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Invasive Aquatic Plants in Lakes Candlewood, Lillinonah, and Zoar Monitoring Report 2007

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Prepared for FirstLight Power Resources

Pursuant to Federal Energy and Regulatory Commission
Article 409

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Introduction

Lakes Candlewood, Lillinonah and Zoar are impoundments managed by FirstLight Power Resources for hydroelectric generation. In addition to providing electricity, these water bodies are among the State's premier recreational lakes. Candlewood is the state's largest lake (5086 acres), while Lillinonah is the third largest (1595 acres) and Zoar is the sixth largest (919 acres) (Jacobs and O'Donnell, 2002). Invasive species represent severe ecological and economic threats (Wilcove et al. 1998, Pimintel et al. 2000). Because invasive species are not native, they have few natural enemies. Their dramatic growth rates can clog water intakes, decrease recreational opportunities, reduce local real estate values and alter native plant communities (Connecticut Aquatic Nuisance Species Working Group, 2006, Fishman et al. 1998). Currently, invasive aquatic plants are found in approximately two-thirds of Connecticut's lakes and ponds (CAES IAPP, 2007).

Studies on the history of aquatic vegetation in Connecticut lakes are scarce. The first surveys were performed as part of the states fisheries management program in the 1930's and 1950's (CT State Board of Fisheries and Game, 1942 and 1959). These surveys provided general information on the presence of aquatic vegetation but failed to identify the plant species. The 1930's study stated that Candlewood Lake's shoreline ranged "from rocky cliffs to dense growths of aquatic vegetation." Lake Lillinonah was not mentioned, however, Lake Zoar was described as having "luxuriant growth of marginal and submerged vegetation in protected and shallow areas." In the 1950's survey, the dense growth of aquatic vegetation in Candlewood Lake was again mentioned. Lake Lillinonah was described as not being completely surveyed and Lake Zoar was said to have abundant submerged vegetation in the shoal areas and scarce vegetation elsewhere. The Connecticut Agricultural Experiment Station (CAES) performed a more complete inventory of aquatic vegetation of Connecticut Lakes in the 1970's (Frink and Norvell, 1984). Although the main goal was to determine water chemistry, the coverage and species of plants were detailed for most lakes. Uncharacteristically, aquatic vegetation was not mentioned for Candlewood, Lillinonah or Zoar possibly because the shorelines were too extensive and could not be adequately surveyed within the scope of the water chemistry objectives. Portions of Candlewood Lake were surveyed from 1979 – 1982 by the Connecticut Department of Environmental Protection (1983). Thirteen aquatic plant species were found with two of the species being invasive; *Myriophyllum spicatum* (Eurasian water milfoil) and *Myriophyllum brasiliense (*Parrot feather, species name now *aquaticum*). Interestingly, *M. spicatum,* which is now the most troublesome invasive in Candlewood Lake, was mentioned as being dense only in Latin's Cove. A water milfoil, now protected under state statute because of it's rarity, *Myriophyllum exalbesens* (Northern water milfoil, species name now *sibiricum*) was stated as being the plant of greatest abundance elsewhere. *M. exalbesens* is often confused with *M. spicatum.* The authors noted they were not positive of their identification, thus they may have actually observed *M. spicatum*.

In 2004, CAES formed an Invasive Aquatic Plant Program (IAPP) to systematically document Connecticut's invasive and native aquatic vegetation. CAES IAPP has since surveyed over 130 public and private lakes and ponds. Over 100 plant species have been

found, with 12 of the species being classified as invasive (IPANE, 2007). Approximately, two-thirds of the water bodies contained one or more invasive species. *Myriophyllum spicatum* (Eurasian water milfoil) was the most frequently found invasive aquatic plant, being present in 24 percent of the water bodies surveyed. Candlewood Lake was surveyed by CAES IAPP in 2005. Surprisingly, this represented the first extensive vegetation survey of Connecticut's largest lake (Jacobs and O'Donnell, 2002). Likewise, Lillinonah and Zoar have not previously been extensively surveyed (Jacobs and O'Donnell, 2002).

M. spicatum is currently being managed in all three lakes. Drawdown and hand harvesting is the method of choice in Candlewood Lake (Tarsi, 2006), while machine harvesting and herbicides are employed in Lake Lillinonah. Machine harvesting is used extensively in Lake Zoar.

The following report fulfills the Federal Energy Regulatory Commission (FERC) article 409 requirement for annual invasive aquatic plant monitoring for Lakes Candlewood, Lillinonah and Zoar (Northeast Generating Company, 2005). Documentation of native plants is not required by FERC, however, they are include in this report in order to provide a more complete picture of the aquatic plant community.

Objectives:

1. Survey and map the invasive aquatic plants in Lakes Candlewood, Lillinonah and Zoar to fulfill the FERC nuisance plant monitoring requirement in article 409. Follow CAES IAPP lake survey protocol with the addition of georeferenced points or polygons for all invasive plant locations.

2. Survey and map all native plants in Lakes Lillinonah and Zoar (Candlewood was completed in 2005) to compliment the CAES IAPP statewide database.

3. Provide a protocol for future surveys.

4. Summarize management techniques for the invasive aquatic plants found.

Materials and Methods:

We conducted surveys according to established methods (CAES IAPP, 2007) from motorized boats, containing two-person research teams from late June through September. We slowly traveled through the littoral zone recording all aquatic plant species on a bathymetric lake map. To positively identify plants, we obtained samples from water less than three meters deep by hand or with a long-handled rake. In deeper water we obtained plants with a grapple attached to a rope. When field identification was questionable, we brought samples back to the lab for further review using the taxonomy of Crow and Hellquist (2000*a*, 2000*b*). Depth was measured either by rake handle, drop line or digital depth finder. We also circumnavigated areas of invasive plants with a Trimble® global positioning system (GPS; accuracy <1 meters) forming a polygon (Selsky et al. 2006). We then measured depth within these areas by rake handle, drop line or digital depth finder. These areas are called a "patch" in this report. We measured depth within each polygon in at least three

different areas, averaged the values and assigned the polygon a depth range of 0-1, 1-3, 3-5, or 5-7 meters (m). We recorded individual plants as a point feature and assigned the point an area of 0.0002 acres ($1m^2$). Polygons around the Eurasian milfoil in Candlewood Lake were first obtained by CAES IAPP in the New Milford arm in 2005 and the remainder of the lake 2006. The polygons for the entire lake obtained for this report (2007) are compared to the combined 2005-2006 data. Polygons are located with latitude and longitude coordinates (see appendix) that are the calculated center (centroid). Because polygons are irregular and sometimes cover long distances the centroid is sometimes located outside patch.

We collected quantitative abundance information on invasive aquatic plants by using the CAES IAPP (2007) transect method. We selected transect locations using a random-representative method to assure the variety of habitat types were represented. A minimum of one transect (10 sampling points) was established for every 100 acres of surface area in each lake. We positioned transects perpendicular to the shoreline and recorded the abundance of each species found within a 2 m^2 area at 0, 5, 10, 20, 30, 40, 50, 60, 70 and 80 m from the shore (a total of 10 samples on each transect). The transects and mapping of native vegetation in Candlewood Lake were performed in late June during the 2005 CAES IAPP survey an not repeated in 2007. Transects were done for Lake Lillinonah in August and Lake Zoar in September. We ranked abundance of each species on a scale of 1–5 (1 = rare, a single stem; 2 = uncommon, few stems; 3 = common; 4 = abundant; 5 = extremely abundant or dominant). One specimen of every species collected in each lake were dried, mounted and deposited in the herbaria of the Connecticut Agricultural Experiment Station (NHES).

Using a YSI® 58 meter (YSI Inc., Yellow Springs, Ohio), we measured water temperature and dissolved oxygen at a depth of 0.5 m and at 1 m intervals to the bottom of the deepest areas of each lake as determined by CT Department of Environmental Protection lake bathymetry maps (Jacobs and O'Donnell, 2002). We took water samples from 0.5 m below the surface and near the bottom. Using a Secchi disk we measured transparency. We stored water samples at 3 degrees Celsius until they were analyzed for pH, alkalinity, conductivity and total phosphorus. We measured conductivity and pH with a Fisher-Accumet® AR20 meter (Fisher Scientific International Inc., Hampton, NH), and quantified alkalinity by titration with 0.16N H_2SO_4 to a pH 4.5 end point (expressed as mg/l $CaCO_3$). Finally, we analyzed total phosphorus by the ascorbic acid method with potassium persulfate digestion (American Public Health Association, 1995).

After the field season, we post-processed and imported the GPS data obtained by Trimble® GPS into ArcGIS® 9.1 (ESRI, Redlands, CA), where it was further geo-corrected. We calculated the areas of the patches with the XTools Pro tool and overlaid the data on 2006 United States Department of Agriculture (USDA) National Agriculture Imagery Program (NAIP) Connecticut aerial photos in order to show invasive species locations in relation to actual shoreline conditions.

To test the feasibility of remote sensing as an invasive aquatic plant survey method, we contracted for DigitalGlobe Inc. for QuickBird satellite (http://www.digitalglobe.com/about/quickbird.htmlsatellite) photographs of al three lakes at cost of $3142. The QuickBird imagery is 4-band pansharpened (red, blue, green and near-infrared) and 16 bit with 60 cm (0.6 m) resolution. We specified the images be taken during

Table 1. Invasive and native plants in Candlewood Lake. Occurrence and frequency along transects and total area covered.

Scientific Name	**Common Name**	**Abbrev.**	**Occurrence** (times found**)	**Frequency** (percent**)	**Area** ('05-'06) (acres)	**Area** ('07) (acres)
Callitriche sp.	Water starwort	CalSp	1	0.1	ND***	ND
Ceratophyllum demersum	Coontail	CerDem	7	0.9	ND	ND
Elodea nuttallii	Waterweed	EloNut	4	0.5	ND	ND
Lemna minor	Duckweed	LemMin	2	0.3	ND	ND
*Myriophyllum spicatum**	Eurasian watermilfoil	MyrSpi	199	25.4	275	221
Najas flexilis	Nodding waternymph	NajFle	7	0.9	ND	ND
*Najas minor**	Brittle waternymph	NajMin	19	2.4	ND	11.8
Nymphaea odorata	White water lily	NymOdo	1	0.1	ND	ND
*Potamogeton crispus**	Curly leaf pondweed	PotCri	14	1.8	ND	0.1
Potamogeton foliosus	Leafy pondweed	PotFol	6	0.8	ND	ND
Potamogeton gramineus	Variable leaf pondweed	PotGra	2	0.3	ND	ND
Potamogeton pusillus	Small Pondweed	PotPus	5	0.6	ND	ND
Potamogeton perfoliatus	Clasping leaf pondweed	PotPer	1	0.1	ND	ND
Spirodela polyrhiza	Great duckweed	SpiPol	1	0.1	ND	ND
Stuckinia pectinatus	Sago pondweed	StuPec	8	1.0	ND	ND
Vallisneria americana	Eel grass	ValAme	2	0.3	ND	ND

*Invasive plant
** 782 points on 84 transects
***Not determined

the period from August 1st thru September 30th with less than 20 percent cloud cover and the satellite no more than 10° of nadir. Satellite image procurement can be unreliable due weather, satellite tracking patterns and queue order. The QuickBird satellite option was much less expensive ($3,142) than aerial photographs done by aircraft (+/-$22,000 for Candlewood alone).

Results and Discussion

Candlewood Lake

The aquatic plant community in Candlewood Lake consists of thirteen native and three invasive species (Table 1). Locations of all the plants are shown on Candlewood Lake maps 1-9. The invasive species are *M. spicatum, Najas minor* (minor naiad) and *Potamogeton crispus* (curly leaf pondweed). *M. spicatum* was the most frequently observed plant in 2007, covering 221 acres or 4.3 percent of the lake. Some of the largest areas of *M. spicatum* occurred in Echo Bay (Candlewood Lake, map 8), southern Danbury Bay (map 9), the southeast side of Deer Island (map 3), the shoal area south of Holiday Point (map 1), Lattins Cove (map 8), and in Shelter Harbor (map 3). *N. minor* was the second most frequently observed invasive aquatic plant, covering 11.8 acres or 0.23 percent of the lake primarily in the shallow areas of Allen's Cove (map 1), Lattins Cove (map 8) and Shelter Harbor (map 3). *P. crispus* was the least frequently found invasive covering only 0.1 acres. Because *P. crispu*s senesces in the summer months (Catling and Dobson, 1985), a considerable amount of this plant may have been missed.

There were differences in the coverage of *M. spicatum* between 2005-2006 and 2007. The CAES IAPP survey found a total of 275 acres of *M. spicatum* in 2005-2006 compared to 221 acres in 2007. This corresponds to a reduction in coverage of 19.6 percent and

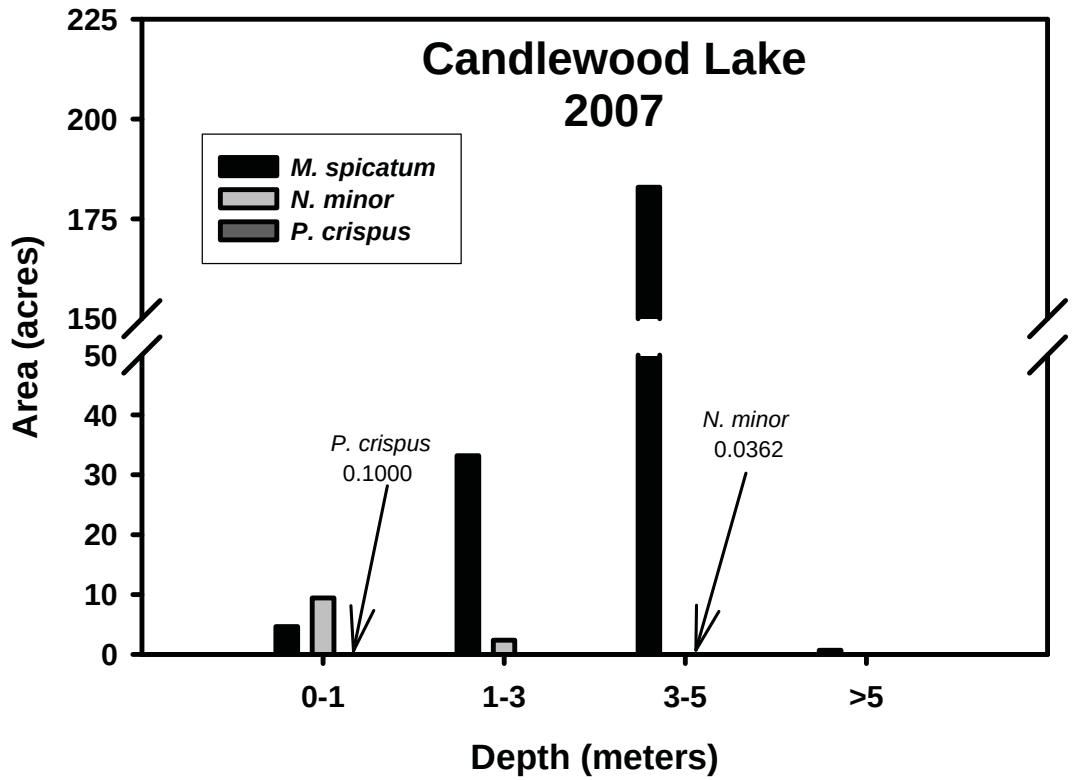


Figure 1. Depth preferences of invasive plants in Candlewood Lake.

suggests the drawdown during the winter of 2006-07 was more effective than in previous winters. *P. crispus* was found in only one site on the Southwest side of Great Neck (map 3) during the 2007 survey, compared to 14 occurrences along the transects in 2005. This could be because of the more thorough examination that occurs when using the transect method. Alternatively, *P. crispus* may have been largely eliminated by the 2006-2007 drawdown.

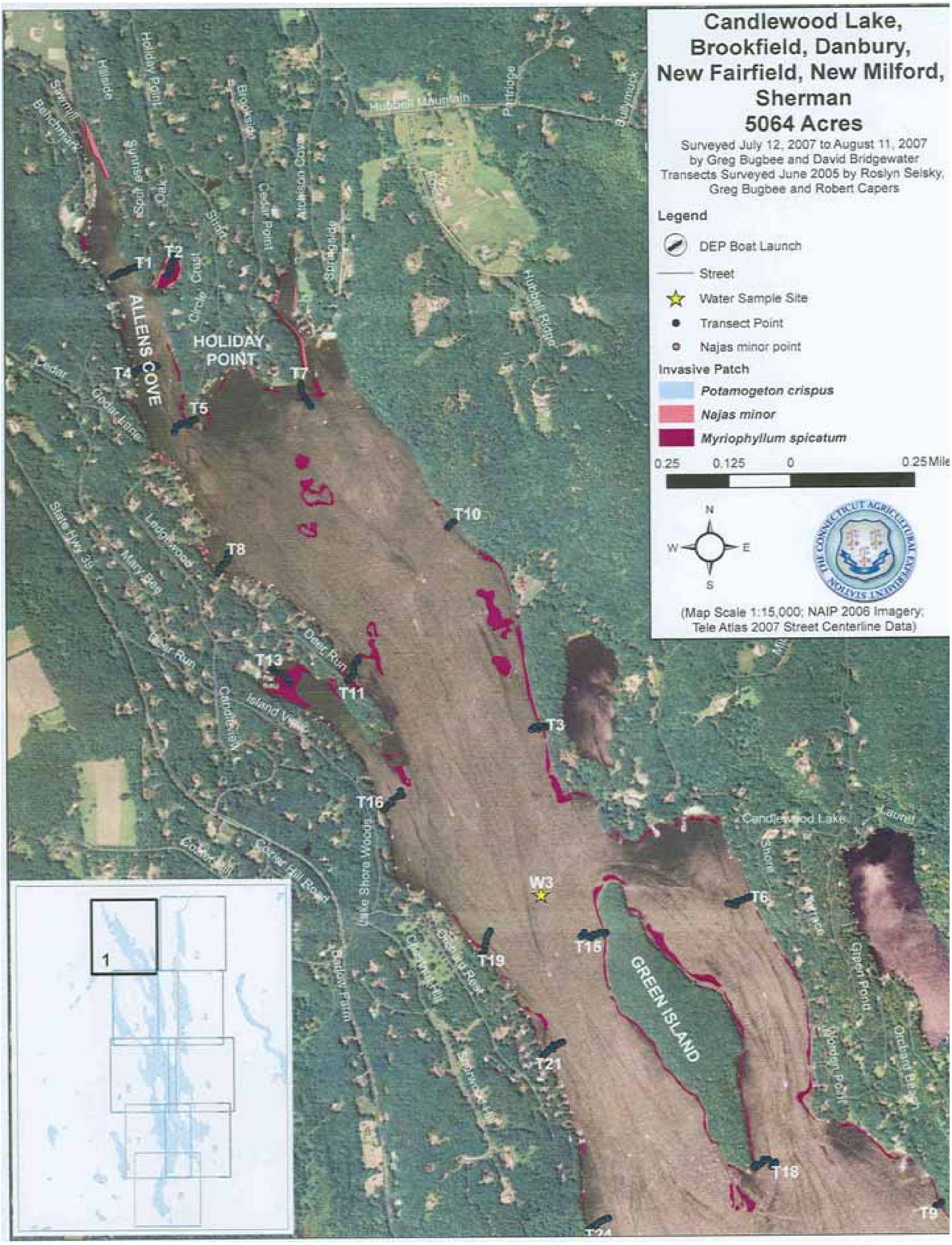
Invasive species in Candlewood Lake have distinct depth preferences (Figure 1). The greatest area of *M. spicatum* (182 acres, 82.6%) occurred in 3-5 meters of water. Only 2.1 percent (4.6 acres) of the milfoil occurred at depths of 0-1 meters while 33.2 acres (15.0%) was present at depths of 1-3 m. Only two small areas of milfoil (0.7 acres, 0.3%) were found in greater than five meters of water, representing 0.3 percent of the total. Distinct lines of *M. spicatum* followed the three meter depth and rapidly decreased along the five meter contour (Figure 2). This correlates well with *M. spicatum* being inhibited by the three meter (10 ft) drawdown. In areas greater than 5 meters (16 ft) *M. spicatum* was likely reduced by inadequate light. *M. spicatum* observed at shallower depths, exposed during drawdown, were typically associated with muck bottoms in protected areas such as Allen's and Lattins Cove. These areas may better insulate root systems from the effects of drawdown and produce stronger plants better able to winter exposure. In addition, these areas likely harbor reproductive structures such as rhizomes, fragmented stems, and auxiliary buds or simply collect plant fragments early in the season that took root prior to this survey (Madsen, 1988).

Figure 2. Line of *M. spicatum* in 3 – 5 meters of water (left). Dense *N. minor* at the 0-1 meter depth in Allens Cove (right).

The depth preferences of *M. spicatum* could be influenced by the effects of drawdown, sediment type and water clarity. The 2006-2007 drawdown of three meters lasted from December thru February. This was considerably deeper and longer than typically performed in the past. CAES IAPP 2005 transect data indicates that *M. spicatum* occurs in substrate ranging from silty in protected coves to rocky and gravelly along deeper more exposed areas. A study by Kleinschmidt Energy and Water Resource Consultants (2006) found most of the milfoil in Candlewood Lake occurred in the finest of the six substrate classes measured. Silt may be accumulating at the lowest extent of the drawdown but this cannot be confirmed by the data presented here. Water clarity, as measured with a Secchi disk, generally ranged from 2-3 meters during the summer (Table 4). In 2007, the poorest water clarity of 1-2 m occurred in early summer (data not shown).

N. minor (Figure 2) was most often found in water from zero to one meter deep (4.4 acres, 65.2% of total), however, 2.4 acres (34.8%) occurred in water one to three meters deep. *N. minor* was not found in water greater than three meters deep. The restriction of *N. minor* to shallow water is likely because it rarely grows more than 1 m in height and therefore becomes light limited at deeper depths. Also it is an annual that reproduces from seed each year that may prefer the shallower quiescent coves. As with *M. spicatum*, *N. minor* was found in a wide range of sediment classes from sand to silt.

