 70 |
| <i>Najas flexilis</i> | 20 | 10 | 10 | 2.5 | | | | 42.5 |
| <i>Potamogeton gramineus</i> | 2.5 | 10 | 10 | 2.5 | | | | 25 |
| <i>Potamogeton perfoliatus</i> | | 10 | 10 | 2.5 | | | | 22.5 |
| <i>Potamogeton praelongus</i> | | | 10 | 10 | | | | 20 |
| <i>Potamogeton zosteriformis</i> | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| <i>Potamogeton amplifolius</i> | 2.5 | 10 | 10 | 10 | | | | 32.5 |
| <i>Ranunculus longirostris</i> | | | 2.5 | 10 | | | | 12.5 |
| <i>Sparganium</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Vallisneria americana</i> | 10 | 75 | 20 | 10 | | | | 115 |

| Date: | 9/22/00 | | | | | | | |
|--------------------------------|---------|-----|-----|-----|-----|------|-----|-------|
| Site: | T-29b | | | | | | | |
| Harris Bay culvert | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| <i>Chara sp.</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Elatine minima</i> | | | 2.5 | | | | | 2.5 |
| <i>Elodea canadensis</i> | | | 2.5 | 2.5 | 2.5 | 2.5 | | 10 |
| <i>Heteranthera dubia</i> | | 2.5 | | | | | | 2.5 |
| <i>Isoetes echinospora</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Isoetes macrospora</i> | | | | | 10 | 37.5 | | 47.5 |
| <i>M. tenellum</i> | | 2.5 | | | | | | 2.5 |
| <i>Najas flexilis</i> | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | 15 |
| <i>Najas guadalupensis</i> | | | | | 2.5 | | | 2.5 |
| <i>Potamogeton perfoliatus</i> | | | | 2.5 | 2.5 | 2.5 | | 7.5 |
| <i>Potamogeton pusillus</i> | 2.5 | 2.5 | | 2.5 | 2.5 | | | 10 |
| <i>Potamogeton robbinsii</i> | 2.5 | 2.5 | 2.5 | | 2.5 | 2.5 | | 12.5 |
| <i>Potamogeton spirillus</i> | 2.5 | 2.5 | | 2.5 | 2.5 | | | 10 |
| <i>Potamogeton amplifolius</i> | | | | | 2.5 | 2.5 | | 5 |
| <i>Potamogeton gramineus</i> | 2.5 | 10 | 2.5 | 2.5 | 2.5 | 2.5 | | 22.5 |
| <i>Vallisneria americana</i> | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | 15 |

| | | | | | | | | | |
|-------------------------|---------|-----|-----|-----|-----|-----|-----|-------|--|
| Date: | 9/22/00 | | | | | | | | |
| Site: | T-29c | | | | | | | | |
| Sandy Bay | | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total | |
| Chara sp. | 2.5 | 2.5 | 2.5 | | | | | 7.5 | |
| Eleocharis acicularis | 2.5 | 2.5 | | | | | | 5 | |
| Elodea canadensis | | | 2.5 | | | | | 2.5 | |
| Eriocaulon septangulare | | 2.5 | | | | | | 2.5 | |
| Heteranthera dubia | 2.5 | | | | | | | 2.5 | |
| Isoetes echinospora | | 2.5 | | | | | | 2.5 | |
| Juncus pelocarpus | | 2.5 | | | | | | 2.5 | |
| Myriophyllum tenellum | | 2.5 | | | | | | 2.5 | |
| Najas flexilis | | 2.5 | 2.5 | | | | | 5 | |
| Potamogeton pectinatus | | 2.5 | | | | | | 2.5 | |
| Potamogeton perfoliatus | 10 | 2.5 | 2.5 | | | | | 15 | |
| Potamogeton spirillus | 2.5 | | | | | | | 2.5 | |
| Potamogeton gramineus | | 2.5 | 2.5 | | | | | 5 | |
| Ranunculus longirostris | 2.5 | | | | | | | 2.5 | |
| Sparganium | | 2.5 | 2.5 | | | | | 5 | |
| Vallisneria americana | 10 | 2.5 | 2.5 | | | | | 15 | |

| | | | | | | | | | |
|--------------------------|---------|-----|-----|-----|-----|-----|-----|-------|--|
| Date: | 9/22/00 | | | | | | | | |
| Site: | T-30 | | | | | | | | |
| Bay SW Happy Family Isl. | | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total | |
| Elatine minima | 2.5 | | | | | | | 2.5 | |
| Eleocharis acicularis | 2.5 | | | | | | | 2.5 | |
| Eriocaulon septangulare | 20 | | | | | | | 20 | |
| Juncus pelocarpus | 2.5 | | | | | | | 2.5 | |
| Potamogeton gramineus | 2.5 | | | | | | | 2.5 | |
| Ranunculus longirostris | 2.5 | 2.5 | | | | | | 5 | |
| Vallisneria americana | 2.5 | 2.5 | | | | | | 5 | |

| | | | | | | | | | |
|-------------------------|---------|-----|-----|-----|-----|-----|-----|-------|--|
| Date: | 9/22/00 | | | | | | | | |
| Site: | T-30a | | | | | | | | |
| Harris Bay inlet | | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total | |
| Eriocaulon septangulare | | 2.5 | | | | | | 2.5 | |
| Juncus pelocarpus | 2.5 | | | | | | | 2.5 | |
| Myriophyllum spicatum | | 2.5 | | | | | | 2.5 | |
| Nuphar luteum | 10 | 10 | | | | | | 20 | |
| Nymphaea odorata | 10 | 10 | | | | | | 20 | |
| Potamogeton gramineus | 2.5 | 2.5 | | | | | | 5 | |
| Potamogeton robbinsii | | 2.5 | | | | | | 2.5 | |
| Potamogeton spirillus | | 2.5 | | | | | | 2.5 | |
| Pontederia cordata | 2.5 | | | | | | | 2.5 | |
| Potamogeton epihydrus | 2.5 | 10 | | | | | | 12.5 | |
| Sagittaria graminea | | 10 | | | | | | 10 | |
| Sparganium sp. | 10 | 10 | | | | | | 20 | |
| Vallisneria americana | 2.5 | 2.5 | | | | | | 5 | |