Remote sensing satellite imagery from DigitalGlobe Inc. was not done by September 30th so we extended the window until October 15th but still the imagery was not taken.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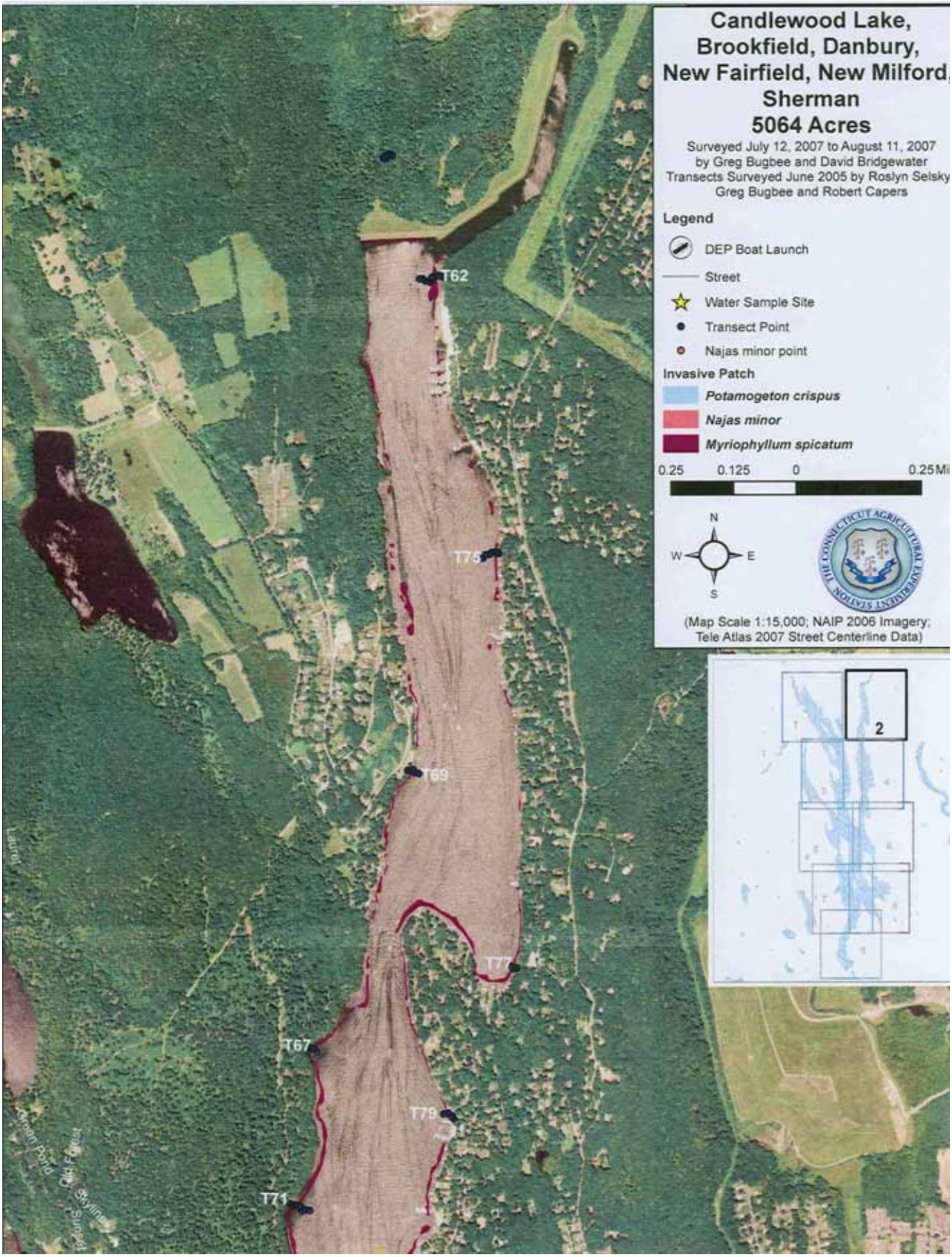
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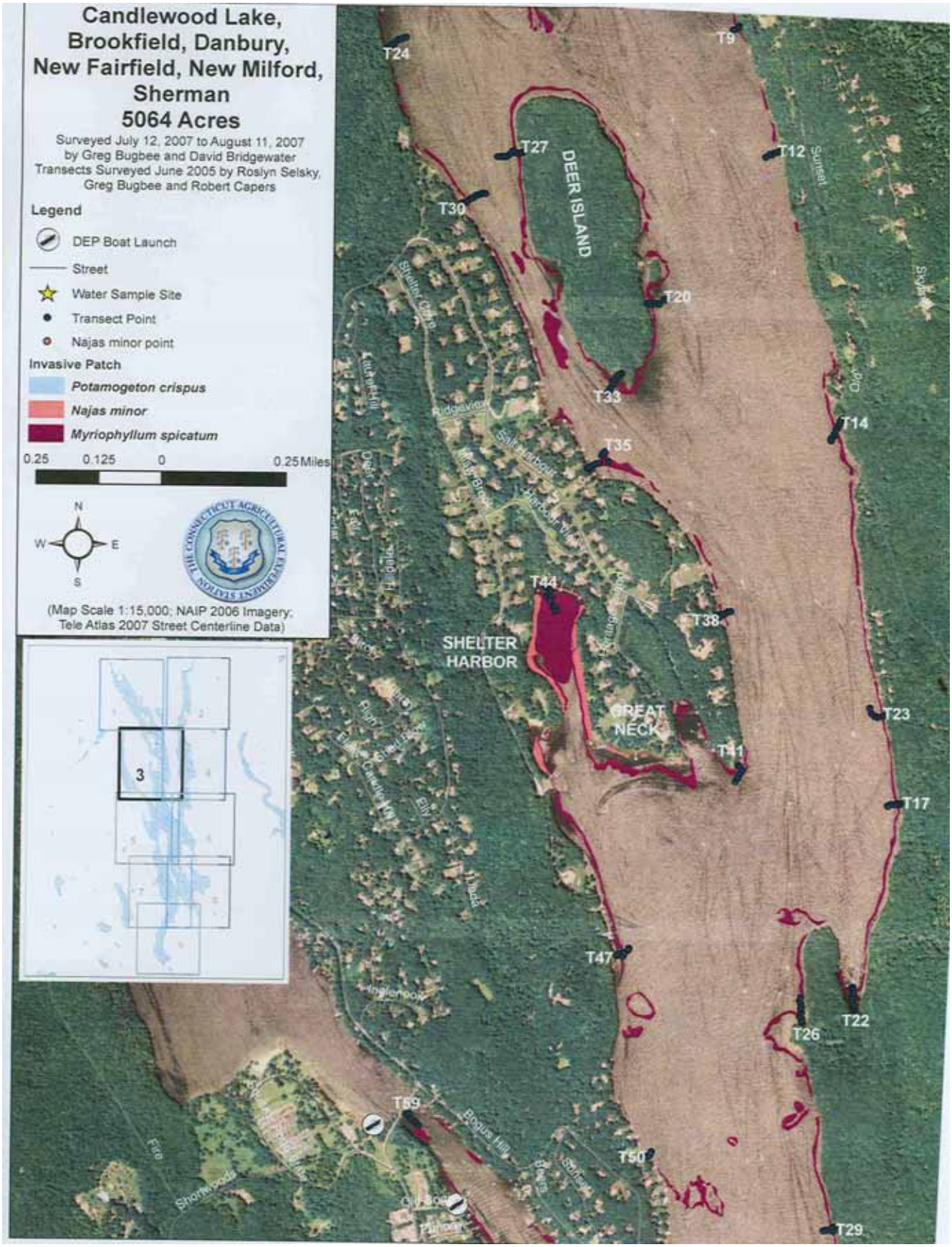
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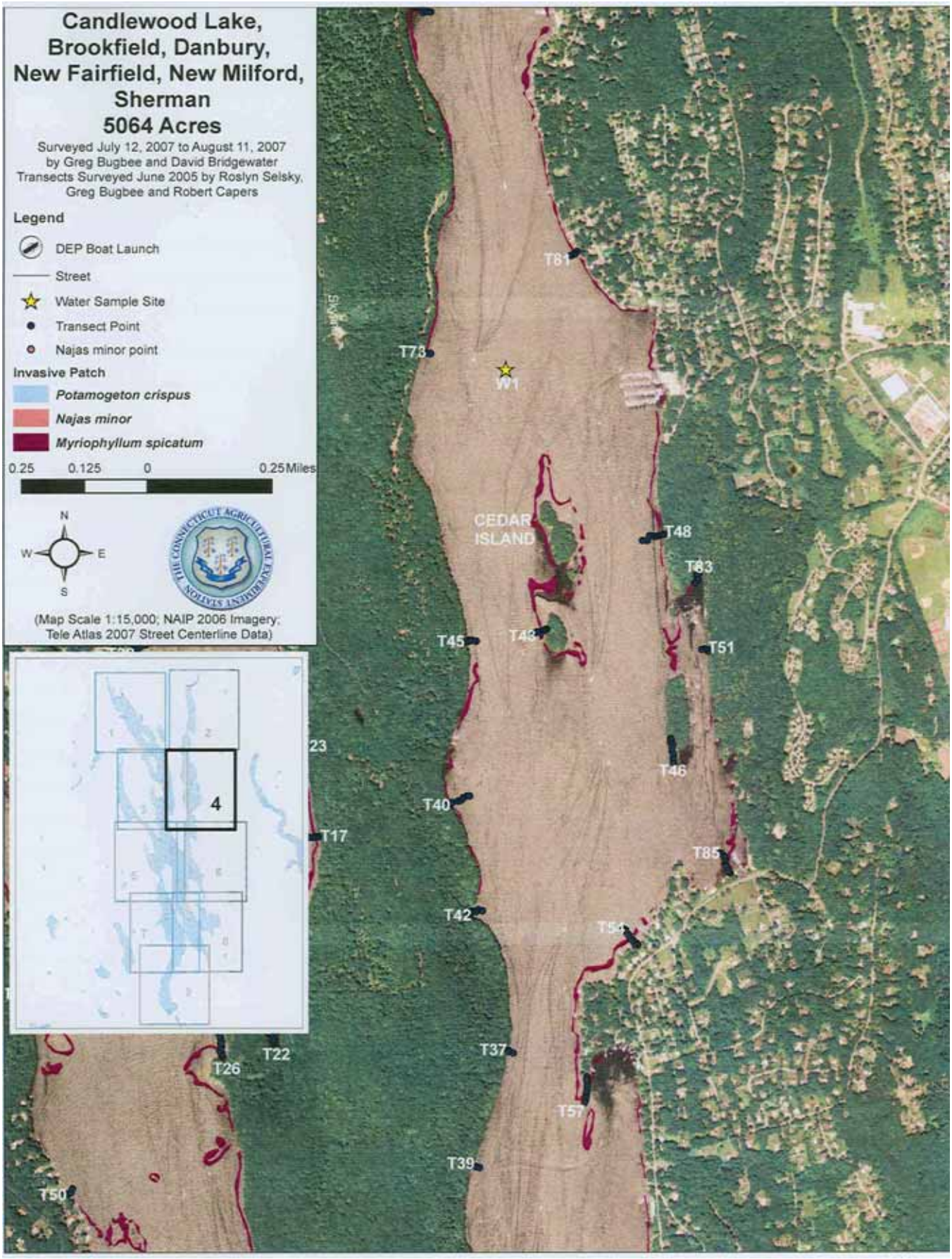
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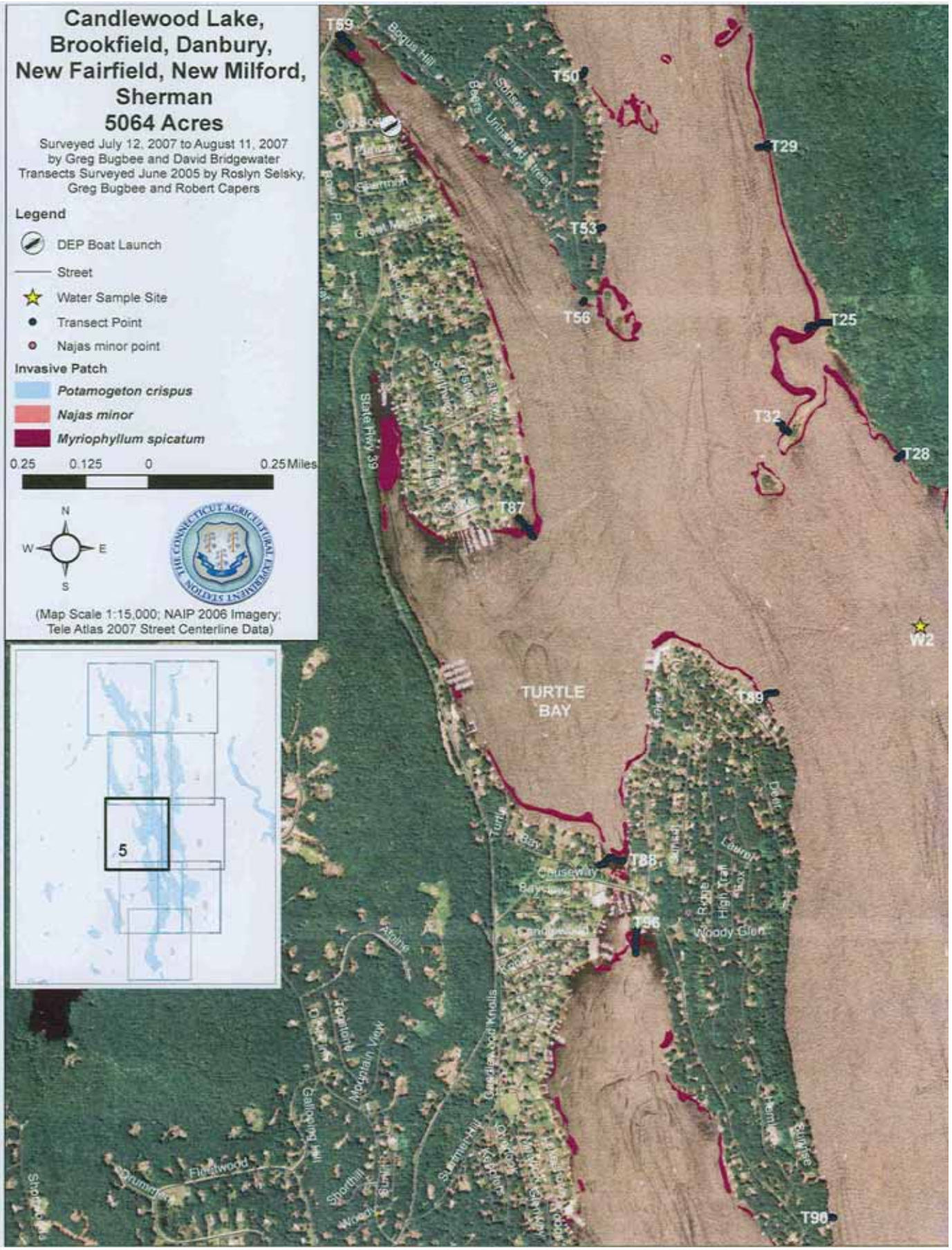
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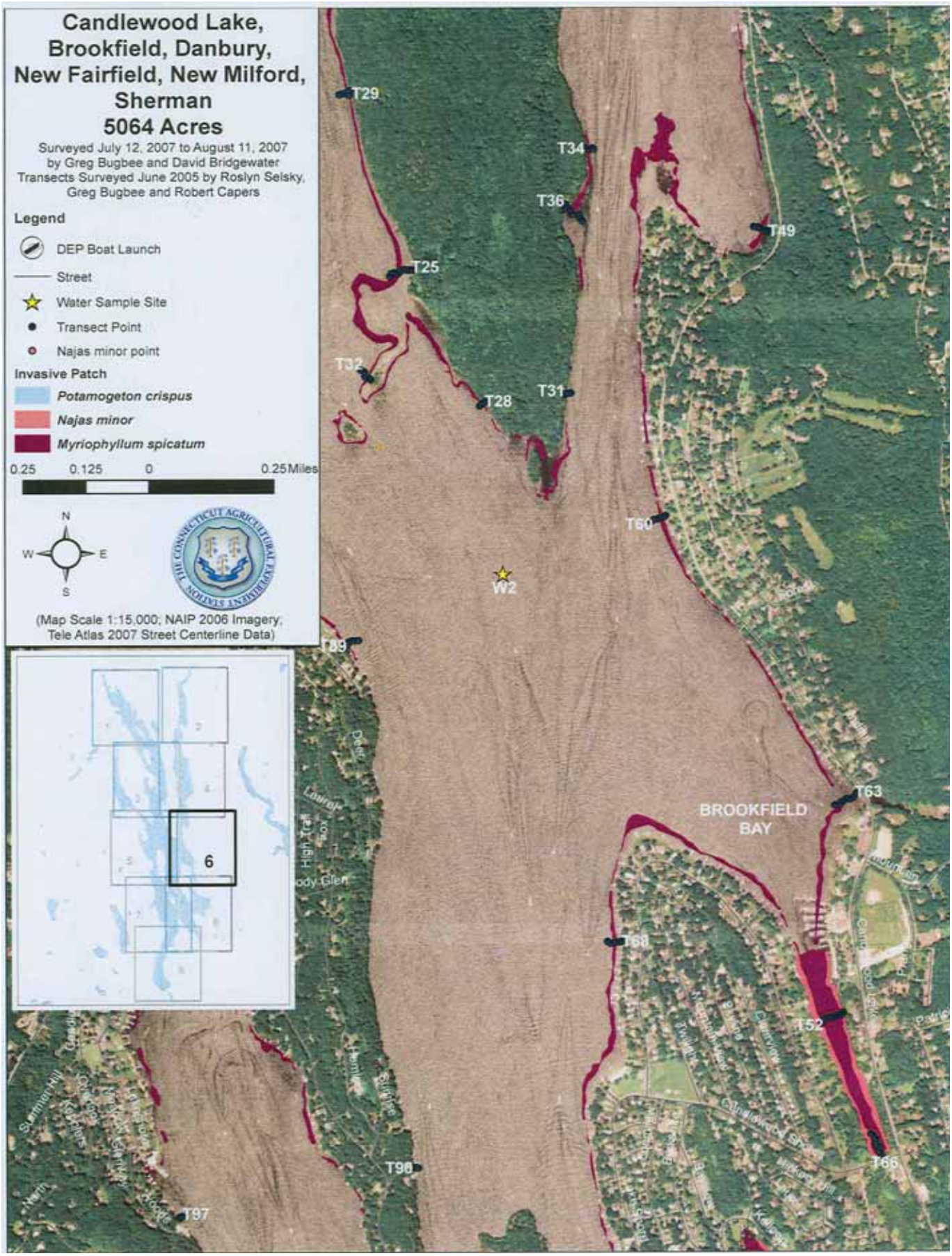
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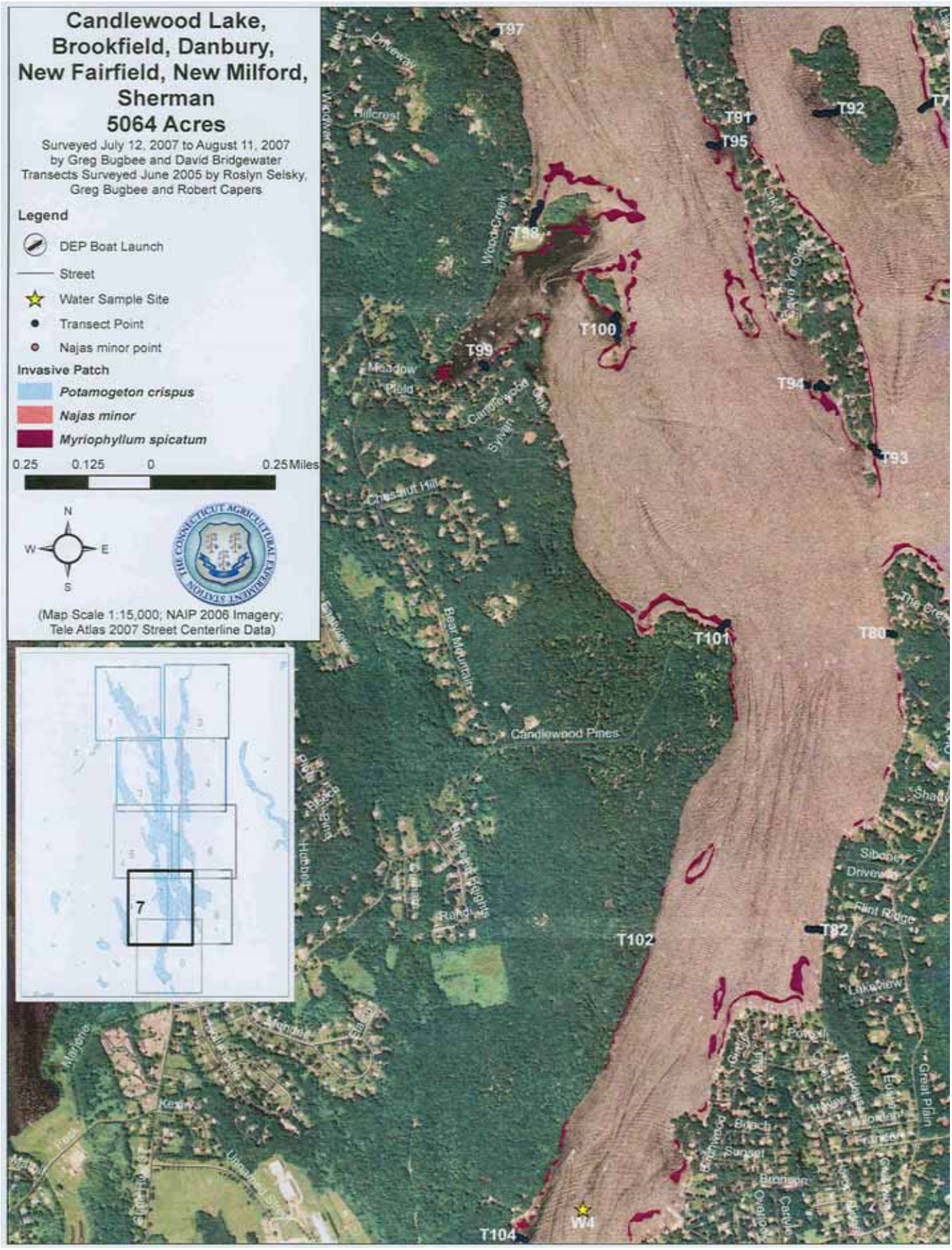
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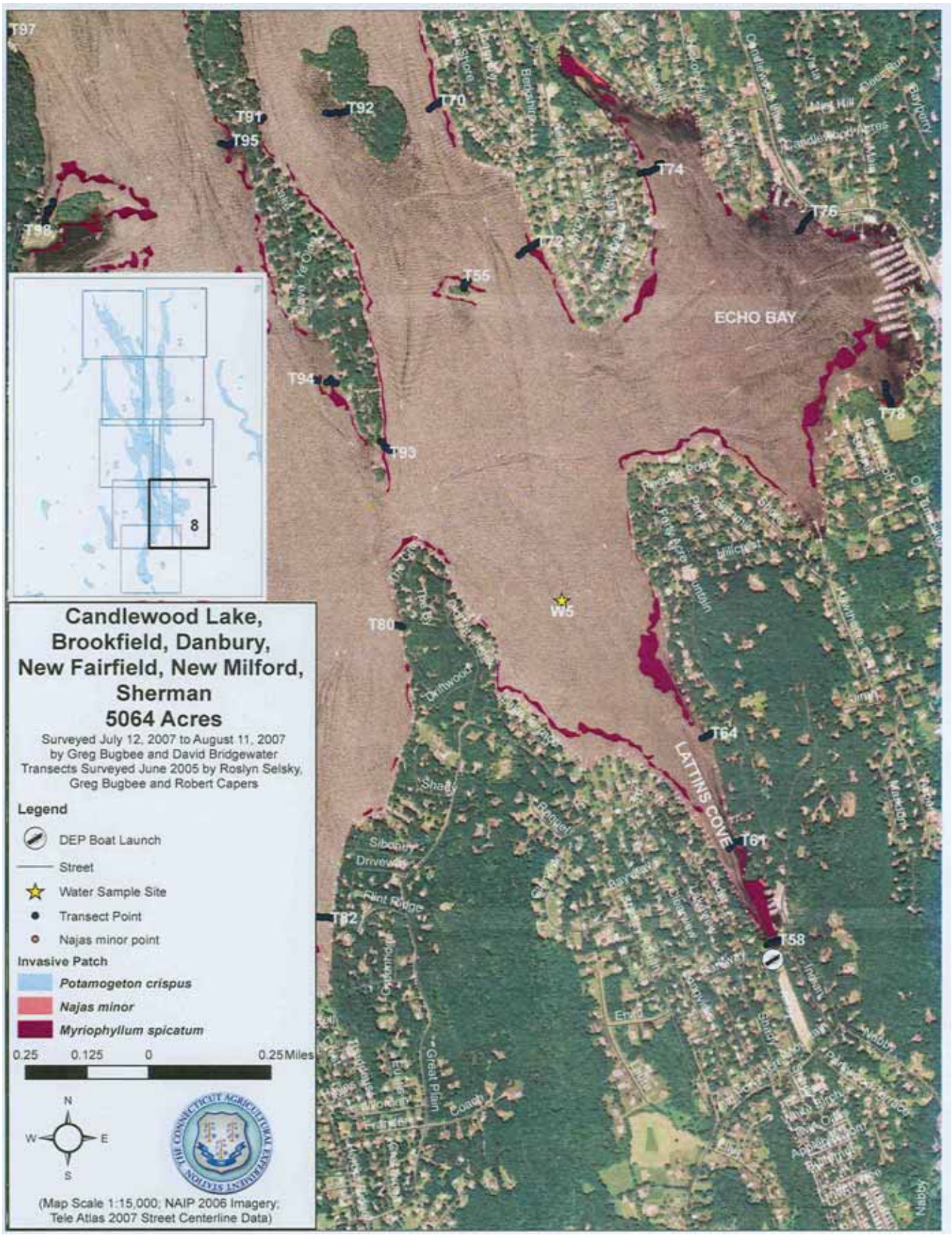
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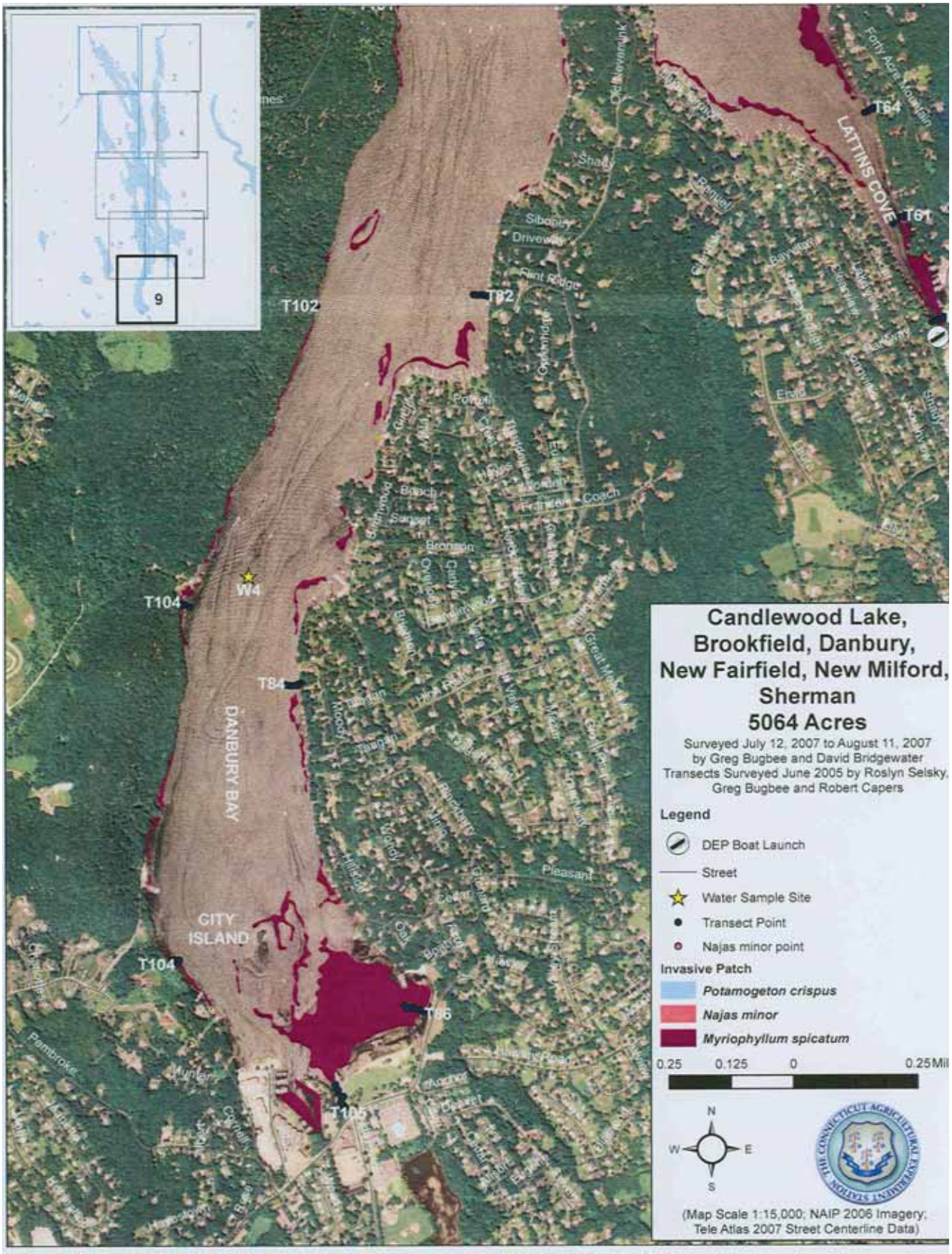
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Table 2. Invasive and native plants in Lake Lillinonah. Occurrence and frequency along transects and total area covered.

Scientific Name	Common Name	Abbrev.	Occurrence (times found**)	Frequency (percent**)	Area (acres)
Callitriche verna	Water starwort	CalVer	1	0.6	ND***
Eleocharis sp.	Spikerush	EleSp	2	1.3	ND
Elodea nuttallii	Waterweed	EloNut	0	0.0	ND
Isoetes sp.	Quillwort	IsoSp	0	0.0	ND
Lemna minor	Duckweed	LemMin	1	0.6	ND
*Myriophyllum spicatum**	Eurasian watermilfoil	MyrSpi	16	10.2	21.3
*Najas minor**	Brittle waternymph	NajMin	17	10.8	7.6
Potamogeton bicupulatus	Snailseed pondweed	PotBic	0	0.0	ND
*Potamogeton crispus**	Curly leaf pondweed	PotCri	3	1.9	0.1
Potamogeton illinoensis	Illinois pondweed	PotIll	2	1.3	ND
Potamogeton pusillus	Small pondweed	PotPus	0	0.0	ND
Sparganium sp.	Bur reed	SparSp	0	0.0	ND
Stuckinia pectinatus	Sago pondweed	StuPec	0	0.0	ND
Zannichellia palustris	Horned pondweed	ZanPal	1	0.6	ND
Zosterella dubia	Water stargrass	ZosDub	4	2.5	ND

*Invasive plant
** 157 points on 17 transects
***Not determined

Lake Lillinonah

The 2007 CAES IAPP survey of Lake Lillinonah confirmed the presence of *M. spicatum* found in a 1989 survey of the lake[1] (IEP Inc. 1989). We also found two other invasive aquatic plants, *N. minor* and *P. crispus*, and 12 natives (Table 2). The total area of *M. spicatum* and *N. minor* were 21.3 and 7.6 acres, respectively, while *P. crispus* only covered 0.1 acres. However, the total percentage of the lake area covered by these three invasives was less than 2 percent. *N. minor* was the most frequently found plant in the transects, occurring in 10.9 percent of the point locations. (The most frequently observed native, *Zosterella dubia*, occurred in only 2.5 percent of the transect point locations.) *N. minor* was closely followed by *M. spicatum,* which was found in 10.2 percent of the transect locations. *P. crispus* was only found in 1.9 percent of the transect locations. Compared to lakes Candlewood and Zoar the acreage covered by invasive plants was small. This is likely because of the steep-sloped sides, deep depths, and poor water clarity.

Most of the *M. spicatum* occurred in the northwest arm of the lake (Lake Lillinonah maps 1 and 2), mainly at (17.5 acres, 82.2%) at depths of 1-3 m. M. spicatum was also found to occur at depths of 3-5 meters (2.5 acres or 11.7% of the recorded *M. spicatum*) and 0-1 meters deep (1.29 acres or 6.1% of the recorded *M. spicatum*; Figure 3). The largest patches of *N. minor* occurred in the northeast arm of the lake (map 5), mainly in water 0-1 meters deep (6.5 acres, 87.7%) with the remainder (1.1 acres, 12.3%) found at the 1-3 meter depth. *P. crispus* occurred in only a few places in water less than three meters deep.

[1] This 1989 survey also found *Najas* sp., *Najas gracillima*, *Lemna* sp. and *Typha* sp. To date, no collection specimens were deposited in the University of Connecticut Herbarium, the official Connecticut repository for plant specimens.

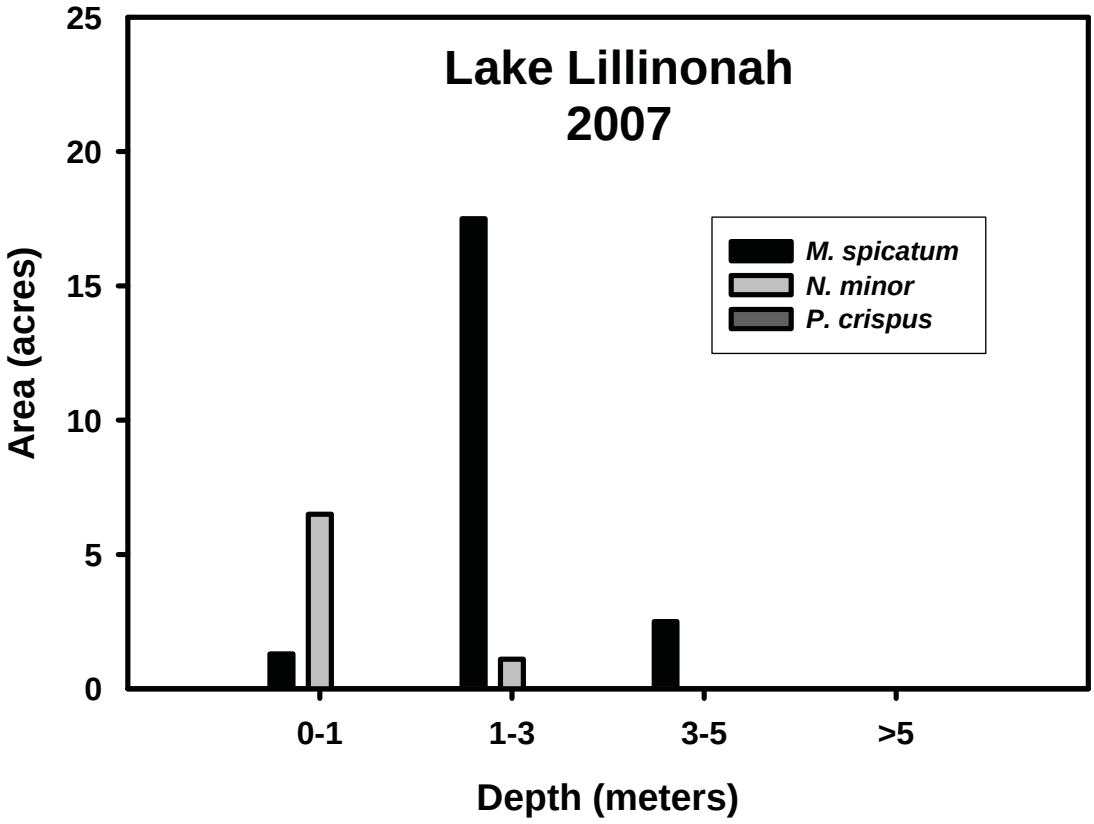
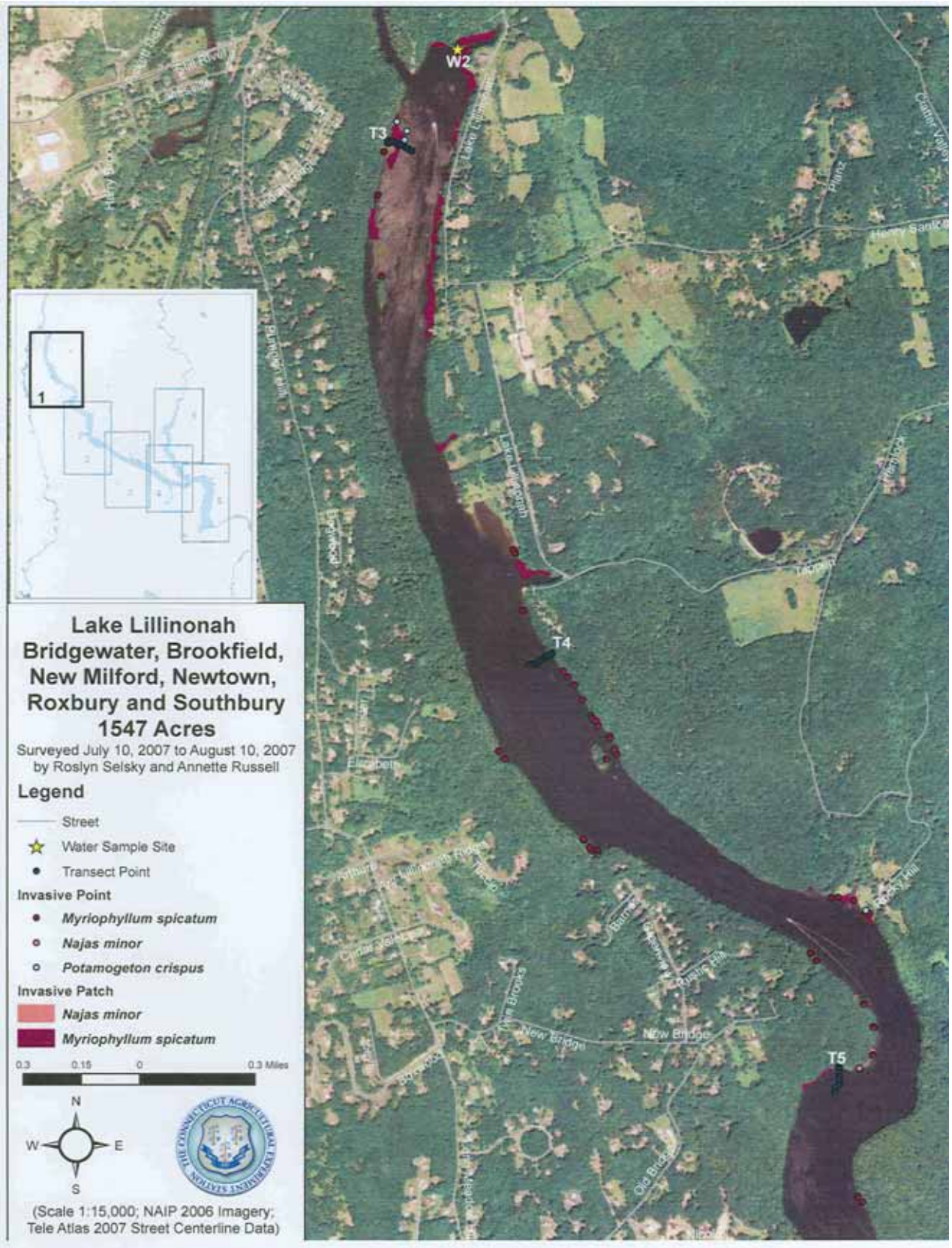
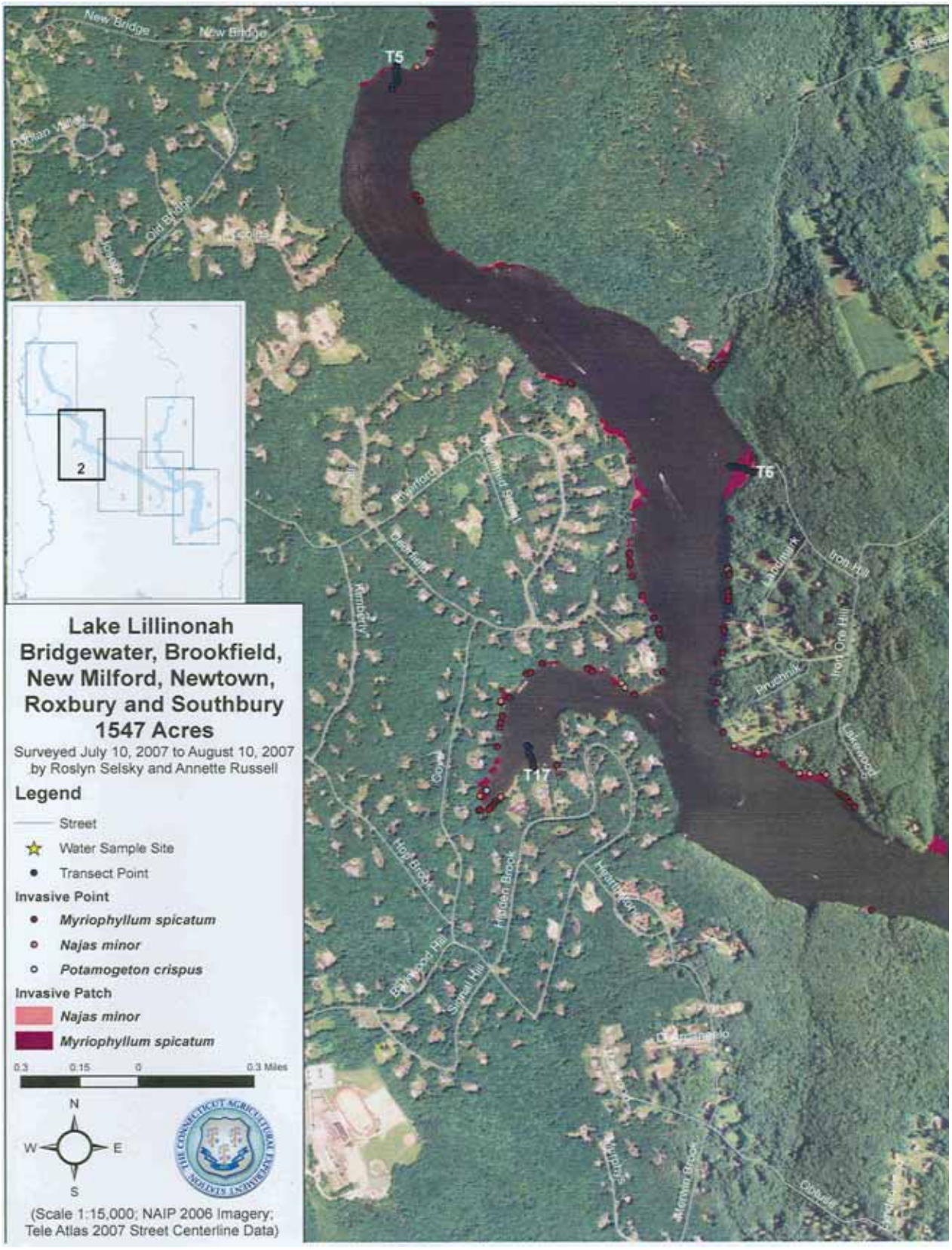


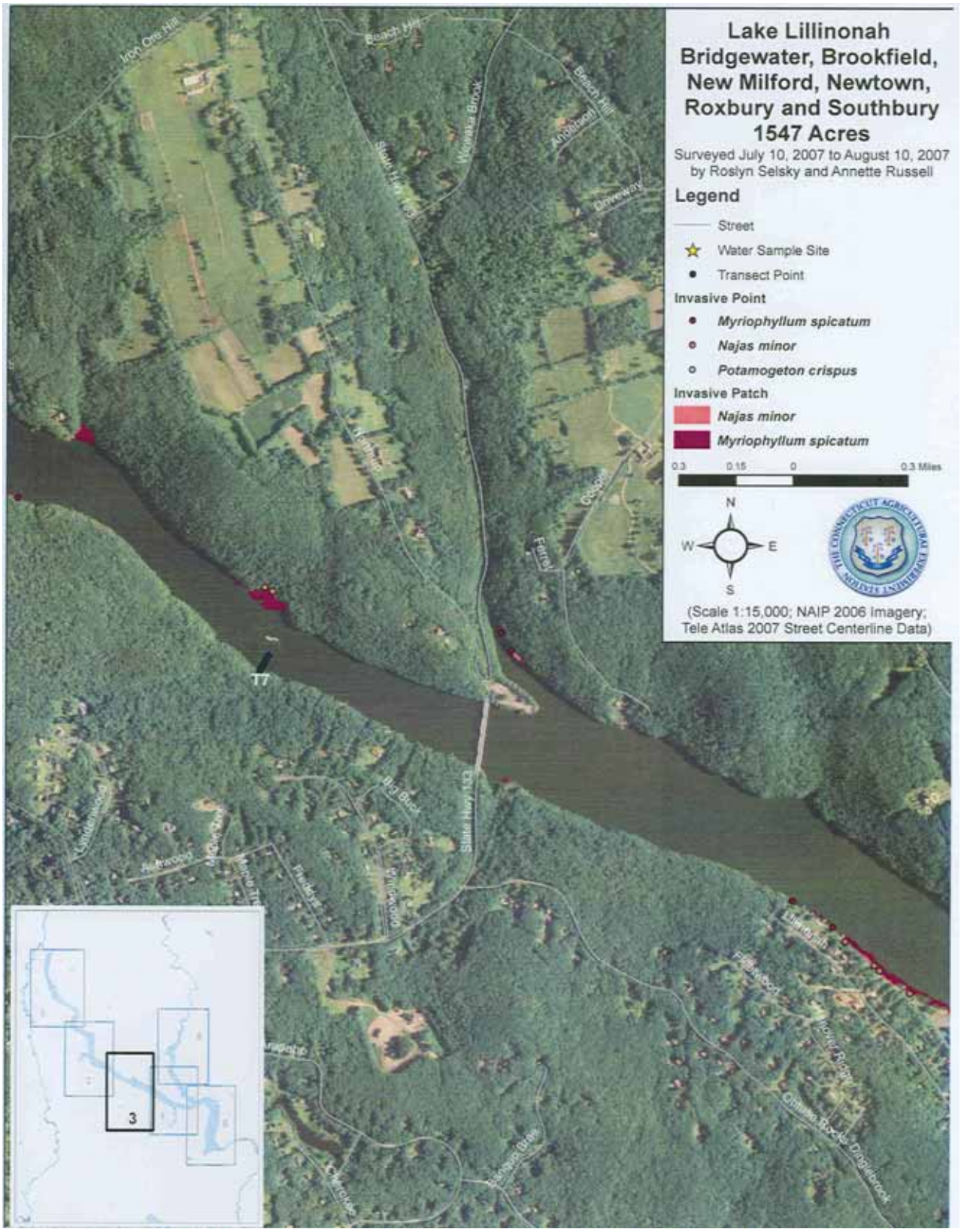
Figure 3. Depth preferences of invasive plants in Lake Lillinonah.