Date: 8/31/00

Site: T-32

Dunham's Bay

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|--------------------------------|------|-----|-----|-----|-----|-----|-----|-------|
| <i>Brasenia schreberi</i> | | 2.5 | | | | | | 2.5 |
| <i>Ceratophyllum demersum</i> | | 2.5 | | | | | | 2.5 |
| <i>Eleocharis acicularis</i> | 10 | 10 | | | | | | 20 |
| <i>Myriophyllum spicatum</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Najas flexilis</i> | 20 | 10 | | | | | | 30 |
| <i>Nuphar luteum</i> | 75 | | | | | | | 75 |
| <i>Potamogeton gramineus</i> | 10 | 10 | | | | | | 20 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton praelongus</i> | 2.5 | | | | | | | 2.5 |
| <i>Potamogeton robbinsii</i> | | 2.5 | | | | | | 2.5 |
| <i>Potamogeton amplifolius</i> | | 10 | | | | | | 10 |
| <i>Sagittaria graminea</i> | 10 | 2.5 | | | | | | 12.5 |
| <i>Sparganium sp.</i> | | 2.5 | | | | | | 2.5 |
| <i>Utricularia purpurea</i> | 2.5 | | | | | | | 2.5 |
| <i>Utricularia resupinata</i> | 20 | 10 | | | | | | 30 |
| <i>Utricularia vulgaris</i> | | 2.5 | | | | | | 2.5 |
| <i>Vallisneria americana</i> | 37.5 | 20 | | | | | | 57.5 |

Date: 8/31/00

Site: T-33

B-E Dark Bay

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|----------------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| <i>Bidens beckii</i> | | | | 2.5 | 2.5 | | | 5 |
| <i>Ceratophyllum demersum</i> | | 2.5 | | 2.5 | | | | 5 |
| <i>Chara sp.</i> | 2.5 | 2.5 | 2.5 | 2.5 | 10 | 20 | | 40 |
| <i>Elatine minima</i> | | 2.5 | | | | | | 2.5 |
| <i>Eleocharis acicularis</i> | | 20 | | | | | | 20 |
| <i>Elodea canadensis</i> | | 2.5 | | 2.5 | | | | 5 |
| <i>Isoetes macrospora</i> | | | | | 2.5 | 2.5 | | 5 |
| <i>Isoetes echinospora</i> | 2.5 | | | | | | | 2.5 |
| <i>Juncus pelocarpus</i> | | 2.5 | | | | | | 2.5 |
| <i>Lobelia dortmanna</i> | | 2.5 | | | | | | 2.5 |
| <i>M. tenellum</i> | 10 | | | | | | | 10 |
| <i>Najas flexilis</i> | | 10 | 10 | | | | | 20 |
| <i>Potamogeton gramineus</i> | | 2.5 | | | | | | 2.5 |
| <i>Potamogeton perfoliatus</i> | 2.5 | | | | | | | 2.5 |
| <i>Potamogeton praelongus</i> | | | | 2.5 | | | | 2.5 |
| <i>Potamogeton pusillus</i> | | | | 2.5 | 2.5 | | | 5 |
| <i>Potamogeton robbinsii</i> | | | | 10 | 10 | 20 | | 40 |
| <i>Potamogeton spirillus</i> | 2.5 | | | | | | | 2.5 |
| <i>Potamogeton zosteriformis</i> | | | | 2.5 | | | | 2.5 |
| <i>Potamogeton amplifolius</i> | | | 10 | 10 | | | | 20 |
| <i>Ranunculus longirostris</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Sagittaria graminea</i> | 10 | 2.5 | 2.5 | | | | | 15 |
| <i>Sparganium sp.</i> | | | 2.5 | | | | | 2.5 |
| <i>Subularia aquatica</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Vallisneria americana</i> | 10 | 2.5 | 10 | 20 | | | | 42.5 |

Date: 8/31/00

Site: T-34

Dark Bay

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|-----|-----|-----|------|-----|-----|-----|-------|
| Chara sp. | | 10 | 2.5 | 2.5 | 2.5 | | | 17.5 |
| Elatine minima | | | 2.5 | | | | | 2.5 |
| Eleocharis acicularis | | | 10 | | | | | 10 |
| Elodea canadensis | 2.5 | | 10 | 2.5 | 2.5 | | | 17.5 |
| Eriocaulon septangulare | 2.5 | | | | | | | 2.5 |
| Isoetes echinospora | | | 2.5 | | | | | 2.5 |
| Isoetes macrospora | | | | 37.5 | 75 | 75 | 75 | 262.5 |
| Myriophyllum tenellum | 2.5 | | | | | | | 2.5 |
| Najas flexilis | | | 10 | | | | | 10 |
| Najas guadalupensis | | | | | 2.5 | | | 2.5 |
| Potamogeton gramineus | | 20 | 20 | 2.5 | | | | 42.5 |
| Potamogeton perfoliatus | | 10 | 10 | 2.5 | 2.5 | | | 25 |
| Potamogeton robbinsii | | | | | 2.5 | 2.5 | 2.5 | 7.5 |
| Potamogeton spirillus | | | | 2.5 | | | | 2.5 |
| Potamogeton vaseyii | | | 2.5 | | | | | 2.5 |
| Sagittaria graminea | | | 2.5 | 2.5 | | | | 5 |
| Vallisneria americana | | 10 | 10 | 10 | 10 | | | 40 |

Date: 8/31/00

Site: T-35a

S. of Plum Pt.

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Chara sp. | 2.5 | 2.5 | 2.5 | 10 | 10 | | | 27.5 |
| Elatine minima | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| Eleocharis acicularis | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Isoetes echinospora | 2.5 | 2.5 | 10 | 10 | 2.5 | | | 27.5 |
| Lobelia dortmanna | | 10 | 2.5 | | | | | 12.5 |
| Myriophyllum tenellum | | 10 | 2.5 | 2.5 | | | | 15 |
| Najas flexilis | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 17.5 |
| Potamogeton perfoliatus | | | | 10 | 10 | | | 20 |
| Potamogeton pusillus | | | | | 2.5 | 2.5 | 2.5 | 7.5 |
| Potamogeton spirillus | | | | 2.5 | 2.5 | | | 5 |
| Potamogeton vaseyii | | | | 2.5 | 2.5 | | | 5 |
| Potamogeton gramineus | | 2.5 | 10 | 2.5 | | | | 15 |
| Ranunculus longirostris | | | | 2.5 | | | | 2.5 |
| Vallisneria americana | | 10 | 10 | 20 | 20 | | | 60 |

Date: 8/31/00

Site: T-35b

Plum/Woods Pt.

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|---------------------------------|-----|------|-----|------|-----|-----|-----|-------|
| <i>Bidens beckii</i> | | | | 2.5 | | | | 2.5 |
| <i>Chara</i> sp. | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 10 | 20 | 42.5 |
| <i>Elatine minima</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Elodea canadensis</i> | | 2.5 | | | 2.5 | 2.5 | | 7.5 |
| <i>Heteranthera dubia</i> | | 2.5 | | | | | | 2.5 |
| <i>Isoetes macrospora</i> | | | 10 | 37.5 | 75 | 75 | 10 | 207.5 |
| <i>Isoetes echinospora</i> | | | 10 | 2.5 | | | | 12.5 |
| <i>Myriophyllum tenellum</i> | 2.5 | 37.5 | | | | | | 40 |
| <i>Najas flexilis</i> | 10 | 10 | | | 2.5 | 2.5 | | 25 |
| <i>Potamogeton obtusifolius</i> | | 2.5 | | | | | | 2.5 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton pusillus</i> | | | 2.5 | 2.5 | 2.5 | | | 7.5 |
| <i>Potamogeton robbinsii</i> | | 2.5 | 10 | 10 | 2.5 | 2.5 | 2.5 | 30 |
| <i>Potamogeton spirillus</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Potamogeton gramineus</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Ranunculus longirostris</i> | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| <i>Utricularia resupinata</i> | | 75 | | | | | | 75 |
| <i>Vallisneria americana</i> | 2.5 | 37.5 | 10 | 20 | 20 | 10 | 2.5 | 102.5 |

Date: 8/31/00

Site: T-36

North of Wiawaka

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|--------------------------------|------|-----|-----|-----|-----|------|-----|-------|
| <i>Chara</i> sp. | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 10 | 10 | 32.5 |
| <i>Elatine minima</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Elodea canadensis</i> | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| <i>Isoetes echinospora</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Isoetes macrospora</i> | | | | 10 | 20 | 37.5 | 75 | 142.5 |
| <i>Lobelia dortmanna</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Myriophyllum tenellum</i> | 37.5 | 10 | | | | | | 47.5 |
| <i>Najas flexilis</i> | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 15 |
| <i>Potamogeton foliosus</i> | | | 2.5 | | | | | 2.5 |
| <i>Potamogeton gramineus</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Potamogeton perfoliatus</i> | | | 2.5 | | | | | 2.5 |
| <i>Potamogeton robbinsii</i> | | 2.5 | 10 | 10 | 10 | 2.5 | 2.5 | 37.5 |
| <i>Potamogeton spirillus</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Ranunculus longirostris</i> | | 2.5 | | | 2.5 | | | 5 |
| <i>Subularia aquatica</i> | | | 2.5 | | | | | 2.5 |
| <i>Utricularia resupinate</i> | 10 | 2.5 | 2.5 | 2.5 | 2.5 | | | 20 |
| <i>Vallisneria americana</i> | 2.5 | 2.5 | 10 | 10 | 2.5 | | | 27.5 |

Date:
 Site: T-36a
 East Shore

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Chara sp. | | | | 2.5 | 2.5 | 2.5 | 2.5 | 10 |
| Elatine minima | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| Eleocharis acicularis | 2.5 | 10 | 10 | | | | | 22.5 |
| Elodea canadensis | 10 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | 22.5 |
| Eriocaulon septangulare | 10 | 20 | 10 | | | | | 40 |
| Isoetes echinospora | 2.5 | 20 | 10 | | | | | 32.5 |
| Isoetes macrospora | | | 2.5 | 75 | 75 | 75 | 75 | 302.5 |
| Myriophyllum tenellum | 10 | | | | | | | 10 |
| Najas flexilis | 10 | 2.5 | 10 | 10 | | | | 32.5 |
| Potamogeton foliosus | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| Potamogeton gramineus | 10 | 10 | 10 | | | | | 30 |
| Potamogeton perfoliatus | | 10 | | | | | | 10 |
| Potamogeton pusillus | | | 2.5 | 2.5 | 2.5 | 2.5 | | 10 |
| Potamogeton robbinsii | | | 2.5 | 2.5 | 2.5 | 2.5 | | 10 |
| Potamogeton spirillus | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| Ranunculus longirostris | | 2.5 | 2.5 | 2.5 | 2.5 | | | 10 |
| R. reptans | 10 | | | | | | | 10 |
| Subularia aquatica | 2.5 | | | | | | | 2.5 |
| Vallisneria americana | 10 | 20 | 20 | 20 | 10 | 2.5 | | 82.5 |