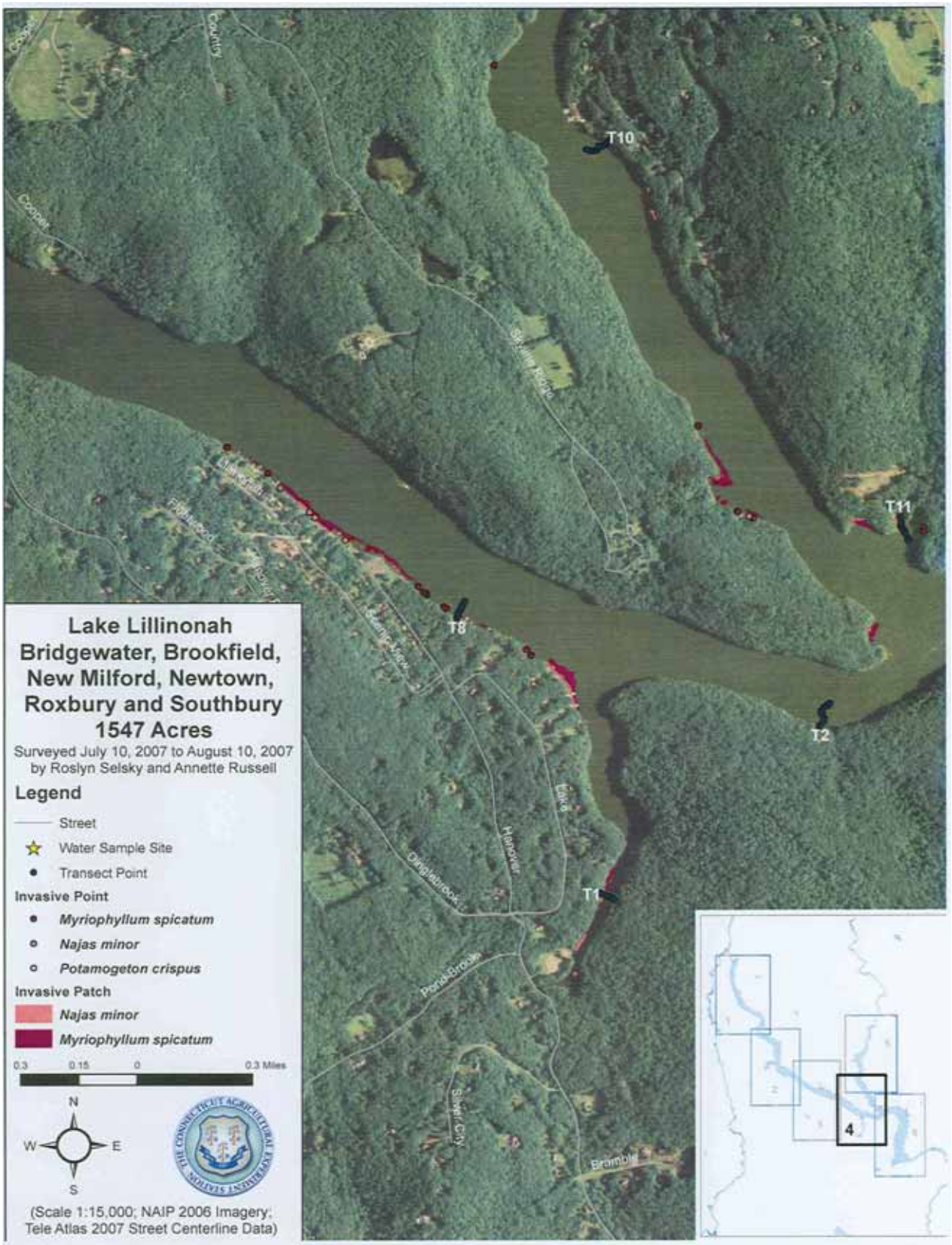
During our survey, areas on Lake Lillinonah were treated with the algaecide copper sulfate on July 12, 24 and August 7, 21. One area was treated with the algaecide Cutrine Plus on July 24. Two areas of *M. spicatum,* totaling 10 acres, were treated with the herbicide Reward on July 24. (A map showing the locations of these treatments is included in the appendix of this report.) This treatment may have reduced the actual amount of M. spicatum detected in our survey. In non-managed areas, thick layers of suspended algae impacted our findings by limiting our ability to see into the water column (transparency was determined to be 1 - 1.4 meters; Table 4). Presence of *P. crispus* may have been affected by its natural senescence during the survey period.

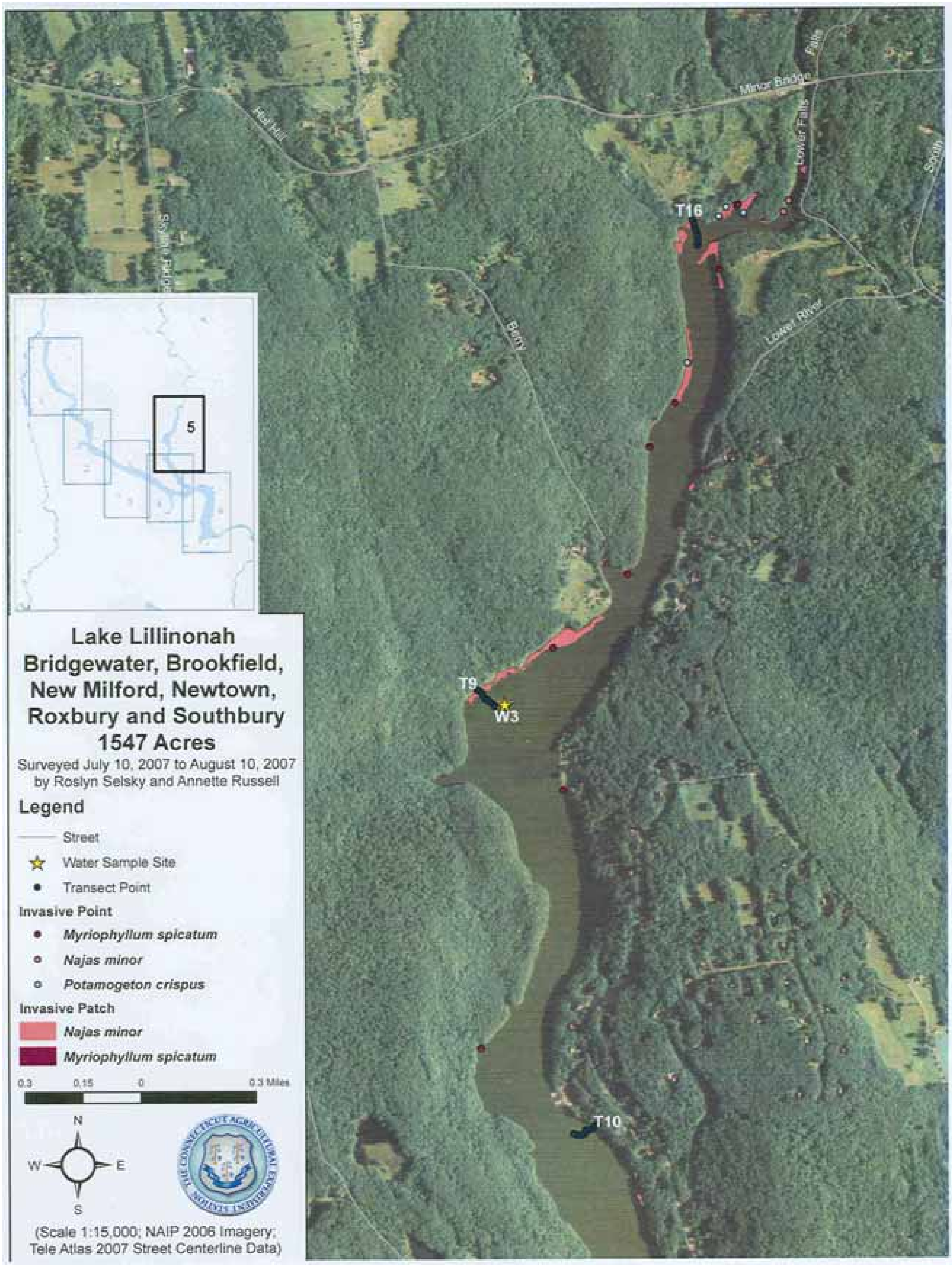
We observed factors that may influence future invasive aquatic plant growth in Lake Lillinonah. The algaecide treatments may improve water clarity thereby increasing the littoral zone and associated habitat for both native and invasive aquatic plants. New construction along Lake Lillinonah's extremely steep shoreline may cause further erosion that results in increased available nutrients needed to support the growth of algae and vascular plants. In addition, the growth of *N. minor* could possibly rival *M. spicatum* in Lake Lillinonah in the future due to its ability to form very dense stands particularly in shallow depths.


W2
T3
T4
T5
1
Lake Lillinonah
Bridgewater, Brookfield, New Milford, Newtown, Roxbury and Southbury
1547 Acres
Surveyed July 10, 2007 to August 10, 2007 by Roslyn Selsky and Annette Russell
Legend
Street
Water Sample Site
Transect Point
Invasive Point
Myriophyllum spicatum
Najas minor
Potamogeton crispus
Invasive Patch
Najas minor
Myriophyllum spicatum
0.3 0.15 0 0.3 Miles
N
W
E
S
(Scale 1:15,000; NAIP 2006 Imagery; Tele Atlas 2007 Street Centerline Data)


T5
T6
T17
2
Lake Lillinonah
Bridgewater, Brookfield,
New Milford, Newtown,
Roxbury and Southbury
1547 Acres
Surveyed July 10, 2007 to August 10, 2007
by Roslyn Selsky and Annette Russell
Legend
Street
Water Sample Site
Transect Point
Invasive Point
Myriophyllum spicatum
Najas minor
Potamogeton crispus
Invasive Patch
Najas minor
Myriophyllum spicatum
0.3 0.15 0 0.3 Miles
N
W E
S
(Scale 1:15,000; NAIP 2006 Imagery;
Tele Atlas 2007 Street Centerline Data)


Lake Lillinonah
Bridgewater, Brookfield, New Milford, Newtown, Roxbury and Southbury
1547 Acres
Surveyed July 10, 2007 to August 10, 2007
by Roslyn Selsky and Annette Russell
Legend
Street
Water Sample Site
Transect Point
Invasive Point
Myriophyllum spicatum
Najas minor
Potamogeton crispus
Invasive Patch
Najas minor
Myriophyllum spicatum
0.3 0.15 0 0.3 Miles
N
W E
S
(Scale 1:15,000; NAIP 2006 Imagery;
Tele Atlas 2007 Street Centerline Data)
T7
3


Lake Lillinonah
Bridgewater, Brookfield, New Milford, Newtown, Roxbury and Southbury
1547 Acres
Surveyed July 10, 2007 to August 10, 2007 by Roslyn Selsky and Annette Russell
Legend
Street
Water Sample Site
Transect Point
Invasive Point
Myriophyllum spicatum
Najas minor
Potamogeton crispus
Invasive Patch
Najas minor
Myriophyllum spicatum
0.3 0.15 0 0.3 Miles
N
W
E
S
(Scale 1:15,000; NAIP 2006 Imagery; Tele Atlas 2007 Street Centerline Data)
T10
T11
T8
T2
T1
4


Lake Lillinonah
Bridgewater, Brookfield, New Milford, Newtown, Roxbury and Southbury
1547 Acres
Surveyed July 10, 2007 to August 10, 2007
by Roslyn Selsky and Annette Russell
Legend
Street
Water Sample Site
Transect Point
Invasive Point
Myriophyllum spicatum
Najas minor
Potamogeton crispus
Invasive Patch
Najas minor
Myriophyllum spicatum
0.3 0.15 0 0.3 Miles
N
W
E
S
(Scale 1:15,000; NAIP 2006 Imagery; Tele Atlas 2007 Street Centerline Data)
5
T16
T9
W3
T10
Minor Bridge
Lower Falls
Lower River
Berry
South

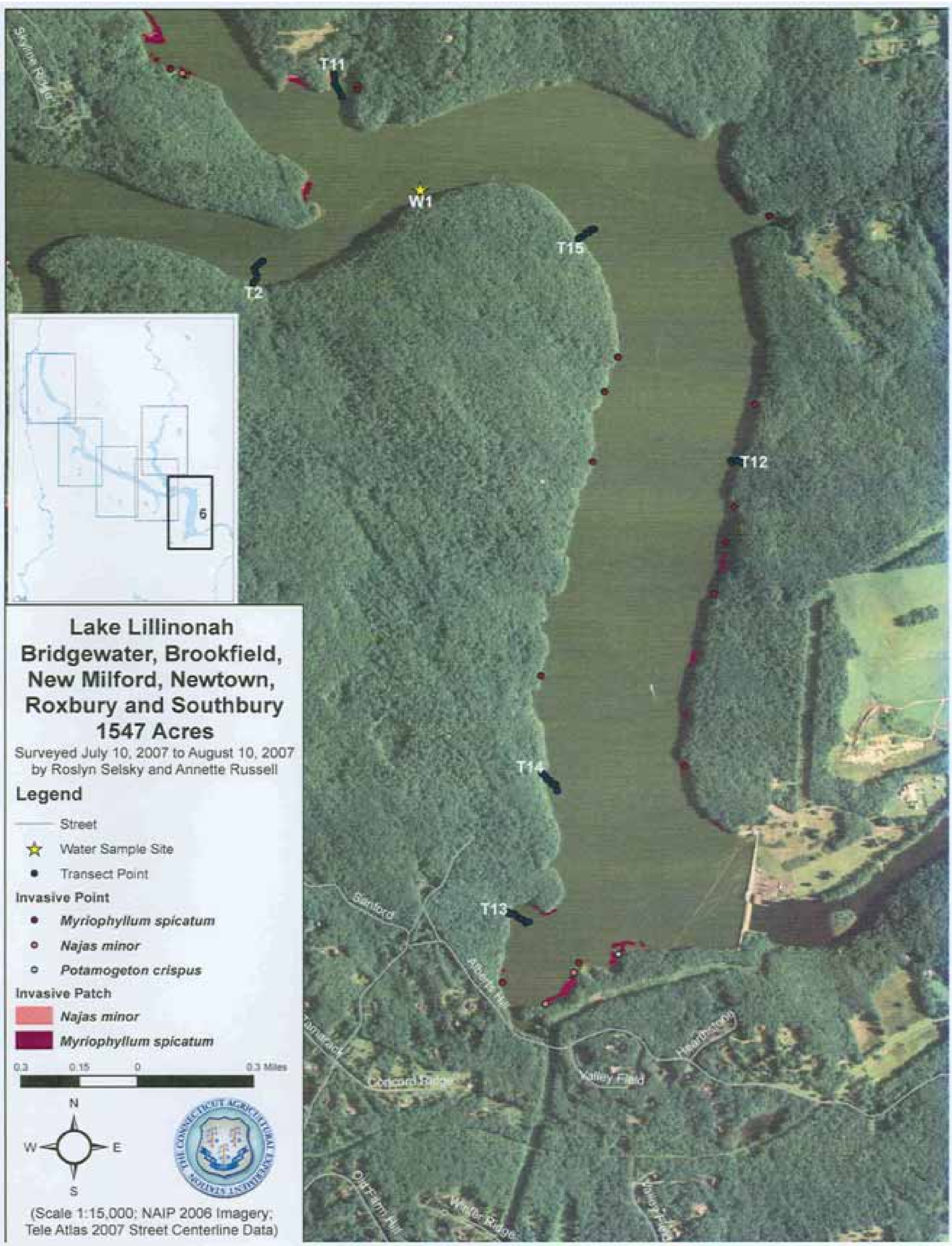

Lake Lillinonah
Bridgewater, Brookfield,
New Milford, Newtown,
Roxbury and Southbury
1547 Acres
Surveyed July 10, 2007 to August 10, 2007
by Roslyn Selsky and Annette Russell
Legend
Street
Water Sample Site
Transect Point
Invasive Point
Myriophyllum spicatum
Najas minor
Potamogeton crispus
Invasive Patch
Najas minor
Myriophyllum spicatum
0.3 0.15 0 0.3 Miles
N
W
E
S
(Scale 1:15,000; NAIP 2006 Imagery;
Tele Atlas 2007 Street Centerline Data)
T11
W1
T15
T2
T12
T14
T13
6
Sanford
Concord Ridge
Valley Field
Hearthstone
Tamarack

Figure 3. Invasive and native plants in Lake Zoar. Occurrence and frequency along transects and total area covered.

Scientific Name	Common Name	Abbrev.	Occurrence (times found**)	Frequency (percent**)	Area (acres)
Ceratophyllum demersum	Coontail	CerDem	3	3.0	ND***
Elodea nuttallii	Waterweed	EloNut	6	6.0	ND
Isoetes species	Quillwort	IsoSp	0	0.0	ND
*Marsilea quadrifolia**	European waterclover	MarQua	0	0.0	<0.1
*Myriophyllum spicatum**	Eurasian watermilfoil	MyrSpi	35	35.0	62.6
Najas flexilis	Slender naiad	NajFle	2	2.0	ND
*Najas minor**	Brittle waternymph	NajMin	18	18.0	32.5
*Potamogeton crispus**	Curly leaf pondweed	PotCri	6	6.0	20.8
Potamogeton epihydrus	Ribbonleaf pondweed	PotEpi	0	0.0	ND
Potamogeton foliosus	Leafy pondweed	PotFol	2	2.0	ND
Potamogeton natans	Floatingleaf pondweed	PotNat	0	0.0	ND
Potamogeton nodosus	Long leaf pondweed	PotNod	0	0.0	ND
Potamogeton perfoliatus	Clasping leaf pondweed	SpiPol	0	0.0	ND
Potamogeton pusillus	Small pondweed	PotPul	0	0.0	ND
Sagittaria species	Arrowhead	SagSp	0	0.0	ND
Stuckinia pectinatus	Sago pondweed	StuPec	3	3.0	ND
Valisneria americana	Eel grass	ValAme	8	8.0	ND
Zosterella dubia	Water stargrass	ZosDub	1	1.0	ND

*Invasive plant
** 100 points on 10 transects
***Not determined

Lake Zoar

The 2007 CAES IAPP survey of Lake Zoar confirmed the presence of four invasive and 14 native species of aquatic plants. The invasive species were *M. spicatum, Marsilea quadrifolia, N. minor* and *P. crispus. M. spicatum* was the most prevalent invasive aquatic plant, covering 62.6 acres or 6.8 percent of the surface area (Table 5), and occurred in 33 percent of the transect points. By contrast, the most prevalent native species, *Valisneria americana*, occurred in 8 percent of the transect point locations. Although *M. spicatum* could be found in most sections of the lake, it was most prevalent in the northern end and just south of the Route 84 bridge (Lake Zoar maps 1 and 2). *N. minor*, covered 32.5 acres or 3.5 percent of the lakes surface, area and was found in 18 percent of the transect points. The coverage of *P. crispus* was 20.8 acres or 2.3 percent of the lake's surface, and 6 percent of the transect points. The most extensive areas of *P. crispus* were located in two coves just north of transect three (T3, map 1). *M. quadrifolia* was found in only one shallow cove, on the northwest side of the lake (map 1), covering less than 0.1 acres. *M. quadrifolia* did not occur in any transect points.

Most *M. spicatum* was found at depths of 0-1 and 1-3 three meters of water (Figure 4) representing 53.6 and 46.3 percent of the total respectively. *N. minor* was most likely to be found in the same areas as *M. spicatum* and had similar depth preferences with 50.3 percent occurring at a depth of 0-1 m and 49.7 percent occurring at a depth of 1-3 m. The depth preference of *P. crispus* was also similar to *M. spicatum*, with 43.1 percent growing in 0-1 m of water and 56.7 percent located at a depth of 1-3 m. *M. spicatum*, *N. minor* and *P. crispus* were found mostly in sand sediment, but also occurred in silt sediment. *M. quadrifolia* was found exclusively on sand sediment.

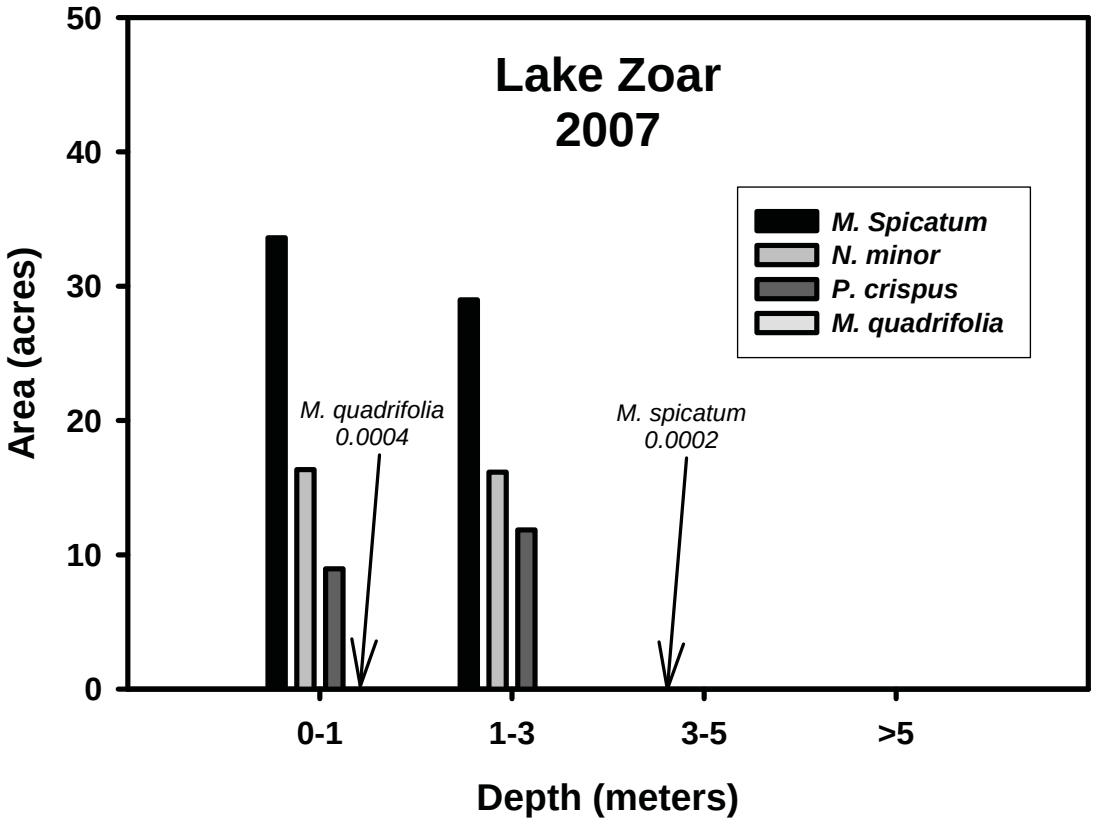


Figure 4. Depth preferences of invasive plants in Lake Zoar.