Date: 8/31/00
 Site: T-36b

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Chara sp. | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| Elatine minima | 2.5 | 2.5 | | | | | | 5 |
| Eleocharis acicularis | 2.5 | 2.5 | | | | | | 5 |
| Elodea canadensis | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| Heteranthera dubia | | 2.5 | | | | | | 2.5 |
| Isoetes echinospora | 2.5 | 2.5 | | | | | | 5 |
| Myriophyllum tenellum | 2.5 | 2.5 | | | | | | 5 |
| Najas flexilis | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| Potamogeton vaseyji | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton perfoliatus | | 2.5 | | | | | | 2.5 |
| Potamogeton pusillus | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton robbinsii | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Potamogeton spirillus | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| Sagittaria graminea | 10 | 2.5 | | | | | | 12.5 |
| Vallisneria americana | 2.5 | 2.5 | | | | | | 5 |

Date: 8/30/00
 Site: T-36c

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|--------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Chara sp. | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Elatine minima | | 2.5 | 2.5 | | | | | 5 |
| Elodea canadensis | | | 2.5 | 2.5 | | | | 5 |
| Eriocaulon septangulare | 10 | 2.5 | | | | | | 12.5 |
| Isoetes echinospora | | 2.5 | 2.5 | | | | | 5 |
| Juncus pelocarpus | | | 2.5 | | | | | 2.5 |
| Myriophyllum tenellum | | 2.5 | 2.5 | | | | | 5 |
| Najas flexilis | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Najas guadalupensis | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton foliosus | | | | 2.5 | | | | 2.5 |
| Potamogeton gramineus | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Potamogeton obtusifolius | | | | 2.5 | | | | 2.5 |
| Potamogeton perfoliatus | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Potamogeton robbinsii | | | 2.5 | 2.5 | | | | 5 |
| Potamogeton spirillus | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Ranunculus longirostris | | | | 2.5 | | | | 2.5 |
| Subularia aquatica | | 2.5 | 2.5 | | | | | 5 |
| Utricularia resupinata | | 10 | 10 | 2.5 | | | | 22.5 |
| Vallisneria americana | | 10 | 10 | 10 | | | | 30 |

Date: 8/31/00
 Site: T-36d

East Shore

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|-----|-----|-----|-----|-----|------|-----|-------|
| Chara sp. | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 17.5 |
| Elatine minima | 2.5 | 2.5 | | | | | | 5 |
| Elodea canadensis | | | | | | 2.5 | 2.5 | 5 |
| Eriocaulon septangulare | 10 | 2.5 | | | | | | 12.5 |
| Isoetes macrospora | | | | | 2.5 | 37.5 | 75 | 115 |
| Juncus pelocarpus | 2.5 | 2.5 | | | | | | 5 |
| Lobelia dortmanna | | 2.5 | | | | | | 2.5 |
| Myriophyllum tenellum | 2.5 | 2.5 | | | | | | 5 |
| Najas guadalupensis | | | | | | 10 | 2.5 | 12.5 |
| Potamogeton gramineus | | 2.5 | | | | | | 2.5 |
| Potamogeton pusillus | | | | | | 2.5 | 2.5 | 5 |
| Potamogeton spirillus | | | | 2.5 | | 2.5 | | 5 |
| Subularia aquatica | | 2.5 | | | | | | 2.5 |

Date: 8/30/00
 Site: T-36e

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Chara sp. | 10 | 10 | 2.5 | 2.5 | | 2.5 | | 27.5 |
| Elatine minima | 2.5 | | | | | | | 2.5 |
| Elodea canadensis | | 2.5 | | | | | | 2.5 |
| Isoetes macrospora | | | | 2.5 | 10 | 75 | | 87.5 |
| Juncus pelocarpus | 2.5 | | | | | | | 2.5 |
| Najas flexilis | | 2.5 | | | | | | 2.5 |
| Potamogeton foliosus | 2.5 | 2.5 | 10 | 10 | | | | 25 |
| Potamogeton gramineus | 10 | 10 | 10 | | | | | 30 |
| Potamogeton perfoliatus | | | 2.5 | | | | | 2.5 |
| Potamogeton pusillus | 10 | 2.5 | 10 | | | | | 22.5 |
| Potamogeton spirillus | | | 10 | | | | | 10 |
| Potamogeton robbinsii | | 2.5 | 2.5 | 2.5 | 10 | | | 17.5 |
| Ranunculus longirostris | | | 10 | | | | | 10 |
| R. reptans | | 75 | | | | | | 75 |
| Sparganium sp. | 2.5 | | | | | | | 2.5 |
| Subularia aquatica | 2.5 | | | | | | | 2.5 |
| Utricularia resupinata | 75 | | | | | | | 75 |
| Vallisneria americana | | 10 | 10 | | | | | 20 |

Date: 8/30/00
 Site: T-36f

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-------------------------|-----|-----|-----|-----|-----|------|------|-------|
| Elodea canadensis | | | | 2.5 | 10 | 2.5 | 2.5 | 17.5 |
| Isoetes echinospora | | | | 2.5 | | | | 2.5 |
| Isoetes macrospora | | | | 2.5 | 10 | 37.5 | 37.5 | 87.5 |
| Najas flexilis | | | | | | 2.5 | | 2.5 |
| Najas guadalupensis | | | | 10 | 10 | 10 | 2.5 | 32.5 |
| Potamogeton perfoliatus | | | | 2.5 | 2.5 | | | 5 |
| Potamogeton spirillus | | | | 2.5 | 2.5 | | | 5 |
| Vallisneria americana | | | | 2.5 | 2.5 | | | 5 |