Lake Zoar had slightly more vegetation than Lake Lillinonah, but still had large areas, primarily south of the boat launch, free of any vegetation. The lack of vegetation was most likely due to steep sloped sides, deep bathymetry and poor water clarity (Table 4). Vegetation was mostly found north of the boat launch (maps 1 and 2), where the lake was relatively shallow.

As compared to Lakes Candlewood and Lillinonah, a relatively large amount of *P. crispus* was found in Lake Zoar, occurring mostly in the northern portion of the lake by the dam. *P. crispus* was found, not as turions, as one would expect during the time-frame of the Zoar survey, but as actively growing plants, akin to colder weather growth[1]. This anomaly could be due to the dam releases, which occurred everyday and consisted of cooler, bottom water from Lake Lillinonah. Thus, the dam releases might be keeping the water temperatures artificially cool enough for continued *P. crispus* summer growth, giving this invasive the advantage of year-round growth which could increase its abundance by the dam.

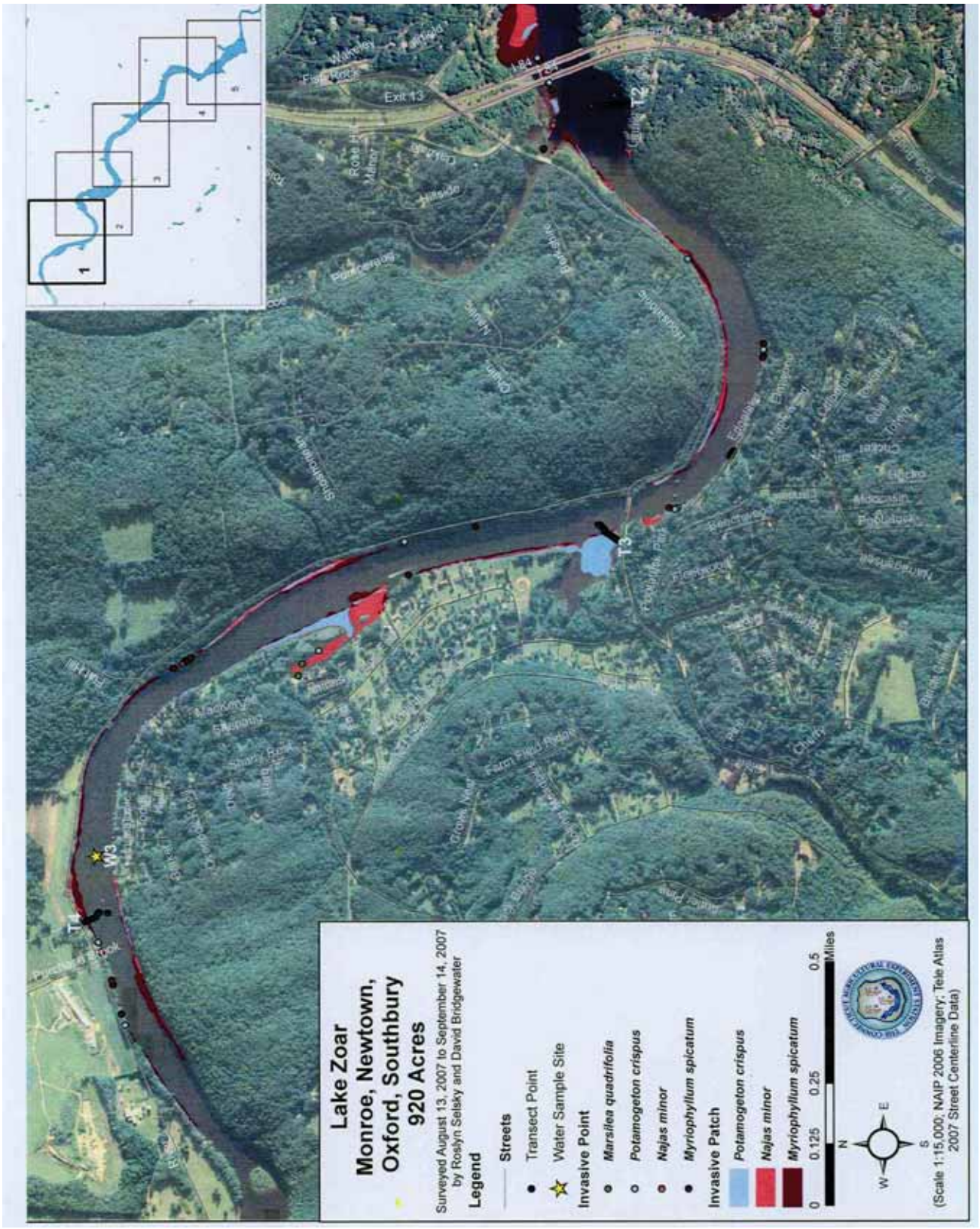
Our findings may have been influenced by mechanical harvesting of *M. spicatum* and increased water velocity caused by dam releases (forcing the plants to lay flat on the sediment), both of which made the plants difficult to see from the surface. While Lake Zoar

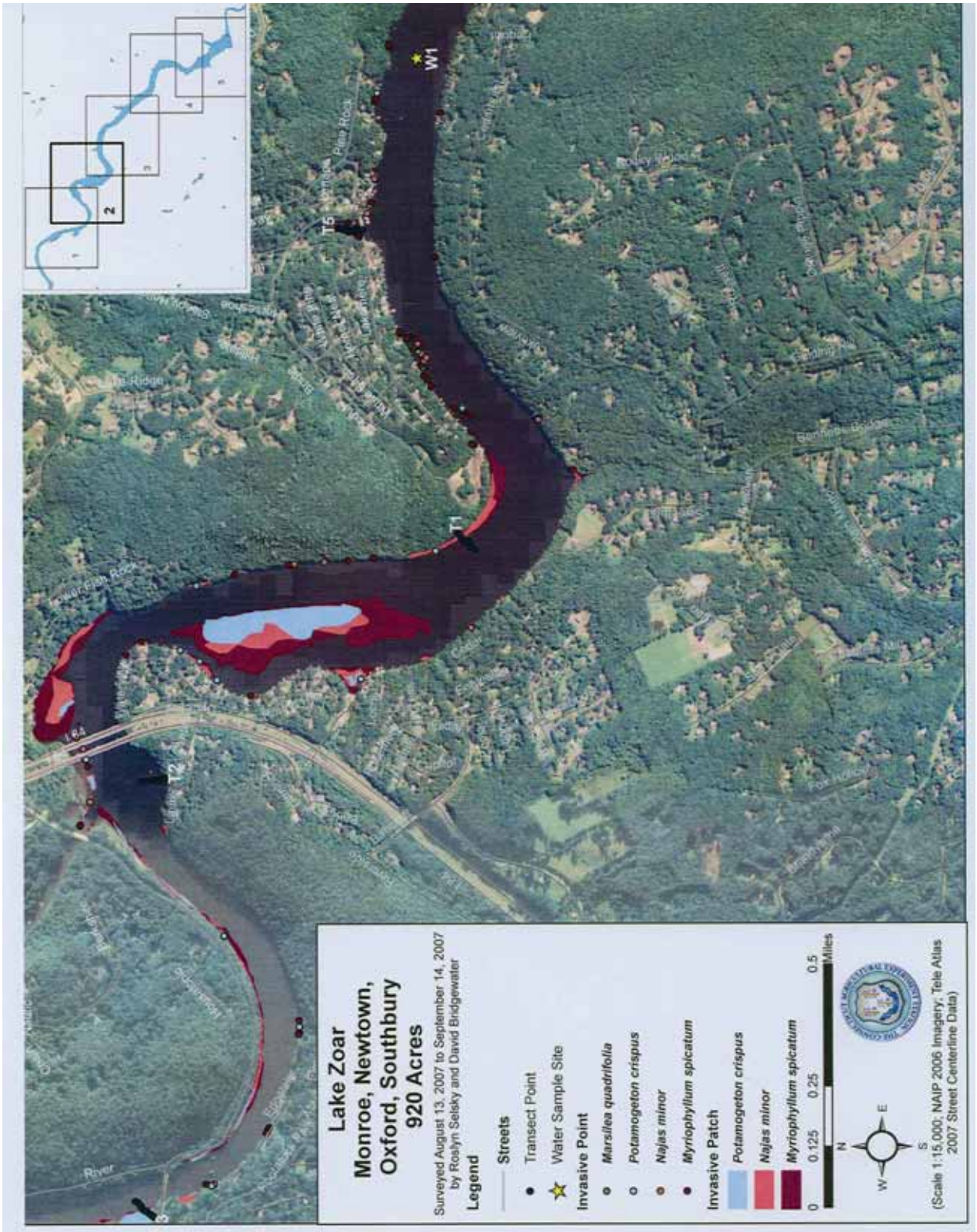
[1] *P. crispus* actively grows and reproduces in cooler water temperature from spring to early summer. *P. crispus* senesces in the warm summer months leaving only fruits and turions (protective leaf bud and source of vegetative reproduction). The fruits and turions produce small plants in late fall, which over-winter.

appeared to have less algae than Lake Lillinonah, its water clarity was still poor (Table 4), which also affected our ability to locate invasive aquatic plants. In addition, Lake Zoar had some very shallow areas (less than 2 acres) that were inaccessible by boat where invasive aquatic plants may have occurred.

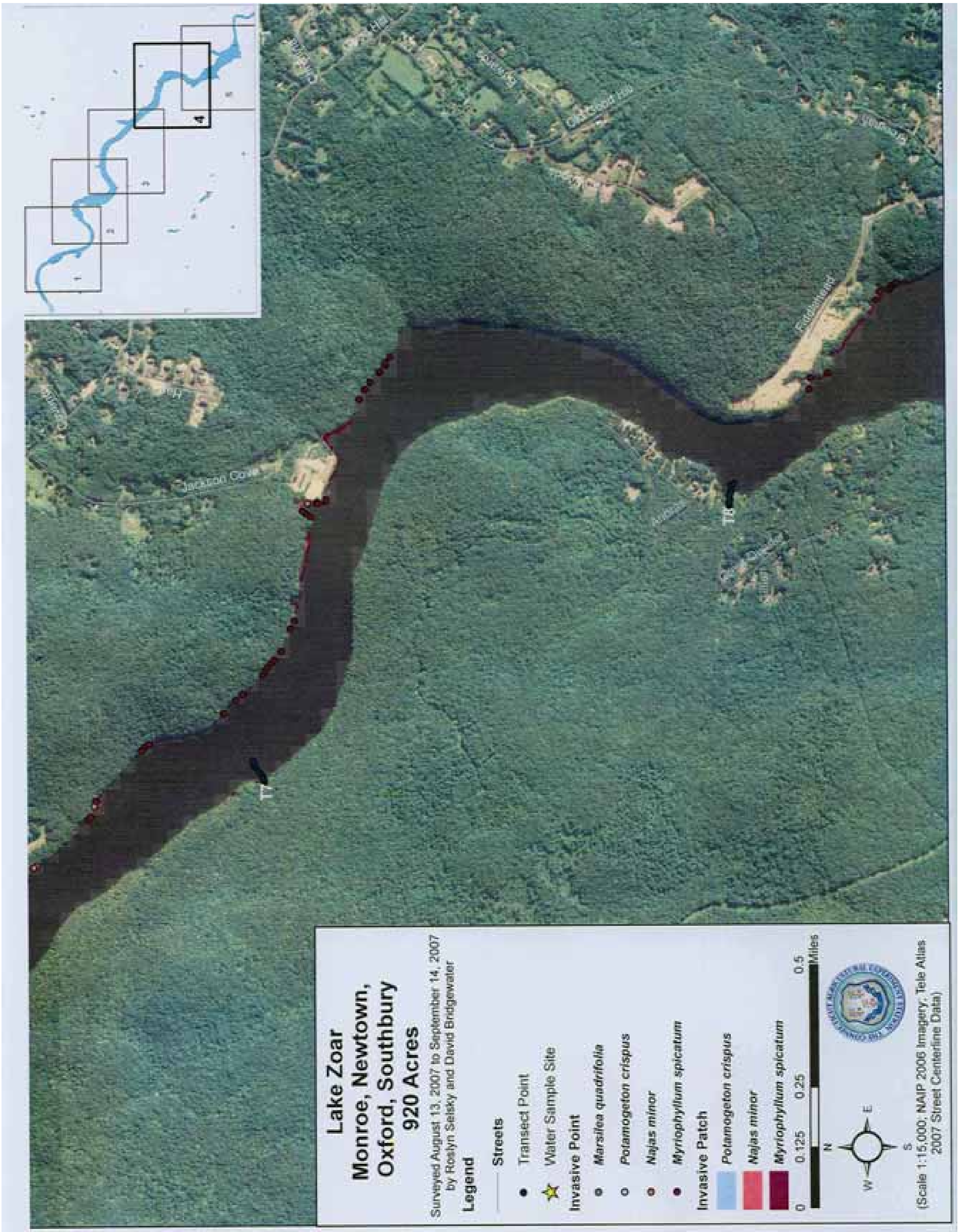
As with Lake Lillinonah, Lake Zoar also had a relatively large amount of suspended algae, possibly due to increased nutrients from watershed run-off. However, the suspended algae problem was not as bad as Lake Lillinonah nor were the slopes of the side of the lake as steep. We are not aware of any plans to treat the lake with algaecide, but this treatment could increase the invasive aquatic plant population by improving water clarity and increasing available habitat.

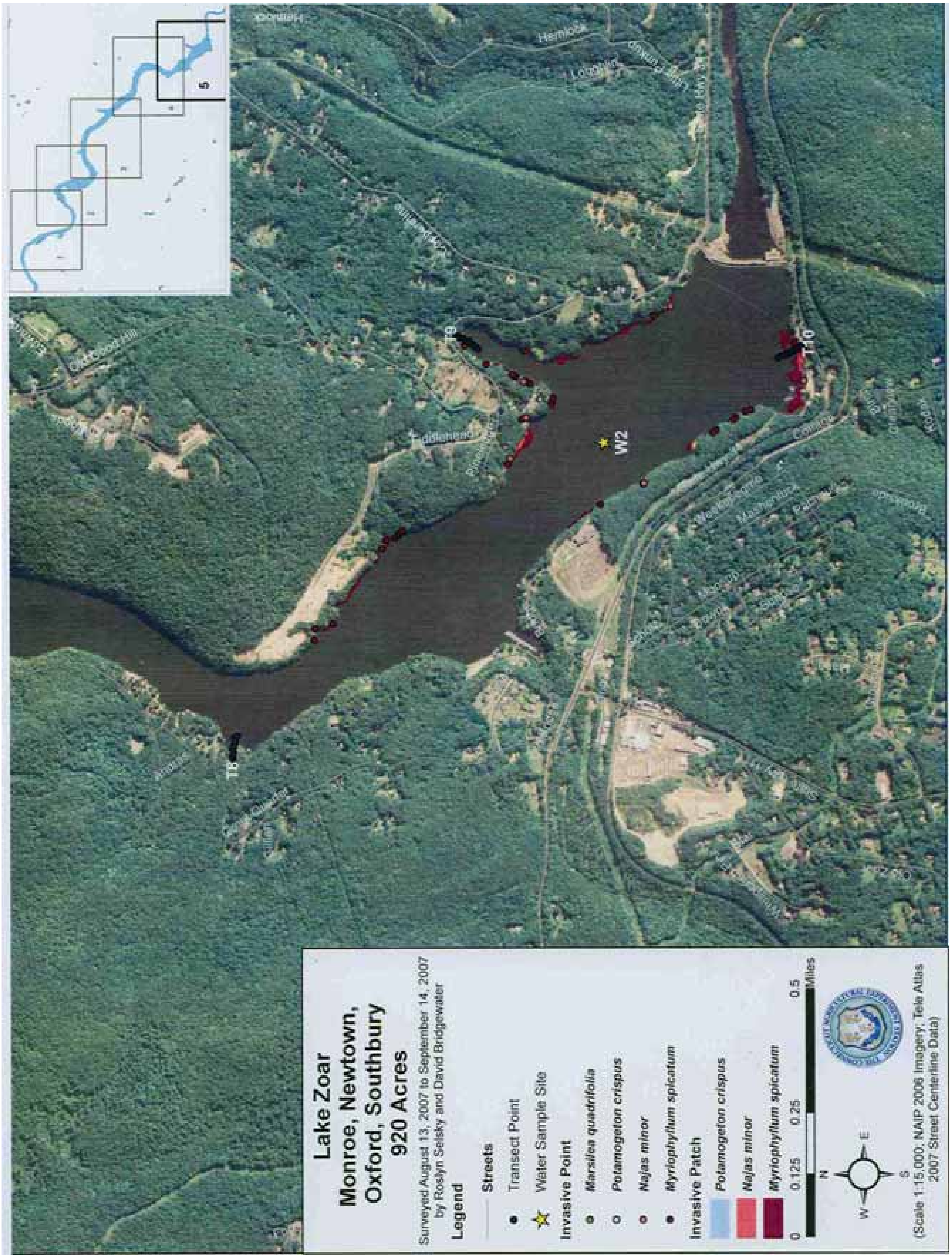
Mechanical harvesting was able to effectively shorten aquatic plants in Lake Zoar, but seemed to be unable to operate in the shallow depths (less than four feet), where the invasives, especially *N. minor*, were most prevalent. Documentation of the effectiveness of the harvesting program could help in future decisions on where and when to utilize this invasive plant management technique.


Lake Zoar
Monroe, Newtown,
Oxford, Southbury
920 Acres
Surveyed August 13, 2007 to September 14, 2007
by Roslyn Selsky and David Bridgewater
Legend
Streets
Transect Point
Water Sample Site
Invasive Point
Marsilea quadrifolia
Potamogeton crispus
Najas minor
Myriophyllum spicatum
Invasive Patch
Potamogeton crispus
Najas minor
Myriophyllum spicatum
0 0.125 0.25 0.5 Miles
N
W E
S
(Scale 1:15,000; NAIP 2006 Imagery; Tele Atlas
2007 Street Centerline Data)
T1
T2
T3
W3
Exit 13
I-84


Lake Zoar
Monroe, Newtown,
Oxford, Southbury
920 Acres
Surveyed August 13, 2007 to September 14, 2007
by Roslyn Selsky and David Bridgewater
Legend
Streets
Transect Point
Water Sample Site
Invasive Point
Marsilea quadrifolia
Potamogeton crispus
Najas minor
Myriophyllum spicatum
Invasive Patch
Potamogeton crispus
Najas minor
Myriophyllum spicatum
0 0.125 0.25 0.5 Miles
N
W E
S
(Scale 1:15,000; NAIP 2006 Imagery; Tele Atlas
2007 Street Centerline Data)
W1
T1
T2
T5
I-84
River


Lake Zoar
Monroe, Newtown,
Oxford, Southbury
920 Acres
Surveyed August 13, 2007 to September 14, 2007
by Roslyn Selsky and David Bridgewater
Legend
Streets
Transect Point
Water Sample Site
Invasive Point
Marsilea quadrifolia
Potamogeton crispus
Najas minor
Myriophyllum spicatum
Invasive Patch
Potamogeton crispus
Najas minor
Myriophyllum spicatum
0 0.125 0.25 0.5 Miles
N
W E
S
(Scale 1:15,000; NAIP 2006 Imagery; Tele Atlas
2007 Street Centerline Data)
T1
T5
T6
T7
W1


Lake Zoar
Monroe, Newtown,
Oxford, Southbury
920 Acres
Surveyed August 13, 2007 to September 14, 2007
by Roslyn Selsky and David Bridgewater
Legend
Streets
Transect Point
Water Sample Site
Invasive Point
Marsilea quadrifolia
Potamogeton crispus
Najas minor
Myriophyllum spicatum
Invasive Patch
Potamogeton crispus
Najas minor
Myriophyllum spicatum
0 0.125 0.25 0.5 Miles
N
E
S
W
(Scale 1:15,000; NAIP 2006 Imagery, Tele Atlas
2007 Street Centerline Data)
T7
T8
Jackson Cove
4


Lake Zoar
Monroe, Newtown, Oxford, Southbury
920 Acres
Surveyed August 13, 2007 to September 14, 2007 by Roslyn Selsky and David Bridgewater
Legend
Streets
Transect Point
Water Sample Site
Invasive Point
Marsilea quadrifolia
Potamogeton crispus
Najas minor
Myriophyllum spicatum
Invasive Patch
Potamogeton crispus
Najas minor
Myriophyllum spicatum
0 0.125 0.25 0.5 Miles
N
E
S
W
(Scale 1:15,000; NAIP 2006 Imagery, Tele Atlas 2007 Street Centerline Data)
T6
T9
T10
W2
5

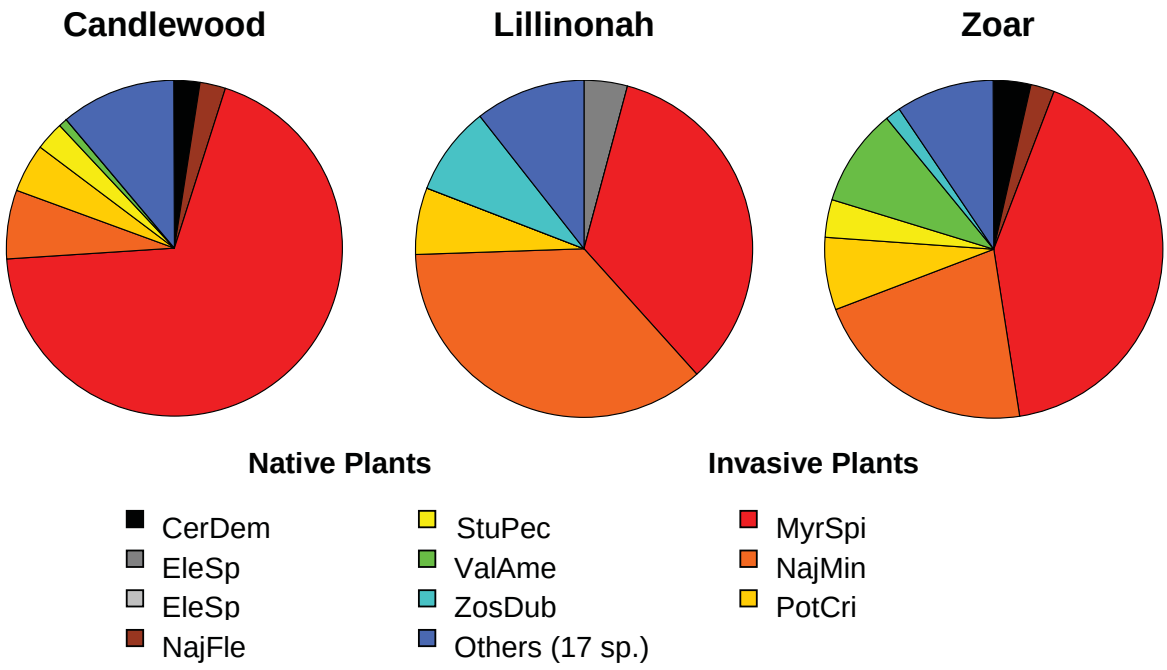


Figure 5. Frequency of the occurrence (percent of occupied sites) of native and invasive plant species in Lakes Candlewood (n=219), Lillinonah (n=36) and Zoar(n=41).