Date: 8/30/00
 Site: T-37a & b

Crosbyside

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| Bidens beckii | | | 2.5 | 2.5 | 2.5 | 2.5 | | 10 |
| Chara sp. | | | | | | 20 | 75 | 95 |
| Elodea canadensis | | | | | | 2.5 | 2.5 | 5 |
| Isoetes macrospora | | | | | | 10 | | 10 |
| Najas flexilis | 2.5 | 10 | | | | | | 12.5 |
| N. guadalupensis | | | 2.5 | 2.5 | | | | 5 |
| Potamogeton amplifolius | | | 2.5 | | | | | 2.5 |
| Potamogeton gramineus | 10 | | | | | | | 10 |
| Potamogeton perfoliatus | | 10 | 10 | | | | | 20 |
| Potamogeton pusillus | | | 2.5 | | | | | 2.5 |
| Potamogeton robbinsii | | 10 | 20 | 20 | | 75 | 10 | 135 |
| Potamogeton zosteriformis | | | | | | 2.5 | | 2.5 |
| Ranunculus longirostris | | 2.5 | | | | | | 2.5 |
| Vallisneria americana | 10 | 10 | 20 | 10 | 10 | | | 60 |

Date: 8/30/00

Site: T-37c & d

Crosbyside

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|----------------------------------|-----|------|-----|-----|-----|-----|-----|-------|
| <i>Bidens beckii</i> | | | | 2.5 | 2.5 | | | 5 |
| <i>Chara</i> sp. | 2.5 | 2.5 | 2.5 | 10 | 10 | 2.5 | 7.5 | 105 |
| <i>Eleocharis acicularis</i> | 10 | 10 | 10 | | | | | 30 |
| <i>Elodea canadensis</i> | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 17.5 |
| <i>Eriocaulon septangulare</i> | 2.5 | | | | | | | 2.5 |
| <i>Isoetes echinospora</i> | 2.5 | | | | | | | 2.5 |
| <i>Isoetes macrospora</i> | | | 2.5 | 20 | 7.5 | 20 | | 117.5 |
| <i>Myriophyllum tenellum</i> | 10 | 10 | | | | | | 20 |
| <i>Najas flexilis</i> | 2.5 | 10 | 10 | 2.5 | 2.5 | 2.5 | | 30 |
| <i>N. quadalupensis</i> | | | | 2.5 | 10 | 20 | | 32.5 |
| <i>Potamogeton foliosus</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Potamogeton gramineus</i> | 10 | 2.5 | 2.5 | 2.5 | | | | 17.5 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 2.5 | 2.5 | 10 | | | | 17.5 |
| <i>Potamogeton pusillus</i> | | | | 2.5 | 2.5 | 2.5 | | 7.5 |
| <i>Potamogeton robbinsii</i> | | 2.5 | 10 | 20 | 10 | 2.5 | 10 | 55 |
| <i>Potamogeton zosteriformis</i> | | | | 2.5 | | | | 2.5 |
| <i>Ranunculus longirostris</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Ranunculus reptans</i> | 20 | | | | | | | 20 |
| <i>Sagittaria graminea</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Sparganium</i> sp. | | 2.5 | | | | | | 2.5 |
| <i>Subularia aquatica</i> | 2.5 | | | | | | | 2.5 |
| <i>Vallisneria americana</i> | 10 | 37.5 | 20 | 10 | 10 | 10 | | 97.5 |

Date: 9/22/00

Site: T-40

Marine Village culvert

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-----------------------------------|------|-----|-----|------|-----|-----|-----|-------|
| <i>Chara</i> sp. | 10 | 10 | 2.5 | 10 | 10 | 10 | | 52.5 |
| <i>Eleocharis acicularis</i> | 37.5 | 20 | | | | | | 57.5 |
| <i>Elodea canadensis</i> | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| <i>Heteranthera dubia</i> | 2.5 | | | | | | | 2.5 |
| <i>Myriophyllum alterniflorum</i> | 2.5 | | | | | | | 2.5 |
| <i>Najas flexilis</i> | 2.5 | 2.5 | 2.5 | 10 | | | | 17.5 |
| <i>Potamogeton gramineus</i> | | 10 | 2.5 | | | | | 12.5 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 10 | 10 | 2.5 | | | | 25 |
| <i>Potamogeton robbinsii</i> | | 2.5 | 10 | 37.5 | 20 | 2.5 | | 72.5 |
| <i>Potamogeton spirillum</i> | 2.5 | | | | | | | 2.5 |
| <i>Potamogeton freesii</i> | | 2.5 | | | | | | 2.5 |
| <i>Ranunculus longirostris</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Sagittaria graminea</i> | 10 | 2.5 | | | | | | 12.5 |
| <i>Vallisneria americana</i> | 10 | 10 | 20 | | | | | 40 |

| Date: | 9/22/00 | | | | | | | |
|-----------------------------------|---------|------|------|-----|-----|-----|-----|-------|
| Site: | T-41 | | | | | | | |
| English Brook | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| <i>Chara</i> sp. | 2.5 | 10 | | | | | | 12.5 |
| <i>Elatine minima</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Elodea canadensis</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Eleocharis acicularis</i> | 2.5 | 37.5 | | | | | | 40 |
| <i>Eriocaulon septangulare</i> | | 2.5 | | | | | | 2.5 |
| <i>Juncus pelocarpus</i> | 10 | 10 | | | | | | 20 |
| <i>Myriophyllum alterniflorum</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Najas flexilis</i> | | 2.5 | 10 | | | | | 12.5 |
| <i>Potamogeton amplifolius</i> | | | 10 | | | | | 10 |
| <i>Potamogeton foliosus</i> | | 2.5 | | | | | | 2.5 |
| <i>Potamogeton gramineus</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Potamogeton perfoliatus</i> | 10 | 2.5 | | | | | | 12.5 |
| <i>Potamogeton robbinsii</i> | | 2.5 | 20 | | | | | 22.5 |
| <i>Potamogeton zosteriformis</i> | | | 10 | | | | | 10 |
| <i>Ranunculus longirostris</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Ranunculus reptans</i> | | 2.5 | | | | | | 2.5 |
| <i>Sagittaria graminea</i> | 10 | 10 | | | | | | 20 |
| <i>Sparganium</i> sp. | | 2.5 | | | | | | 2.5 |
| <i>Vallisneria americana</i> | 20 | 10 | 37.5 | | | | | 67.5 |

| Date: | 8/29/00 | | | | | | | |
|----------------------------------|---------|------|------|-----|-----|------|------|-------|
| Site: | T-41a | | | | | | | |
| Tahoe culvert | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| <i>Elodea canadensis</i> | 10 | 10 | 20 | 2.5 | 2.5 | 10 | 2.5 | 57.5 |
| <i>Najas flexilis</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Potamogeton perfoliatus</i> | 10 | 10 | 10 | 10 | 2.5 | 2.5 | | 45 |
| <i>Potamogeton praelongus</i> | | | | | | 2.5 | 2.5 | 5 |
| <i>Potamogeton pusillus</i> | 10 | 10 | 2.5 | | | | | 22.5 |
| <i>Potamogeton richardsonii</i> | 2.5 | 2.5 | 10 | 2.5 | | | | 17.5 |
| <i>Potamogeton robbinsii</i> | | | | 2.5 | 2.5 | 37.5 | 37.5 | 80 |
| <i>Potamogeton spirillus</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Potamogeton zosteriformis</i> | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | 12.5 |
| <i>Vallisneria americana</i> | 37.5 | 37.5 | 37.5 | 75 | 75 | 10 | 10 | 282.5 |

Date: 9/22/00

Site: T-41b

North Tea Island Bay

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|----------------------------------|-----|-----|------|-----|-----|-----|-----|-------|
| <i>Bidens beckii</i> | | 2.5 | 2.5 | 2.5 | 2.5 | | | 10 |
| <i>Eleocharis acicularis</i> | | 2.5 | | | | | | 2.5 |
| <i>Elodea canadensis</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Heteranthera dubia</i> | | | 2.5 | 2.5 | 2.5 | | | 7.5 |
| <i>Myriophyllum spicatum</i> | | 2.5 | 75 | 75 | 20 | | | 172.5 |
| <i>Najas flexilis</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Potamogeton amplifolius</i> | | | | 10 | 10 | | | 20 |
| <i>Potamogeton crispus</i> | | | 2.5 | | | | | 2.5 |
| <i>Potamogeton gramineus</i> | | | | 2.5 | 10 | | | 12.5 |
| <i>Potamogeton perfoliatus</i> | | | 10 | 10 | | | | 20 |
| <i>Potamogeton praelongus</i> | | | | 2.5 | 2.5 | | | 5 |
| <i>Potamogeton robbinsii</i> | | | | 2.5 | 10 | | | 12.5 |
| <i>Potamogeton spirillus</i> | | | 2.5 | | | | | 2.5 |
| <i>Potamogeton zosteriformis</i> | | | 2.5 | 2.5 | 2.5 | | | 7.5 |
| <i>Ranunculus longirostris</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Sagittaria graminea</i> | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| <i>Vallisneria americana</i> | 10 | 75 | 37.5 | 10 | 10 | | | 142.5 |

Date: 8/29/00

Site: T-42

Bay Northeast Tea Island

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-----------------------------------|-----|------|------|-----|------|-----|-----|-------|
| <i>Chara sp.</i> | | 2.5 | | | | | | 2.5 |
| <i>Elatine minima</i> | | 2.5 | | | | | | 2.5 |
| <i>Eleocharis acicularis</i> | 2.5 | 10 | 2.5 | | | | | 15 |
| <i>Elodea canadensis</i> | 2.5 | 37.5 | 37.5 | 2.5 | 2.5 | 2.5 | | 85 |
| <i>Heteranthera dubia</i> | | 2.5 | 2.5 | 2.5 | 2.5 | | | 10 |
| <i>Isoetes echinospora</i> | | 2.5 | 10 | 10 | | | | 22.5 |
| <i>Myriophyllum alterniflorum</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Najas flexilis</i> | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| <i>Potamogeton amplifolius</i> | | | 2.5 | 10 | | | | 12.5 |
| <i>Potamogeton foliosus</i> | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| <i>Potamogeton gramineus</i> | | 2.5 | 10 | 2.5 | | | | 15 |
| <i>Potamogeton perfoliatus</i> | 10 | 10 | 10 | 10 | 2.5 | | | 42.5 |
| <i>Potamogeton praelongus</i> | | | | | 10 | 2.5 | | 12.5 |
| <i>Potamogeton robbinsii</i> | | | 10 | 10 | 37.5 | 75 | | 132.5 |
| <i>Potamogeton pusillus</i> | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| <i>Potamogeton spirillus</i> | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| <i>Potamogeton zosteriformis</i> | | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | 12.5 |
| <i>Ranunculus longirostris</i> | | 2.5 | 10 | 10 | 2.5 | | | 25 |
| <i>Ranunculus reptans</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Sagittaria graminea</i> | 10 | 37.5 | 2.5 | | | | | 50 |
| <i>Vallisneria americana</i> | 2.5 | 37.5 | 10 | 20 | 10 | | | 80 |