Comparisons of Plant Communities

The number of plant species found (species richness) in Lakes Candlewood, Lillinonah and Zoar are quite similar. Candlewood Lake has 16 species, Lake Lillinonah has 15 species and Lake Zoar has 18 species (Figure 5). These species richness values are average for CT lakes and ponds which range from a low of 2 species to a high of 28 (Capers, 2007). The invasive plants *M. spicatum* (MyrSpi) *and N. minor* (NajMin) are the most frequently occurring species in all three lakes. *P. crispus* (PotCri) also occurs in all three lakes but was probably not completely accounted for as it senesced during the survey period with the possible exception of that found in Lake Zoar. A small population of the invasive *M. quadrifolia* (MarQua) was located in Lake Zoar. The frequency of *M. spicatum and N. minor,* that dominated the plant community in Lakes Lillinonah and Zoar, are similar while Candlewood Lake was dominated by *M. spicatum* with a much smaller frequency of *N. minor.* This is probably caused by the drawdowns in Candlewood Lake that expose the shallow areas preferred by *N. minor* and that *N. minor* spreads by drawdown resistant seeds (Siver et al. 1986). Invasive species accounted for more than two-thirds of all the plant occurrences in each lake.

Historical data from 1979 -1982 (CT DEP, 1983) shows 13 plant species present in Candlewood Lake, however, only *Ceratophyllum demersum* (CerDem), *Myriophyllum spicatum* (MyrSpi), *Najas flexiliis* (NajFle), *Potamogeton gramineus* (PotGra), and *Vallisneria americana* (ValAme) are found today. Species found by the CT DEP (1983) study but not found in

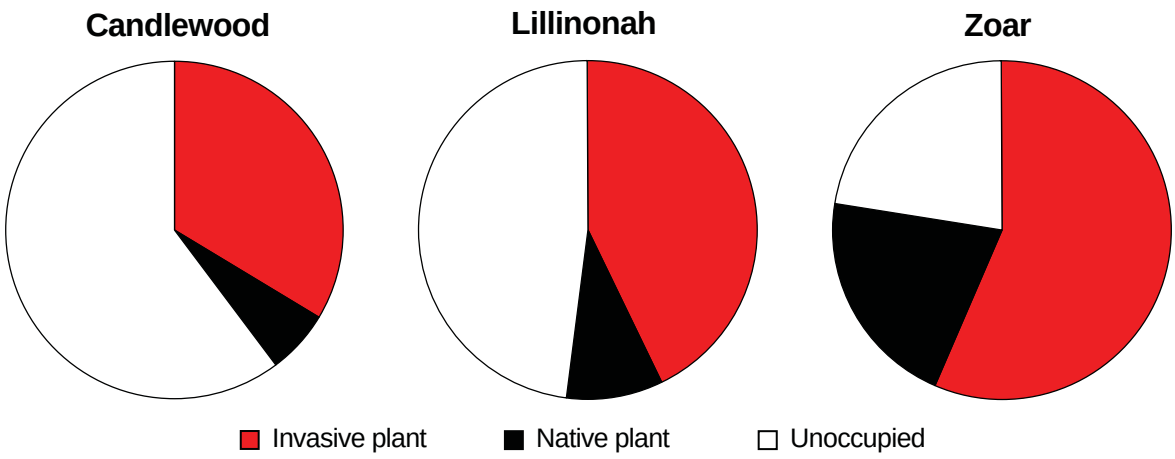


Figure 6. Proportion of transect points in zone of most likely plant growth (Candlewood < 5m depth, Lillinonah and Zoar < 3m depth) containing invasive plants, native plants or unoccupied by plants.

this study were *Myriophyllum brasiliense* (parrot feather, species now called *aquaticum*), *Myriophyllum exalbesens* (northern water milfoil, possibly misidentified, species now called *sibiricum*), *Potamogeton robbinsii* (Robins pondweed), *Potamogeton richardsonii* (Richardson's pondweed) and *Elatine sp*. (waterwort).

The most frequent native plant in Candlewood Lake was *Stuckinia pectinatus* (StuPec) with over nine other native species found in nearly equal proportions. In Lake Lillinonah, *Zosterella dubia* (ZosDub) and *Eleocharis sp*. (EleSp) were the most frequently observed native plants with five others occurring much less often. In Lake Zoar, *Valisneria americana* (ValAme) occurred more frequently than *P. crispus* and the natives *Stuckinia pectinatus*, *Najas flexiliis* and *Ceratophyllum demersum* were also frequently observed. Lake Zoar had the more native species occurrences than Lakes Candlewood and Zoar. Species richness and density of native species (loosely related to frequency), are an indicator of the overall health of a plant community. Lakes with high native species richness combined with high density may provide resistance to colonization by invasive species (Capers et al., 2007).

Information from transects gives an indication of the percentage of lake bottom containing invasive, native and no plants (Figure 6). This data may predictive of the future spread of invasives as suitable unoccupied areas are prime targets for invasion and invasive plants can replace native plants. For the purpose of this report, areas suitable for invasion were considered to be all sediment types, except for rock, in less than five meters of water for Candlewood and three meters of water for Lillinonah and Zoar. These depths were based on the observations of where plants occurred during these surveys and are limited by the 0-1, 1-3 and 3-5 meter depth categories used. They are probably highly dependent on water clarity with increased water clarity increasing the depth of where plants can grow. Nearly two-thirds of the zone currently suitable for plant growth in Candlewood is unoccupied by plants with less than 10 percent occupied by native plants. The unoccupied in areas 0 – 5m deep are likely highly influenced by winter drawdown. The plant growth zone occupied by invasive and native plants increases to over half in Lake Lillinonah with the remainder being

Table 4. Water chemistry in Lakes Candlewood, Lillinonah and Zoar.

Lake	Site	Date	Latitude	Longitude	Depth (m)	Transparency Secchi(m)	Conductivity uS/L	pH	Alkalinity CaCO3(mg/L)	Toatal P (ug/L)
Candlewood	W1	8/16/2007	41.53369	-73.44460	0.5	3.2	179	7.0	32.3	2.5
					12.0		193	6.6	37.5	12
	W2	8/16/2007	41.49322	-73.44793	0.5	3.3	170	7.2	39.8	15
					11.0		176	6.6	38.3	64
	W3	8/16/2007	41.55196	-73.47424	0.5	2.8	170	7.2	28.5	8.1
					10.0		180	6.7	43.5	66
	W4	8/16/2007	41.43951	-73.45640	0.5	3.1	170	7.3	33.8	5.3
					11.0		179	6.7	35.3	84
	W5	8/16/2007	41.45740	-73.43820	0.5	3.2	166	7.3	33.0	5.3
					11.0		178	6.7	35.3	110
Lillinonah	W1	8/9/2007	41.46934	-73.30868	0.5	1.4	158	9.1	49.5	4.5
					13.0		207	7.3	60.8	13
	W2	7/19/2007	41.54138	-73.40301	3	1.0	ND*	ND	ND	ND
	W3	7/27/2007	41.49610	-73.32719	7	1.3	ND	ND	ND	ND
Zoar	W1	9/21/2007	41.42965	-73.22067	0.5	1.1	280	7.2	67.5	27
					12.0		284	7.2	69.0	28
	W2	9/21/2007	41.38752	-73.17851	0.5	2.0	281	7.0	58.5	26
					11.0		279	7.2	63.8	27
	W3	9/21/2007	41.45276	-73.27915	0.5	1.9	305	6.8	58.5	26
					10.0		306	7.1	65.3	27

*Not determined

unoccupied. Lake Zoar has the least unoccupied habitat (< 25%) but also the greatest proportion of the littoral zone containing invasive and native plants. Using this information, the potential for future spread of invasive plants is most acute in Candlewood Lake followed by Lake Lillinonah and then Lake Zoar.

Comparisons of Water Chemistry

Water chemistry can affect the type and abundance of plant species in lakes. For instance *M. spicatum, P. crispus* and *N. minor* are most common in water bodies in the western Connecticut that have moderate to high alkalinity (CAES IAPP, 2007, Capers et al. 2005). Less is known about the water chemistry preferences of *M. quadrifolia* as it has been found in only a few water bodies statewide. Because water chemistry changes during the year and our samples came from only one day, our results (Table 4) may not be representative of the overall water quality. Candlewood had a transparency of near 3 meters which is considerably clearer than Lillinonah (1.0–1.4 m) or Zoar (1.1-2.0 m). The transparency of Candlewood was considerably lower in late June (data not shown) when our first attempt to survey invasive aquatic plants was halted due to high winds and poor water clarity. The conductivity of the lake water increased from one lake to another in a downstream fashion. Candlewood exhibited the lowest conductivity (166-193 *u*s/cm) compared to 158-207 *u*s/cm for Lillinonah and 279-306 us/cm for Zoar. Conductivity is an indicator of overall dissolved ions which can come from natural sources, man-made nutrients (fertilizers, septic systems etc.), aerial deposition and road salt. There was little difference in conductivity between surface and bottoms samples. In the early 1990's the conductivity of Candlewood Lake ranged between 176 and 187 *u*s/cm (Canavan and Siver, 1995) indicating little change has occurred.

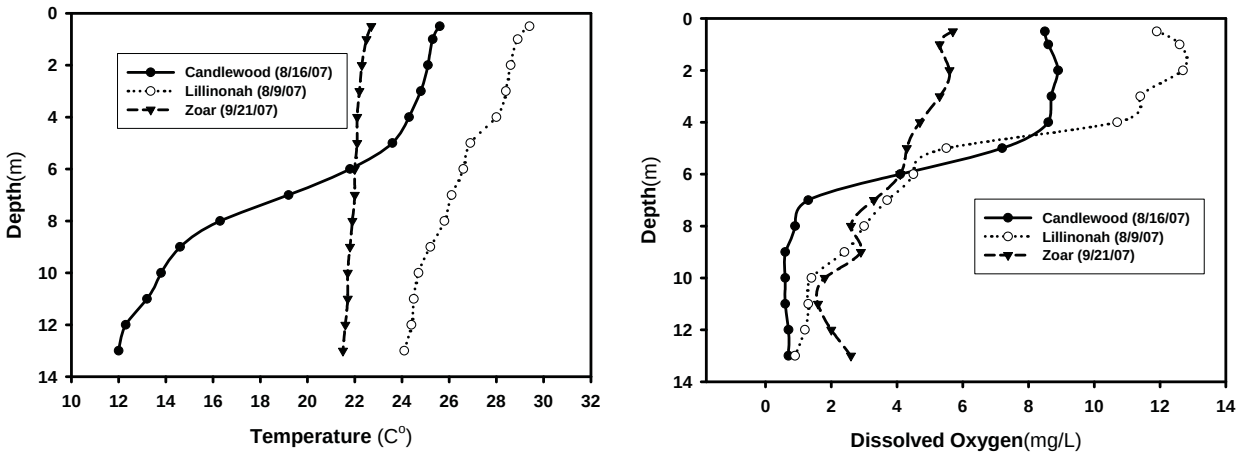


Figure 7. Temperature (left) and dissolved oxygen (right) profiles of Lakes Candlewood, Lillinonah and Zoar.

The pH of all lakes was near neutral (pH 7.0) with the exception of the surface sample from Lillinonah that had a pH of 9.1. The high pH was probably caused by mid-day removal of carbonic acid by actively photosynthesizing algae and not an indicator of lakes pH at other times (Wetzel, 2001). Alkalinity is generally considered a better indicator than pH for determining the potential for a lake to acidify because it is a measure of the waters buffering capacity. Candlewood Lake had the lowest alkalinity of the three lakes (28.5-39.8 mg/L $CaCO_3$) compared to 49.5-60.8 mg/L for Lillinonah and 58.5-69.0 mg/L for Zoar. Alkalinities in Connecticut lakes range from near 0 to greater than 100 mg/L $CaCO_3$ (CAES IAPP, 2007, Canavan and Siver, 1995, Frink and Norvell, 1983). The alkalinities found in Candlewood, Lillinonah and Zoar would be considered in the medium to medium-high portion of this range and capable of supporting healthy populations of *M. spicatum* and *P. crispus*.

Phosphorus (P) concentrations are considered a prime indicator of a lakes ability to support algae and are a key indicator of a lakes trophic sate (Wetzel, 2001). Rooted macrophytes are considered less dependent on P from the water column as they obtain a majority of their nutrients from the hydrosoil (Bristow, 1971). Lakes with P levels between 0 and 10 *u*g/L are considered nutrient poor or oligotrophic. When P concentrations reach 15-25 *ug*/L lakes are classified as moderately fertile or mesotrophic and when P levels reach 30-50 they are deemed fertile or eutrophic (Frink and Norvell, 1983). P concentrations in Candlewood Lake were depth dependent. Surface water had a very low mean P level of 7.2 *ug*/L while bottom water had a very high mean P concentration of 67.2 *ug*/L (Table 4). This partitioning of P between the epilimnion (surface) and hypolimnion (bottom) is common in the summer as anoxic conditions near the bottom (Figure 5, left) release P from the sediment (Norvell, 1974). The water soluble P has difficulty mixing upwards because of temperature related differences (Figure 5, right) in water density. Lake Lillinonah had low P concentrations at both the surface and near the bottom. These low levels of P are difficult to explain considering the algae in the water and previous testing showing P levels from 22 - 119 *ug*/L (Frink and Norvell, 1984). Sometimes aquatic vegetation effectively strips lakes of P in midsummer as vegetation utilizes nutrients that are not replenished by inflow or subsurface mixing. Lake Zoar had P concentrations from 26-28 *ug*/L with little difference between the

Table 7. On-lake survey timeline for Candlewood, Lillinonah, and Zoar in 2007.

Candlewood (Lead surveyor)	**Lillinonah** (Lead surveyor)	**Zoar** (Lead surveyor)
6/20/2007 (Bugbee)	7/9/2007(Selsky)	8/13/2007(Selsky)
6/21/2007(Bugbee)	7/10/2007(Selsky)	8/14/2007(Selsky)
7/12/2007(Bugbee)	7/12/2007(Selsky)	8/15/2007(Selsky)
7/16/2007(Bugbee)	7/13/2007(Selsky)	8/20/2007(Selsky)
7/17/2007(Bugbee)	7/16/2007(Selsky)	8/21/2007(Selsky)
7/19/2007(Bugbee)	7/24/2007(Selsky)	8/24/2007(Selsky)
7/24/2007(Bugbee)	7/26/2007(Selsky)	8/27/2007(Selsky)
7/26/2007(Bugbee)	7/27/2007(Selsky)	8/28/2007(Selsky)
7/27/2007(Bugbee)	8/6/2007(Selsky)	8/29/2007(Selsky)
8/2/2007(Bugbee)	8/7/2007(Selsky)	8/30/2007(Selsky)
8/3/2007(Bugbee)	7/17/2007(Selsky)	9/4/2007(Selsky)
8/5/2007(Bugbee)	7/19/2007(Selsky)	9/5/2007(Selsky)
8/7/2007(Bugbee)	8/9/2007(Selsky)	9/6/2007(Selsky)
8/9/2007(Bugbee)	8/10/2007(Selsky)	9/10/2007(Selsky)
8/11/2007(Bugbee)		9/13/2007(Selsky)
8/15/2007(Bugbee)		9/14/2007(Selsky)
8/16/2007(Bugbee)		9/19/2007(Selsky)
		9/20/2007(Selsky)
		9/21/2007(Selsky)
17 days	**14 days**	**19 days**

surface and bottom water. The similarities between surface and bottom water are probably because the samples were taken later in the season when thermal stratification is reduced or because of mixing by currents associated with hydroelectric generating activities. The small difference in temperature with depth in Lake Zoar (Figure 5, right) also indicates a well mixed water column.

Future Considerations:

Invasive aquatic plant surveys

Annual surveys of relatively large lakes with extensive shorelines and associated littoral zones, such as Candlewood, Lillinonah and Zoar require a considerable commitment. Two teams of experienced surveyors from CAES IAPP required 25 days or 700 worker hours (25 days X 7 hours/day X 4 workers) to complete the task (Table 7). Surveyors require appropriate boats, motors, trailers and tow vehicles, as well as state of the art global positioning systems. Off-lake duties such as data analysis, mapping with geographic information systems (GIS), water analysis and report preparation could double or triple the time necessary to complete a final report. FERC currently does not require a survey of native vegetation. Although this should reduce the on-lake time, it probably will not make a major difference as invasive species are the dominant plants in all three lakes. Information on native vegetation when combined with invasive plant data gives a better assessment of the effects of the invasive plants on the overall plant community. FERC also does not require the transects that took one survey team approximately two days for Lillinonah and another two days for Zoar. The 2005 transects on Candlewood Lake took three CAES IAPP

survey teams four days. Of the survey techniques used here, the transects provide the best quantitative information on plant species dynamics. Future surveys could use a smaller number of transects situated in key locations to monitor the plant community.

Lengthening the survey interval from yearly to every other year or longer could reduce the expenditures needed to monitor the invasive aquatic plants. For Candlewood Lake this could be problematic as the current milfoil management program is based on winter drawdowns that vary in depth and favorable weather conditions each year. Information on the effectiveness of each year's drawdown is critical to planning future drawdowns and annual surveys are needed to provide comparative data. More detailed information on the relations of the winter drawdown on the control of *M. spicatum, N. minor* and *P. crispus*, as well as, how the drawdown is influencing the partitioning of sediment at various lake depths is also important. Annual surveys for Candlewood Lake are suggested to accomplish these goals. The need to survey Lakes Lillinonah and Zoar annually may be less critical as the plant populations have likely adjusted to the water level and flow variability caused by weather and hydroelectric generating practices. The primary milfoil control technique being utilized is mechanical harvesting, which is unlikely to decrease the overall population of *M. spicatum* from year to year. Lengthening the survey interval for Lillinonah and Zoar could provide a more efficient means of monitoring invasive plants.

Surveys using remote sensing techniques could provide an answer to the large commitment of annual on-lake surveys. A CAES remote sensing feasibility study will follow this report as put forth in the 2007 CAES-FirstLight Power Resources invasive species monitoring agreement.

Invasive aquatic plant management

Managing invasive aquatic vegetation, particularly in large lakes, is challenging. Large numbers of stakeholders from multiple towns often make developing a strategy difficult. The costs for managing large acreages of unwanted vegetation can be prohibitively high. In addition to reducing the influx of nutrients from the watershed, management options fall into four broad categories (Getsinger, 2005): 1) mechanical – harvesting and hydroraking; 2) physical – drawdown, dredging, and benthic barriers; 3) chemical – herbicides; 4) biological – grass carp, milfoil weevil etc. many of these techniques are possible alternatives to the Candlewood Lake drawdown described in detail by Tarsi (2006). An overview of management options with special emphasis on the information garnered in this report will be discussed here.

Reducing nutrients:

Limiting nutrients reaching the lakes may reduce the abundance of invasive species. *M. spicatum* populations have been linked to nutrient enriched lakes (CAES, 2007). Activities that reduce the forested area in the watershed will increase the export of nutrient to lakes. Norvell et al (1979) developed phosphorus export coefficients for various land uses. Annual export of P from urban, agricultural and wooded land was determined to be 1.52, 0.48 and 0.09 lb/A respectively. Prime sources of nutrients from a watershed are septic systems, fertilizer and runoff from paved areas. Frink (1971) estimated that the annual input of P to Candlewood Lake was 9980 pounds per annum with 54 percent coming from the watershed and the remainder coming from the Housatonic River. Shoreline management plans

(SMP's), open space protection, public education and sensitive planning and zoning can help assure development proceeds in a manner to that limits adverse affects on lakes. The Candlewood Lake Focus Group's – Management and Planning Guide for Candlewood Lake (2005) is an example of an effort draw up practices that can be utilized to reduce nutrient influx. Similar plans could be beneficial for Lakes Lillinonah and Zoar.

Mechanical control:

Harvesting cuts plants above the sediment while hydroraking attempts to remove the roots as well. Hydroraking is more efficient at removing the roots of plants with strong rhizomes, such as water lily, and typically is not utilized to *control M. spicatum, N. minor* or *P. crispus*. Harvesting is currently providing temporary control of *M. spicatum* in Lake Zoar. The longer term effects of annual harvesting are a gradual reduction but not elimination in *M. spicatum* with little or no reduction in water column P (Wetzel, 2005). We observed localized harvesting with hand rakes in Candlewood but could not find evidence of the procedure being done on a larger scale. Because much of the *M. spicatum* in Candlewood is in narrow bands at the 3-5 m contour it could easily be harvested if the machinery is capable of operating at sufficient depth. Annual harvesting might deplete the rootzone of key nutrients but studies suggest this is minimal (Wetzel, 2005). Harvesting *P. crispus* prior to turion formation in the spring has been shown to offer some control (McComas and Stuckert, 2000), however, studies on the effects of harvesting on *N. minor* are lacking. Because large areas of *N. minor* are in water less than 1 m deep, only hand harvesting is feasible.

Physical control:

The Candlewood Lake drawdown and its effects on the invasive plant population have been discussed in some detail in previous sections of this report. This study and a previous study by Siver et al. (1986) suggest the Candlewood Lake drawdown is a relatively effective means of controlling *M. spicatum*. Unfortunately, large acreages of *M. spicatum* occur at a depth of 3-5 m which is beyond the deepest drawdown to date. The logistics of a drawdown to the 5 m depth is beyond the scope of this report but if possible could considerably reduce the total acreage of *M. spicatum*. The possibility of drawdowns for Lake's Lillinonah and Zoar were not investigated but the effects would be expected to be similar to Candlewood with the possible exception of greater sidewall erosion because of stronger currents. Sediment removal by dredging would have to create depths of over 5 m to retard the growth of invasive plants in Candlewood Lake and over 3 m in lakes Lillinonah and Zoar. Because the invasives in all three lakes grow well in sandy substrate, the removal of silt and muck alone will probably not provide control. Benthic barriers (sediment covers) are likely practical only in small areas such as private beaches or docks.