| Date: | 8/29/00 | | | | | | | |
|-------------------------|---------|-----|------|------|------|-----|-----|-------|
| Site: | T-43 | | | | | | | |
| Hearthstone | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| Chara sp. | 2.5 | 10 | 2.5 | 2.5 | 2.5 | 10 | | 30 |
| Elatine minima | | 2.5 | 2.5 | | | | | 5 |
| Elodea canadensis | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | 15 |
| Eleocharis acicularis | | 10 | 2.5 | | | | | 12.5 |
| Heteranthera dubia | | | 2.5 | 2.5 | | | | 5 |
| isoetes echinospora | | 10 | 20 | | | | | 30 |
| Isoetes macrospora | | | 2.5 | 37.5 | 37.5 | 75 | 75 | 227.5 |
| Myriophyllum tenellum | | 2.5 | 37.5 | | | | | 40 |
| Najas flexilis | | | 2.5 | 10 | 2.5 | | | 15 |
| Najas guadalupensis | | | | | 2.5 | | | 2.5 |
| Potamogeton amplifolius | | | 2.5 | 10 | | | | 12.5 |
| Potamogeton gramineus | | 10 | 2.5 | | | | | 12.5 |
| Potamogeton perfoliatus | 10 | 10 | 10 | | | | | 30 |
| Potamogeton pusillus | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Potamogeton robbinsii | | | 2.5 | 10 | 2.5 | 2.5 | | 17.5 |
| Potamogeton spirillum | | | 2.5 | 2.5 | | | | 5 |
| Potamogeton vaseyii | | | 2.5 | 2.5 | | | | 5 |
| Ranunculus longirostris | | 2.5 | 2.5 | 10 | | | | 15 |
| Ranunculus reptans | | 10 | 2.5 | | | | | 12.5 |
| Sagittaria graminea | 2.5 | 20 | 2.5 | | | | | 25 |
| Subularia aquatica | | 2.5 | | | | | | 2.5 |
| Vallisneria americana | 2.5 | 10 | 10 | 10 | | | | 32.5 |

| Date: | 7/25/00 | | | | | | | |
|-------------------------|---------|------|------|-----|-----|-----|-----|-------|
| Site: | T-44 | | | | | | | |
| NW Coopers Point | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| Bidens beckii | | 2.5 | 2.5 | | | | | 5 |
| Chara sp. | 10 | 2.5 | 2.5 | | | | | 15 |
| Eleocharis acicularis | 2.5 | 20 | | | | | | 22.5 |
| Elodea canadensis | 2.5 | | | | | | | 2.5 |
| Eriocaulon septangulare | 75 | 10 | | | | | | 85 |
| Heteranthera dubia | | | 2.5 | | | | | 2.5 |
| Isoetes echinospora | 2.5 | 2.5 | 10 | | | | | 15 |
| Juncus pelocarpus | 2.5 | 10 | | | | | | 12.5 |
| Lobelia dortmanna | 2.5 | 2.5 | | | | | | 5 |
| Myriophyllum spicatum | | 2.5 | 10 | | | | | 12.5 |
| M. tenellum | 10 | 10 | | | | | | 20 |
| Najas flexilis | | 37.5 | 37.5 | | | | | 75 |
| Nymphaea odorata | 2.5 | | | | | | | 2.5 |
| Potamogeton amplifolius | | 2.5 | 10 | | | | | 12.5 |
| Potamogeton foliosus | | 2.5 | | | | | | 2.5 |
| Potamogeton gramineus | 10 | 10 | 10 | | | | | 30 |
| Potamogeton perfoliatus | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| Potamogeton robbinsii | | 2.5 | 10 | | | | | 12.5 |
| Potamogeton spirillum | | 2.5 | | | | | | 2.5 |
| Ranunculus longirostris | 2.5 | 2.5 | | | | | | 5 |
| Ranunculus reptans | 20 | 10 | | | | | | 30 |
| Sagittaria graminea | 2.5 | | 2.5 | | | | | 5 |
| Vallisneria americana | 10 | 10 | 10 | | | | | 30 |

Date: 7/25/00

Site: T-45

SW Cannon Point

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|----------------------------------|------|------|-----|------|------|-----|-----|-------|
| <i>Bidens beckii</i> | | | | 2.5 | 2.5 | | | 5 |
| <i>Eleocharis acicularis</i> | 37.5 | 10 | | | | | | 47.5 |
| <i>Elodea canadensis</i> | | 2.5 | 2.5 | 10 | 10 | | | 25 |
| <i>M. spicatum</i> | 2.5 | 37.5 | 75 | 37.5 | 2.5 | | | 155 |
| <i>M. tenellum</i> | 37.5 | 20 | | | | | | 57.5 |
| <i>Najas flexilis</i> | 2.5 | 2.5 | 2.5 | 10 | 2.5 | | | 20 |
| <i>Potamogeton amplifolius</i> | | | 2.5 | 2.5 | | | | 5 |
| <i>Potamogeton crispus</i> | | 10 | 2.5 | 2.5 | | | | 15 |
| <i>Potamogeton foliosus</i> | 2.5 | 2.5 | 2.5 | 2.5 | | | | 10 |
| <i>Potamogeton perfoliatus</i> | 10 | 10 | 2.5 | 10 | 2.5 | | | 35 |
| <i>Potamogeton pusillus</i> | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | | | 12.5 |
| <i>Potamogeton robbinsii</i> | | | 2.5 | 10 | 37.5 | | | 50 |
| <i>Potamogeton zosteriformis</i> | | | 2.5 | 2.5 | 2.5 | | | 7.5 |
| <i>Sagittaria graminea</i> | 2.5 | 2.5 | | | | | | 5 |
| <i>Vallisneria americana</i> | 10 | 10 | 10 | 10 | 20 | | | 60 |