Chemical control:

Invasive aquatic plant control with herbicides can provide short to mid-term control. Unlike smaller lakes and ponds, where "whole lake" herbicide treatments are practical, larger lakes are best suited to localized or "spot" treatments. Currents or dilution reduces the effectiveness of spot treatments when small areas (< 5 acres) are treated. The areas best suited to herbicide application will be quiescent coves while the least suited are the lines of invasive plants that are common along the sidewall contours of all three lakes. None of the lakes have acreages of invasive plants that are prohibitively large but because small areas of plants are difficult to treat individually the actual area requiring treatment becomes exten-

sive. Some herbicides such as 2, 4-D and triclopyr are systemic (move throughout the plant and the kill roots) and are selective to on dicotyledonous plants. Others such as fluridone are systemic and selective based on the concentration used. Diquat and endothall are fast acting contact herbicides that are contact kill only the plants parts exposed). Then can be somewhat selective based when they are applied. Usually some adverse effects on native plants can be anticipated. CAES has tested spot treatments of *M. spicatum* with 2, 4-D, fluridone and diquat with varying degrees of success (Bugbee and White, 2002, 2003). A test in 2007 on Crystal Lake, in Middletown, found an April application of Diquat (normally applied in July) provided 100 percent control of *M. spicatum* when surveyed the following September (unpublished data). The reason for this result is unknown and further testing on other lakes is needed.

Biological control:

Biological control is the use of one organism to limit the abundance of another organism. Organisms that feed on invasive plants can provide the long-term control that typically occurs in the plants native range. Organisms such as insects, fish, and microbes are the most likely candidates for biological control agents. It can involve the importation of an organism from the nuisance plants native range or the use of a native organism. The milfoil weevil (*Euhrychiopsis lecontei)* appears to be the most promising biological control agent for *M. spicatum.* CAES IAPP has spent considerable effort in studying this aquatic insect. The milfoil weevil is a native insect that feeds on many species of watermilfoils and can reduce the populations of *M. spicatum* (Newman 2004). Candlewood Lake was inspected for the presence of the milfoil weevil and other invertebrates known to damage Eurasian watermilfoil. Five transects in the northwest arm of Candlewood Lake were sampled. Eight watermilfoil stems (0.5 m) were collected at each of five evenly spaced stations along each transect for a total of 200 stems. Watermilfoil stems were inspected using dissection microscopes or 3X magnifying light for evidence of *E. lecontei* (eggs, larvae, pupae, adults and larval damage). Evidence of larval damage was found on only one stem. However, surveys by employees at the Candlewood Lake Authority, under CAES IAPP direction, have verified that the milfoil weevil is present and likely located in several bays. Introductions of the milfoil weevil in Indian Lake, Sharon, CT are being monitored by CAES IAPP. Testing introductions of the milfoil weevil in Lakes Candlewood, Lillinonah and Zoar could provide valuable data on possible *M. spicatum* control with this insect.

An herbivorous fish called grass carp (*Ctenopharyngodon idella*) has been documented to control a variety of aquatic weeds (Cooke et al., 2005). Ball Pond, New Fairfield, CT has been stocked with grass carp for many years and control of *M. spicatum* is evident. Unfortunately no formal documentation is available. Grass carp must be sterile (triploid) and state permits are needed prior to introduction. All inlet and outlet streams must be screened to prevent dispersion. These restrictions make the use of grass carp in large impoundments difficult extremely difficult and impractical in lakes like Candlewood, Lillinonah and Zoar.

Conclusions:

Plant communities in lakes Candlewood, Lillinonah and Zoar are similar. All have between 15 and 18 total plant species with the dominate plants being invasives. The invasive plants in the three lakes are *M. spicatum, N. minor* and *P. crispus* with a small population of *M. quadrifolia* that occurs only in Lake Zoar. *M. spicatum* is the invasive that covers the largest

area on all lakes followed by *N. minor* in Candlewood and Lillinonah. In Lake Zoar *N. minor* and *P. crispus* have nearly identical areas. Species richness (number of species in a lake) is one indicator of the overall health of a plant community. Capers et al. (2007) suggests lakes with high native species richness combined with high density may provide resistance to colonization by invasive species. When the native species density is low this affect diminishes. Lakes Candlewood, Lillinonah and Zoar fall in the middle for species richness when compared to other CT lakes and ponds surveyed by CAES IAPP (2007). Further spread of invasives will be limited by native plant resistance, areas of unoccupied habitat, nutrients and management practices. Prudent lake and watershed management is critical. Better documentation of the results of the current drawdown in Lake Candlewood and harvesting and herbicide treatments Lakes Lillinonah and Zoar is suggested. Investigations into novel invasive plant management techniques such as the milfoil weevil could also be helpful.

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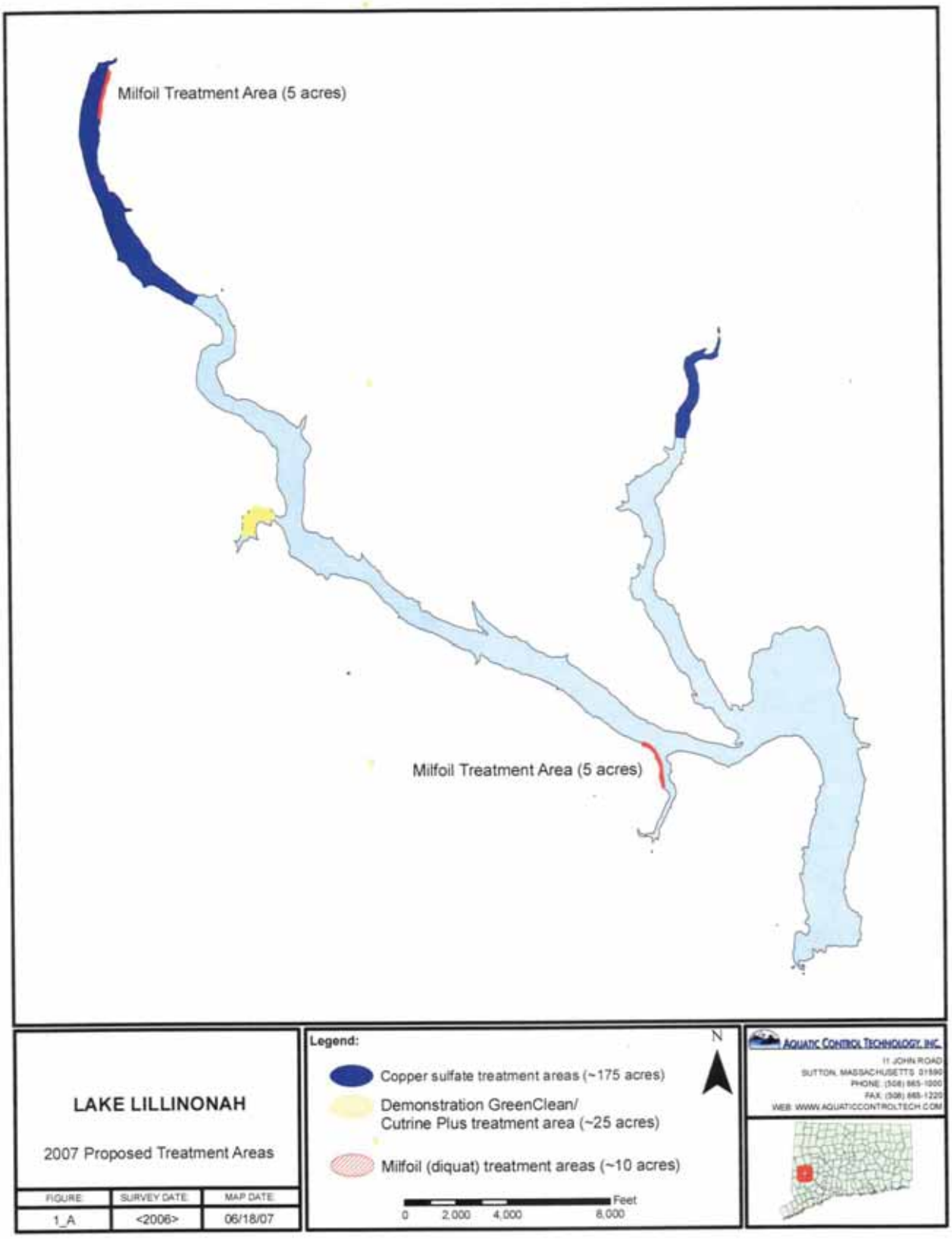
Appendix

Instructions for using GIS data (DVD included)

A GIS (geographic information systems) DVD has been included with this report. In order to view this data, load the data onto your computer and import into ESRI ArcGIS. If you do not have ArcGIS, download the ESRI ArcReader, free software that allows the user to view, navigate and print maps, from ESRI http://www.esri.com/software/arcgis/arcreader/about/features.html. To get base map data, such as lake bathymetry and roads, go to the Connecticut Department of Environmental Protection's (CT DEP) website where you can download data or order a CD.

Locations of Algaecide and Herbicide Treatments in Lake Lillinonah

(courtesy of Aquatic Control Technologies, Sutton, MA)


Milfoil Treatment Area (5 acres)
Milfoil Treatment Area (5 acres)
LAKE LILLINONAH
2007 Proposed Treatment Areas
FIGURE
1_A
SURVEY DATE
<2006>
MAP DATE
06/18/07
Legend:
Copper sulfate treatment areas (~175 acres)
Demonstration GreenClean/
Cutrine Plus treatment area (~25 acres)
Milfoil (diquat) treatment areas (~10 acres)
N
0
2,000
4,000
8,000
Feet
AQUATIC CONTROL TECHNOLOGY, INC.
11 JOHN ROAD
SUTTON, MASSACHUSETTS 01590
PHONE: (508) 865-1000
FAX: (508) 865-1220
WEB: WWW.AQUATICCONTROLTECH.COM

Water Level Data

(courtesy of FirstLight Power Resources, Hartford, CT)

Water surface elevation in Candlewood Lake 2007 (NGVD in feet)

	July				August				September			
Day	Mean	Median	Max.	Min.	Mean	Median	Max.	Min.	Mean	Median	Max.	Min.
1	425.8	425.8	425.8	425.7	426.5	426.5	426.6	426.3	425.5	425.5	425.5	425.4
2	425.8	425.9	425.9	425.8	426.2	426.3	426.3	426.0	425.5	425.5	425.5	425.4
3	425.9	425.9	426.0	425.9	426.0	426.0	426.1	425.9	425.5	425.5	425.5	425.4
4	426.0	426.0	426.2	425.9	425.9	425.9	425.9	425.9	425.4	425.4	425.5	425.4
5	426.2	426.2	426.3	426.1	425.9	425.9	425.9	425.9	425.4	425.4	425.5	425.4
6	426.4	426.3	426.7	426.3	425.9	425.9	425.9	425.8	425.4	425.4	425.5	425.4
7	426.4	426.4	426.5	426.4	425.8	425.8	425.9	425.8	425.4	425.4	425.4	425.4
8	426.5	426.5	426.5	426.4	425.7	425.8	425.9	425.5	425.4	425.4	425.4	425.4
9	426.5	426.5	426.5	426.4	425.5	425.5	425.6	425.5	425.4	425.4	425.4	425.4
10	426.3	426.4	426.4	426.2	425.6	425.7	425.7	425.5	425.4	425.4	425.4	425.4
11	426.2	426.2	426.3	426.2	425.8	425.8	425.8	425.7	425.4	425.4	425.4	425.3
12	426.2	426.3	426.3	426.2	425.8	425.8	425.8	425.7	425.4	425.4	425.4	425.4
13	426.3	426.3	426.3	426.2	425.8	425.8	425.8	425.7	425.4	425.4	425.4	425.4
14	426.4	426.4	426.4	426.3	425.8	425.8	425.8	425.8	425.4	425.4	425.5	425.4
15	426.4	426.4	426.5	426.4	425.8	425.8	425.8	425.8	425.4	425.4	425.5	425.4
16	426.4	426.4	426.5	426.4	425.8	425.8	425.8	425.7	425.4	425.4	425.5	425.4
17	426.4	426.4	426.5	426.3	425.7	425.7	425.7	425.7	425.4	425.4	425.4	425.4
18	426.4	426.4	426.4	426.3	425.7	425.7	425.7	425.7	425.4	425.4	425.4	425.3
19	426.4	426.4	426.4	426.3	425.7	425.7	425.7	425.7	425.4	425.4	425.4	425.3
20	426.4	426.4	426.4	426.4	425.7	425.7	425.7	425.6	425.4	425.4	425.4	425.3
21	426.4	426.4	426.4	426.4	425.7	425.7	425.8	425.6	425.3	425.3	425.4	425.3
22	426.4	426.4	426.4	426.4	425.7	425.7	425.8	425.7	425.3	425.3	425.4	425.3
23	426.5	426.5	426.6	426.4	425.7	425.7	425.8	425.7	425.3	425.3	425.4	425.3
24	426.6	426.6	426.6	426.5	425.7	425.7	425.8	425.7	425.3	425.3	425.4	425.3
25	426.6	426.6	426.6	426.5	425.7	425.7	425.7	425.7	425.3	425.3	425.3	425.3
26	426.5	426.5	426.6	426.5	425.7	425.7	425.7	425.6	425.3	425.3	425.3	425.3
27	426.5	426.5	426.6	426.5	425.6	425.6	425.7	425.5	425.3	425.3	425.3	425.3
28	426.5	426.5	426.6	426.5	425.6	425.6	425.6	425.5	425.3	425.3	425.3	425.3
29	426.5	426.5	426.6	426.4	425.5	425.5	425.6	425.5	425.3	425.3	425.3	425.2
30	426.6	426.6	426.7	426.6	425.5	425.5	425.6	425.5	425.3	425.3	425.3	425.2
31	426.6	426.6	426.6	426.1	425.5	425.5	425.5	425.5				

Water surface elevations in Lake Lillinonah at Shepaug Dam 2007 (NGVD in feet)

	July				August				September			
Day	Mean	Median	Max.	Min.	Mean	Median	Max.	Min.	Mean	Median	Max.	Min.
1	195.4	195.5	195.6	195.2	195.8	195.9	196.2	195.3	195.4	195.4	195.5	195.2
2	195.3	195.4	195.5	195.1	195.6	195.8	196.0	195.1	195.3	195.4	195.5	195.2
3	195.2	195.2	195.4	194.9	195.3	195.5	195.7	194.7	195.1	195.3	195.4	194.7
4	195.0	195.1	195.1	194.8	194.9	195.0	195.1	194.5	194.8	194.9	195.0	194.7
5	195.1	195.1	195.4	194.7	194.9	194.9	195.1	194.7	194.8	194.8	194.9	194.6
6	195.2	195.3	195.9	194.5	195.3	195.3	195.4	195.1	194.7	194.7	194.8	194.5
7	195.2	195.2	195.6	194.8	195.2	195.4	195.6	194.7	194.6	194.6	194.7	194.4
8	195.3	195.4	195.7	194.9	194.7	194.8	195.1	194.1	194.4	194.4	194.6	194.3
9	195.1	195.3	195.6	194.4	194.7	194.7	194.9	194.4	194.4	194.4	194.5	194.2
10	194.7	194.8	195.1	194.1	194.7	194.7	195.2	194.3	194.3	194.2	194.5	194.1
11	194.5	194.6	194.9	194.1	195.1	195.1	195.4	194.7	194.4	194.4	194.5	194.3
12	194.8	194.7	195.6	194.3	195.6	195.7	195.8	195.4	194.5	194.5	194.7	194.4
13	195.6	195.7	196.2	194.8	195.9	195.9	196.2	195.6	194.8	194.8	194.9	194.6
14	195.1	195.1	195.4	194.9	195.8	195.8	196.0	195.5	195.0	195.0	195.2	194.9
15	195.4	195.3	195.8	195.1	195.7	195.7	195.9	195.3	195.2	195.2	195.3	195.0
16	195.9	195.9	196.2	195.4	195.6	195.6	195.8	195.2	195.2	195.2	195.4	195.0
17	195.5	195.7	196.0	194.8	195.5	195.6	195.8	195.0	195.2	195.2	195.4	195.0
18	194.9	195.0	195.3	194.5	195.3	195.3	195.5	195.1	195.2	195.2	195.3	195.0
19	194.8	194.8	195.2	194.3	195.4	195.4	195.5	195.2	195.1	195.2	195.3	194.9
20	195.1	195.0	195.6	194.7	195.3	195.4	195.5	195.0	195.1	195.1	195.2	194.9
21	195.2	195.2	195.7	194.7	195.2	195.2	195.4	195.1	195.0	194.9	195.1	194.7
22	195.1	195.1	195.4	194.7	195.5	195.5	195.7	195.3	194.9	194.8	195.0	194.7
23	195.1	195.1	195.4	194.7	195.7	195.7	195.8	195.5	194.8	194.8	195.0	194.6
24	195.2	195.2	195.6	194.9	195.7	195.7	195.9	195.4	194.8	194.8	194.9	194.6
25	195.3	195.3	195.6	194.8	195.4	195.6	195.7	194.9	194.8	194.8	194.9	194.6
26	195.1	195.2	195.6	194.5	195.1	195.1	195.3	194.9	194.7	194.8	194.9	194.4
27	194.6	194.8	195.0	194.2	195.3	195.3	195.5	195.2	194.5	194.5	194.6	194.4
28	194.7	194.7	195.1	194.4	195.6	195.6	195.8	195.5	194.5	194.5	194.6	194.4
29	195.5	195.5	195.9	195.1	195.5	195.6	195.8	195.2	194.5	194.5	194.6	194.3
30	195.8	195.8	196.3	195.3	195.4	195.4	195.5	195.2	194.3	194.4	194.5	194.1
31	195.9	195.9	196.2	195.5	195.4	195.4	195.5	195.2				

Water surface elevations in Lake Zoar at Stevenson Dam 2007 (NGVD in feet).

	July, 2007				August, 2007				September, 2007			
Day	Mean	Median	Max.	Min.	Mean	Median	Max.	Min.	Mean	Median	Max.	Min.
1	100.6	100.6	101.1	100.3	100.5	100.4	101.1	100.1	100.3	100.3	100.7	100.0
2	100.5	100.5	100.9	100.2	100.7	100.7	101.2	100.3	100.2	100.2	100.6	99.9
3	100.5	100.4	101.1	100.2	100.6	100.5	101.2	100.1	100.3	100.1	101.1	99.8
4	100.6	100.6	101.0	100.3	100.7	100.7	101.3	100.3	100.6	100.6	101.0	100.3
5	100.7	100.7	101.1	100.3	100.5	100.5	100.8	100.2	100.5	100.5	101.0	100.3
6	100.8	100.9	101.1	99.9	100.1	100.1	100.6	99.9	100.6	100.5	101.0	100.3
7	100.6	100.7	101.1	100.1	100.2	100.1	100.7	99.8	100.6	100.6	101.0	100.3
8	100.4	100.5	100.8	100.0	100.4	100.3	101.1	100.1	100.7	100.7	101.1	100.4
9	100.3	100.2	100.9	99.8	100.6	100.4	101.4	100.1	100.6	100.6	101.1	100.4
10	100.6	100.5	101.2	100.1	100.9	100.8	101.4	100.4	100.7	100.8	101.3	100.3
11	100.5	100.5	100.8	100.0	101.0	101.0	101.4	100.8	100.5	100.5	100.6	100.3
12	100.2	100.2	100.7	99.9	101.0	101.0	101.4	100.8	100.4	100.3	100.6	100.1
13	100.3	100.2	100.9	99.8	100.8	100.8	101.1	100.3	100.4	100.4	100.7	100.1
14	100.4	100.4	100.7	100.1	100.4	100.4	100.7	99.9	100.2	100.2	100.5	99.9
15	100.2	100.2	100.6	99.9	100.2	100.0	100.9	99.7	100.2	100.1	100.7	99.9
16	100.2	100.2	100.7	99.9	100.5	100.4	101.3	100.1	100.2	100.2	100.6	99.9
17	100.3	100.2	101.0	99.9	100.6	100.7	101.0	99.8	100.3	100.2	100.7	99.9
18	100.5	100.5	100.9	100.1	100.4	100.4	100.8	100.1	100.3	100.3	100.6	100.0
19	100.6	100.4	101.3	100.1	100.3	100.3	100.8	100.0	100.2	100.2	100.7	99.9
20	101.0	101.0	101.3	100.3	100.6	100.4	101.3	100.1	100.2	100.2	100.6	99.9
21	100.8	100.8	101.2	100.3	100.9	100.8	101.3	100.6	100.3	100.3	100.8	99.9
22	100.6	100.6	100.9	100.1	100.9	100.9	101.3	100.6	100.3	100.3	100.7	100.1
23	100.5	100.4	101.0	100.1	100.8	100.8	101.2	100.6	100.3	100.3	100.7	100.0
24	100.7	100.6	101.3	100.4	100.5	100.6	100.8	100.1	100.1	100.1	100.5	99.9
25	100.7	100.7	101.0	100.3	100.4	100.2	101.1	99.9	100.0	100.0	100.4	99.8
26	100.6	100.6	101.2	100.2	100.6	100.6	101.0	100.3	100.1	99.9	100.7	99.7
27	100.7	100.7	101.2	100.4	100.5	100.5	100.9	100.2	100.2	100.2	100.7	100.1
28	100.7	100.7	101.2	100.5	100.4	100.4	100.8	100.1	100.2	100.2	100.6	100.0
29	100.9	100.9	101.4	100.6	100.5	100.3	101.3	100.0	100.2	100.1	100.6	99.9
30	100.9	100.9	101.2	100.4	100.6	100.6	101.0	100.4	100.2	100.2	100.7	100.0
31	100.6	100.6	100.9	100.2	100.4	100.4	100.8	100.2				