Date: 9/18/00

Site: T-46

Smith Brook

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| <i>Chara sp.</i> | 2.5 | | | | | | | 2.5 |
| <i>Eriocaulon septangulare</i> | | | 2.5 | | | | | 2.5 |
| <i>Isocetes echinospora</i> | | 10 | 2.5 | 10 | | | | 22.5 |
| <i>Lobelia dortmanna</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Myriophyllum alterniflorum</i> | 2.5 | 10 | 2.5 | | | | | 15 |
| <i>Myriophyllum tenellum</i> | | 75 | 75 | 2.5 | | | | 152.5 |
| <i>Potamogeton amplifolius</i> | | | 2.5 | 2.5 | | | | 5 |
| <i>Potamogeton perfoliatus</i> | 2.5 | 10 | 2.5 | 2.5 | | | | 17.5 |
| <i>Subularia aquatica</i> | | 2.5 | | | | | | 2.5 |
| <i>Sagittaria graminea</i> | | 20 | 10 | | | | | 30 |
| <i>Vallisneria americana</i> | | 10 | 20 | 20 | | | | 50 |

Date: 9/18/00

Site: T-47

Stepping Stones

| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
|--------------------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| <i>Chara sp.</i> | | 2.5 | 2.5 | | | | | 5 |
| <i>Eriocaulon septangulare</i> | | 2.5 | | | | | | 2.5 |
| <i>Lobelia dortmanna</i> | | 2.5 | | | | | | 2.5 |
| <i>Myriophyllum tenellum</i> | | 2.5 | | | | | | 2.5 |
| <i>Najas flexilis</i> | | | | 2.5 | | | | 2.5 |
| <i>Potamogeton gramineus</i> | | | | 2.5 | | | | 2.5 |
| <i>Potamogeton robbinsii</i> | | | | 2.5 | | | | 2.5 |
| <i>Vallisneria americana</i> | | | 2.5 | 2.5 | | | | 5 |

| Date: | 9/18/00 | | | | | | | |
|-----------------------|---------|-----|-----|-----|-----|-----|-----|-------|
| Site: | T-48 | | | | | | | |
| Diamond Point | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| Chara sp. | 2.5 | 2.5 | | | | | | 5 |
| M. tenellum | | 2.5 | | | | | | 2.5 |
| Najas flexilis | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton gramineus | | 2.5 | | | | | | 2.5 |
| Lobelia dortmanna | | 2.5 | | | | | | 2.5 |

| Date: | 7/25/00 | | | | | | | |
|-------------------------|---------|-----|-----|-----|-----|-----|-----|-------|
| Site: | T-49 | | | | | | | |
| Edmund's Brook | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| Chara sp. | 2.5 | 10 | 2.5 | 2.5 | | | | 17.5 |
| Elatine minima | 2.5 | 2.5 | | | | | | 5 |
| Elodea canadensis | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Eriocaulon septangulare | 2.5 | | | | | | | 2.5 |
| Isoetes echinospora | | 2.5 | 2.5 | 2.5 | | | | 7.5 |
| Lobelia dortmanna | 2.5 | | | | | | | 2.5 |
| Myriophyllum tenellum | 37.5 | | | | | | | 37.5 |
| Najas flexilis | 2.5 | 2.5 | | | | | | 5 |
| Potamogeton gramineus | 2.5 | 20 | 20 | 10 | | | | 52.5 |
| Potamogeton perfoliatus | | 10 | 10 | 10 | | | | 30 |
| Ranunculus longirostris | | | 2.5 | 2.5 | | | | 5 |
| Sagittaria graminea | | 10 | 2.5 | | | | | 12.5 |
| Vallisneria americana | 2.5 | 10 | 10 | 10 | | | | 32.5 |

| Date: | 8/31/00 | | | | | | | |
|-------------------------|---------|------|------|-----|-----|-----|-----|-------|
| Site: | T-99 | | | | | | | |
| Assembly Point | | | | | | | | |
| Species | 0-1 | 1-2 | 2-3 | 3-4 | 4-5 | 5-6 | 6-7 | Total |
| Chara sp. | 2.5 | 37.5 | | | | | | 40 |
| Elatine minima | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| Eleocharis acicularis | | 10 | 2.5 | | | | | 12.5 |
| Elodea canadensis | 2.5 | | | | | | | 2.5 |
| Eriocaulon septangulare | | 10 | 37.5 | | | | | 47.5 |
| Heteranthera dubia | 10 | 2.5 | | | | | | 12.5 |
| Juncus pelocarpus | 2.5 | 10 | 2.5 | | | | | 15 |
| Myriophyllum tenellum | 10 | | | | | | | 10 |
| Nuphar luteum | | 2.5 | | | | | | 2.5 |
| Nymphaea odorata | 2.5 | | | | | | | 2.5 |
| Potamogeton amplifolius | | | 2.5 | | | | | 2.5 |
| Potamogeton gramineus | 2.5 | 2.5 | 10 | | | | | 15 |
| Potamogeton perfoliatus | 2.5 | | | | | | | 2.5 |
| Ranunculus longirostris | 2.5 | 2.5 | 2.5 | | | | | 7.5 |
| Ranunculus reptans | 2.5 | 10 | 2.5 | | | | | 15 |
| Sagittaria graminea | 75 | | | | | | | 75 |
| Vallisneria americana | 20 | 2.5 | 20 | | | | | 42.5 |