Invasive Aquatic Plant Location Data

Appendix. Candlewood Lake invasive plant location data (1 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
8	MyrSpi		Patch	7/12/2007	01:00:56pm	41.49277	-73.45792	1-3	4	0.2312
9	MyrSpi		Patch	7/12/2007	01:05:39pm	41.49143	-73.45851	1-3	5	0.5468
10	MyrSpi		Patch	7/12/2007	01:08:03pm	41.49211	-73.45852	1-3	4	0.1972
11	MyrSpi		Patch	7/12/2007	01:13:03pm	41.48902	-73.45907	3-5	5	0.0052
12	MyrSpi		Patch	7/12/2007	01:21:45pm	41.48585	-73.45946	0-1	1	0.0003
13	MyrSpi		Patch	7/12/2007	01:25:37pm	41.48667	-73.45946	1-3	3	0.0591
14	MyrSpi		Patch	7/12/2007	01:31:35pm	41.48783	-73.46230	1-3	4	0.1252
15	MyrSpi		Patch	7/12/2007	01:40:27pm	41.49114	-73.46591	3-5	5	0.0630
16	MyrSpi		Patch	7/12/2007	01:44:01pm	41.49200	-73.46646	3-5	4	0.0033
17	MyrSpi		Patch	7/12/2007	01:48:28pm	41.49629	-73.46879	3-5	3	0.0024
18	MyrSpi		Patch	7/12/2007	01:54:11pm	41.50034	-73.46921	1-3	1	0.5407
19	MyrSpi		Patch	7/12/2007	01:57:53pm	41.49852	-73.46830	1-3	4	0.0672
20	MyrSpi		Patch	7/12/2007	02:04:04pm	41.49808	-73.46866	3-5	3	0.0267
21	MyrSpi		Patch	7/12/2007	02:08:54pm	41.49664	-73.46800	3-5	4	0.0153
22	MyrSpi		Patch	7/12/2007	02:11:32pm	41.49600	-73.46727	3-5	4	0.0856
23	MyrSpi		Patch	7/12/2007	02:14:44pm	41.49564	-73.46659	3-5	4	0.0627
24	MyrSpi		Patch	7/12/2007	02:17:28pm	41.49635	-73.46326	3-5	4	0.2482
25	MyrSpi		Patch	7/12/2007	02:27:30pm	41.49905	-73.46353	3-5	4	0.1215
26	MyrSpi		Patch	7/12/2007	02:33:13pm	41.50157	-73.46434	3-5	4	0.1646
27	MyrSpi		Patch	7/12/2007	02:38:47pm	41.50350	-73.46528	3-5	4	1.5123
28	MyrSpi		Patch	7/12/2007	02:43:09pm	41.50564	-73.46638	3-5	5	0.5754
29	MyrSpi		Patch	7/12/2007	02:48:17pm	41.50734	-73.46785	3-5	4	0.2072
30	MyrSpi		Patch	7/12/2007	02:56:10pm	41.50989	-73.47010	3-5	4	0.1141
31	MyrSpi		Patch	7/12/2007	03:01:14pm	41.51018	-73.46931	3-5	2	0.4768
32	MyrSpi		Patch	7/12/2007	03:04:03pm	41.50923	-73.46804	3-5	4	0.0693
33	MyrSpi		Patch	7/12/2007	03:08:50pm	41.50692	-73.46517	3-5	4	0.0122
34	MyrSpi		Patch	7/12/2007	03:13:56pm	41.50422	-73.46226	3-5	4	0.5703
35	MyrSpi		Patch	7/12/2007	03:15:38pm	41.50310	-73.46151	3-5	4	1.8521
36	MyrSpi		Patch	7/12/2007	03:18:14pm	41.50258	-73.46094	3-5	4	0.0573
37	MyrSpi		Patch	7/12/2007	03:20:29pm	41.50242	-73.45978	3-5	2	0.4970
0	MyrSpi		Patch	7/12/2007	11:43:58am	41.44787	-73.43038	1-3	2	0.0677
1	MyrSpi		Patch	7/12/2007	12:01:58pm	41.46267	-73.44534	3-5	5	0.0015
2	MyrSpi		Patch	7/12/2007	12:12:32pm	41.46781	-73.44690	3-5	5	0.0061
3	MyrSpi		Patch	7/12/2007	12:21:48pm	41.46952	-73.44865	3-5	5	0.3758
4	MyrSpi		Patch	7/12/2007	12:23:59pm	41.47012	-73.44907	3-5	5	0.0627
5	MyrSpi		Patch	7/12/2007	12:29:09pm	41.47081	-73.45001	1-3	5	0.7230
6	MyrSpi		Patch	7/12/2007	12:48:19pm	41.49114	-73.45403	3-5	5	0.6383
7	MyrSpi		Patch	7/12/2007	12:51:47pm	41.49227	-73.45597	3-5	5	0.2115
56	MyrSpi		Patch	7/16/2007	01:07:50pm	41.48354	-73.45941	3-5	4	12.3680
57	MyrSpi		Patch	7/16/2007	01:12:47pm	41.48315	-73.45994	3-5	4	0.0290
58	MyrSpi		Patch	7/16/2007	01:21:41pm	41.48040	-73.46192	3-5	4	0.3057
59	MyrSpi		Patch	7/16/2007	01:27:51pm	41.47835	-73.46147	3-5	3	0.3256
60	MyrSpi		Patch	7/16/2007	01:32:20pm	41.47664	-73.46089	3-5	4	0.1160
61	MyrSpi		Patch	7/16/2007	01:34:46pm	41.47585	-73.46100	3-5	4	0.0262
62	MyrSpi		Patch	7/16/2007	01:37:07pm	41.47571	-73.46153	3-5	3	0.0055

Appendix. Candlewood Lake invasive plant location data (2 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
63	MyrSpi	depth 0.5-5m in cove	Patch	7/16/2007	01:40:44pm	41.47563	-73.46139	1-3	3	0.0816
64	MyrSpi		Patch	7/16/2007	01:53:22pm	41.46988	-73.45742	3-5	4	0.1132
65	MyrSpi		Patch	7/16/2007	02:02:49pm	41.46886	-73.45566	3-5	4	0.0540
66	MyrSpi		Patch	7/16/2007	02:14:47pm	41.46787	-73.45844	3-5	4	0.0190
67	MyrSpi		Patch	7/16/2007	02:22:33pm	41.46418	-73.46209	3-5	1	0.0996
68	MyrSpi		Patch	7/16/2007	02:27:43pm	41.46479	-73.45997	3-5	2	0.0376
69	MyrSpi		Patch	7/16/2007	02:30:39pm	41.46508	-73.45938	3-5	2	0.0227
70	MyrSpi		Patch	7/16/2007	02:33:28pm	41.46555	-73.45903	3-5	1	0.0505
71	MyrSpi		Patch	7/16/2007	02:35:21pm	41.46587	-73.45838	3-5	2	0.2864
38	MyrSpi		Patch	7/16/2007	10:10:41am	41.46208	-73.44603	3-5	4	0.0445
39	MyrSpi		Patch	7/16/2007	10:13:23am	41.46248	-73.44640	3-5	4	1.0675
40	MyrSpi		Patch	7/16/2007	10:18:20am	41.46350	-73.44729	3-5	5	0.1166
41	MyrSpi		Patch	7/16/2007	10:31:00am	41.46539	-73.44862	3-5	4	0.0343
42	MyrSpi		Patch	7/16/2007	10:37:17am	41.46721	-73.44997	3-5	4	0.0496
43	MyrSpi		Patch	7/16/2007	10:45:34am	41.46868	-73.45038	3-5	4	0.3909
44	MyrSpi		Patch	7/16/2007	11:10:12am	41.46970	-73.45075	3-5	4	0.0929
45	MyrSpi		Patch	7/16/2007	11:13:08am	41.47009	-73.45096	3-5	4	0.0210
46	MyrSpi		Patch	7/16/2007	11:18:33am	41.47107	-73.45162	3-5	5	0.1516
47	MyrSpi		Patch	7/16/2007	11:25:23am	41.47300	-73.45277	3-5	4	0.2552
48	MyrSpi		Patch	7/16/2007	11:28:52am	41.47449	-73.45323	3-5	4	0.2328
49	MyrSpi		Patch	7/16/2007	11:31:06am	41.47495	-73.45339	5-7	3	0.1150
50	MyrSpi		Patch	7/16/2007	11:35:41am	41.47593	-73.45445	3-5	4	0.1945
51	MyrSpi		Patch	7/16/2007	11:40:35am	41.47722	-73.45538	3-5	4	0.0437
52	MyrSpi		Patch	7/16/2007	11:47:28am	41.47925	-73.45680	3-5	4	2.2005
53	MyrSpi		Patch	7/16/2007	11:53:20am	41.48096	-73.45759	3-5	4	1.4166
54	MyrSpi		Patch	7/16/2007	12:01:03pm	41.48386	-73.45885	3-5	4	6.8541
55	NajMin	cottonwood Cove marina,spi between dock,note actx	Patch	7/16/2007	12:58:36pm	41.48518	-73.45970	0-1	2	0.8941
90	MyrSpi		Patch	7/17/2007	01:03:37pm	41.43900	-73.45420	3-5	4	0.8141
91	MyrSpi		Patch	7/17/2007	01:11:21pm	41.43565	-73.45464	3-5	4	0.1022
92	MyrSpi		Patch	7/17/2007	01:14:18pm	41.43452	-73.45431	3-5	4	0.1034
93	MyrSpi		Patch	7/17/2007	01:19:08pm	41.43351	-73.45414	3-5	3	0.1879
94	MyrSpi		Patch	7/17/2007	01:23:47pm	41.43144	-73.45353	3-5	1	0.6370
95	MyrSpi		Patch	7/17/2007	01:26:58pm	41.43057	-73.45339	3-5	4	0.5555
96	MyrSpi		Patch	7/17/2007	01:31:50pm	41.42993	-73.45315	3-5	4	0.1603
97	MyrSpi		Patch	7/17/2007	01:38:08pm	41.42875	-73.45338	3-5	2	0.0270
98	MyrSpi		Patch	7/17/2007	01:43:38pm	41.42673	-73.45231	3-5	4	0.2239
99	MyrSpi		Patch	7/17/2007	02:23:15pm	41.42934	-73.45512	3-5	4	2.9078
72	MyrSpi		Patch	7/17/2007	10:56:39am	41.45334	-73.43696	3-5	4	0.0834
73	MyrSpi		Patch	7/17/2007	11:17:08am	41.45667	-73.44125	3-5	3	0.3347
74	MyrSpi		Patch	7/17/2007	11:26:31am	41.45824	-73.44273	3-5	2	0.0694
75	MyrSpi		Patch	7/17/2007	11:31:06am	41.45893	-73.44387	3-5	4	1.6524
76	MyrSpi		Patch	7/17/2007	11:39:01am	41.45675	-73.44457	3-5	1	0.1795
77	MyrSpi		Patch	7/17/2007	11:42:40am	41.45531	-73.44429	3-5	3	0.5778
78	MyrSpi		Patch	7/17/2007	11:46:25am	41.45451	-73.44426	3-5	3	0.1394
79	MyrSpi		Patch	7/17/2007	11:49:59am	41.45247	-73.44475	3-5	3	0.2553

Appendix. Candlewood Lake invasive plant location data (3 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
80	MyrSpi		Patch	7/17/2007	11:51:44am	41.45107	-73.44533	3-5	3	0.5705
81	MyrSpi		Patch	7/17/2007	11:55:02am	41.45098	-73.44581	3-5	4	0.3051
82	MyrSpi		Patch	7/17/2007	12:26:04pm	41.44647	-73.44810	3-5	4	0.1240
83	MyrSpi		Patch	7/17/2007	12:32:29pm	41.44558	-73.44970	3-5	4	0.2106
84	MyrSpi		Patch	7/17/2007	12:42:13pm	41.44579	-73.45118	3-5	3	0.1920
85	MyrSpi		Patch	7/17/2007	12:47:48pm	41.44438	-73.45143	3-5	3	0.0819
86	MyrSpi		Patch	7/17/2007	12:50:21pm	41.44251	-73.45174	3-5	4	0.0418
87	MyrSpi		Patch	7/17/2007	12:54:09pm	41.44146	-73.45275	3-5	4	0.0370
88	MyrSpi		Patch	7/17/2007	12:56:26pm	41.44058	-73.45270	3-5	4	1.8935
89	MyrSpi		Patch	7/17/2007	12:59:34pm	41.43972	-73.45290	3-5	3	0.0476
129	MyrSpi		Patch	7/19/2007	01:19:05pm	41.45667	-73.45420	0-1	1	0.1003
130	NajMin		Patch	7/19/2007	01:22:13pm	41.45663	-73.45402	0-1	3	0.8437
131	MyrSpi		Patch	7/19/2007	01:24:52pm	41.45732	-73.45490	3-5	4	0.1167
132	MyrSpi		Patch	7/19/2007	01:34:25pm	41.46551	-73.45813	3-5	4	0.5303
100	MyrSpi		Patch	7/19/2007	10:32:31am	41.42768	-73.45674	3-5	4	0.1220
101	MyrSpi		Patch	7/19/2007	10:42:52am	41.42864	-73.45662	3-5	2	0.0925
102	MyrSpi		Patch	7/19/2007	10:47:14am	41.42828	-73.45435	3-5	3	0.2037
103	MyrSpi		Patch	7/19/2007	11:13:24am	41.42475	-73.45526	1-3	2	0.4338
104	MyrSpi		Patch	7/19/2007	11:16:23am	41.42454	-73.45532	1-3	1	0.0261
105	MyrSpi	0.5-5 meter depth	Patch	7/19/2007	11:18:34am	41.42387	-73.45435	3-5	2	0.0442
106	MyrSpi	0.5-5m depth	Patch	7/19/2007	11:22:02am	41.42375	-73.45361	0-1	2	0.1281
107	MyrSpi	0.5-5m depth	Patch	7/19/2007	11:24:54am	41.42442	-73.45406	1-3	3	0.6146
108	MyrSpi		Patch	7/19/2007	11:36:27am	41.42765	-73.45857	3-5	3	0.6158
109	MyrSpi		Patch	7/19/2007	11:41:08am	41.43014	-73.46019	3-5	4	0.3601
110	MyrSpi		Patch	7/19/2007	11:42:46am	41.43054	-73.46014	3-5	4	0.6327
111	MyrSpi		Patch	7/19/2007	11:45:12am	41.43124	-73.46017	3-5	4	0.1653
112	MyrSpi		Patch	7/19/2007	11:47:53am	41.43146	-73.46021	3-5	2	0.3527
113	MyrSpi		Patch	7/19/2007	11:49:45am	41.43212	-73.46000	3-5	3	0.2385
114	MyrSpi		Patch	7/19/2007	11:53:03am	41.43305	-73.45969	3-5	3	0.6100
115	MyrSpi		Patch	7/19/2007	11:56:07am	41.43382	-73.45943	3-5	3	0.1366
116	MyrSpi		Patch	7/19/2007	12:00:52pm	41.43858	-73.45883	3-5	3	0.0314
117	MyrSpi		Patch	7/19/2007	12:05:00pm	41.43924	-73.45836	3-5	4	0.0120
118	MyrSpi		Patch	7/19/2007	12:06:53pm	41.43952	-73.45822	3-5	3	1.7419
119	MyrSpi		Patch	7/19/2007	12:08:54pm	41.43994	-73.45803	3-5	3	2.0362
120	MyrSpi		Patch	7/19/2007	12:10:54pm	41.44043	-73.45778	3-5	2	0.3706
121	MyrSpi		Patch	7/19/2007	12:12:20pm	41.44085	-73.45750	3-5	4	0.3691
122	MyrSpi		Patch	7/19/2007	12:14:44pm	41.44172	-73.45718	3-5	2	0.1032
123	MyrSpi		Patch	7/19/2007	12:18:44pm	41.44377	-73.45553	3-5	3	0.0770
124	MyrSpi		Patch	7/19/2007	12:22:21pm	41.44581	-73.45459	3-5	2	0.0171
125	MyrSpi		Patch	7/19/2007	12:27:15pm	41.44888	-73.45338	3-5	3	0.1507
126	MyrSpi		Patch	7/19/2007	12:33:18pm	41.45435	-73.45064	3-5	3	2.7728
127	MyrSpi		Patch	7/19/2007	12:36:09pm	41.45581	-73.45077	3-5	2	0.0414
128	MyrSpi		Patch	7/19/2007	12:40:33pm	41.45720	-73.45267	3-5	4	0.0002
136	MyrSpi		Patch	7/24/2007	01:01:28pm	41.46488	-73.45535	3-5	4	0.6753
137	MyrSpi		Patch	7/24/2007	01:11:20pm	41.46563	-73.45476	3-5	2	0.0349

Appendix. Candlewood Lake invasive plant location data (4 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
138	MyrSpi		Patch	7/24/2007	01:13:35pm	41.46624	-73.45493	3-5	3	0.0787
139	MyrSpi		Patch	7/24/2007	01:24:14pm	41.44962	-73.45207	3-5	4	0.1197
140	MyrSpi		Patch	7/24/2007	01:39:33pm	41.46703	-73.45090	3-5	4	0.0773
141	MyrSpi		Patch	7/24/2007	01:43:30pm	41.46600	-73.45022	3-5	3	0.0214
142	MyrSpi		Patch	7/24/2007	01:48:15pm	41.46623	-73.45090	3-5	3	0.0884
143	MyrSpi		Patch	7/24/2007	01:51:26pm	41.46539	-73.45031	3-5	2	1.0231
144	MyrSpi		Patch	7/24/2007	01:57:50pm	41.46633	-73.44225	3-5	4	0.9145
145	MyrSpi		Patch	7/24/2007	02:02:25pm	41.46675	-73.44246	3-5	4	0.6552
146	MyrSpi		Patch	7/24/2007	02:12:34pm	41.46669	-73.43500	3-5	4	0.3435
147	MyrSpi		Patch	7/24/2007	02:18:30pm	41.46840	-73.43465	3-5	3	0.0971
148	MyrSpi		Patch	7/24/2007	02:22:11pm	41.46950	-73.43479	3-5	3	0.0975
149	MyrSpi		Patch	7/24/2007	02:27:08pm	41.47133	-73.43562	3-5	2	0.3845
150	MyrSpi		Patch	7/24/2007	02:31:48pm	41.47243	-73.43649	3-5	3	0.0132
151	NajMin		Patch	7/24/2007	02:36:23pm	41.47360	-73.43849	3-5	4	0.7585
152	MyrSpi	depth =1-2	Patch	7/24/2007	02:41:13pm	41.47374	-73.43831	1-3	2	0.3462
153	MyrSpi		Patch	7/24/2007	02:43:39pm	41.47337	-73.43797	1-3	1	0.3149
154	MyrSpi		Patch	7/24/2007	02:47:31pm	41.47316	-73.43719	1-3	2	0.1049
155	NajMin		Patch	7/24/2007	02:49:48pm	41.47324	-73.43730	1-3	2	0.0167
156	MyrSpi		Patch	7/24/2007	02:53:30pm	41.47251	-73.43584	0-1	3	0.5481
157	NajMin		Patch	7/24/2007	02:54:22pm	41.47258	-73.43599	0-1	2	0.2063
158	MyrSpi		Patch	7/24/2007	03:01:47pm	41.46924	-73.43185	3-5	4	0.1157
159	MyrSpi		Patch	7/24/2007	03:05:44pm	41.46891	-73.43031	3-5	3	24.8938
160	MyrSpi		Patch	7/24/2007	03:07:33pm	41.46954	-73.43002	3-5	3	1.1937
161	MyrSpi		Patch	7/24/2007	03:09:26pm	41.46963	-73.42953	3-5	3	0.1420
162	MyrSpi		Patch	7/24/2007	03:10:33pm	41.46930	-73.42911	3-5	3	0.0148
163	MyrSpi		Patch	7/24/2007	03:11:34pm	41.46858	-73.42793	3-5	4	1.2041
133	MyrSpi		Patch	7/24/2007	12:40:57pm	41.46680	-73.45488	3-5	4	1.3206
134	MyrSpi		Patch	7/24/2007	12:45:13pm	41.46762	-73.45468	3-5	4	0.4154
135	MyrSpi		Patch	7/24/2007	12:50:02pm	41.46686	-73.45584	3-5	3	0.0319
187	MyrSpi		Patch	7/26/2007	01:10:27pm	41.47147	-73.44281	3-5	3	0.0587
188	MyrSpi		Patch	7/26/2007	01:15:09pm	41.47321	-73.44360	3-5	3	0.0137
189	MyrSpi		Patch	7/26/2007	01:20:30pm	41.47574	-73.44431	3-5	3	0.0657
190	MyrSpi		Patch	7/26/2007	01:22:41pm	41.47642	-73.44448	3-5	3	0.1899
191	MyrSpi		Patch	7/26/2007	01:28:31pm	41.48033	-73.44387	3-5	4	0.2859
192	MyrSpi		Patch	7/26/2007	01:41:19pm	41.48518	-73.44073	3-5	4	0.1448
193	MyrSpi		Patch	7/26/2007	01:53:40pm	41.48312	-73.43697	3-5	4	0.4098
194	MyrSpi		Patch	7/26/2007	01:56:09pm	41.48226	-73.43645	3-5	3	0.0357
195	MyrSpi		Patch	7/26/2007	01:58:54pm	41.48172	-73.43592	3-5	3	0.0186
196	MyrSpi		Patch	7/26/2007	02:02:21pm	41.48175	-73.43575	3-5	4	0.0378
197	MyrSpi		Patch	7/26/2007	02:09:42pm	41.47886	-73.43450	1-3	1	0.0811
521	NajMin	with M. spicatum	Patch	7/26/2007	02:09:42pm	41.47886	-73.43450	0-1	2	0.0665
198	MyrSpi		Patch	7/26/2007	02:24:31pm	41.48247	-73.43571	3-5	3	0.1888
164	MyrSpi		Patch	7/26/2007	10:42:12am	41.44828	-73.43020	3-5	2	0.0601
165	NajMin		Patch	7/26/2007	10:45:33am	41.44897	-73.43015	1-3	2	0.3926
166	MyrSpi		Patch	7/26/2007	10:49:47am	41.44969	-73.43102	3-5	4	0.0532

Appendix. Candlewood Lake invasive plant location data (5 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
167	MyrSpi		Patch	7/26/2007	10:53:12am	41.45103	-73.43154	3-5	3	0.1409
168	MyrSpi		Patch	7/26/2007	10:55:13am	41.45138	-73.43180	3-5	3	0.2767
169	MyrSpi		Patch	7/26/2007	11:01:34am	41.45561	-73.43443	3-5	3	1.4655
170	MyrSpi		Patch	7/26/2007	11:10:16am	41.45746	-73.43453	3-5	3	0.2340
171	MyrSpi		Patch	7/26/2007	11:12:33am	41.45861	-73.43517	3-5	2	0.0504
172	MyrSpi		Patch	7/26/2007	11:14:22am	41.45969	-73.43556	3-5	3	0.3154
173	MyrSpi		Patch	7/26/2007	11:17:48am	41.46185	-73.43466	3-5	4	0.3555
174	MyrSpi		Patch	7/26/2007	11:25:49am	41.46190	-73.43147	3-5	4	1.2119
175	MyrSpi		Patch	7/26/2007	11:33:44am	41.46028	-73.42903	3-5	3	0.9490
176	MyrSpi		Patch	7/26/2007	11:38:39am	41.46154	-73.42835	3-5	3	0.1131
177	MyrSpi		Patch	7/26/2007	11:48:27am	41.46340	-73.42527	1-3	1	0.0732
178	MyrSpi		Patch	7/26/2007	11:52:51am	41.46296	-73.42858	3-5	4	0.7224
179	MyrSpi		Patch	7/26/2007	12:01:21pm	41.46526	-73.42564	3-5	3	0.4080
180	MyrSpi		Patch	7/26/2007	12:04:52pm	41.46647	-73.42507	3-5	4	0.3969
181	MyrSpi		Patch	7/26/2007	12:40:08pm	41.46812	-73.42575	3-5	2	0.4251
182	MyrSpi		Patch	7/26/2007	12:42:40pm	41.46845	-73.42587	3-5	3	0.0616
183	MyrSpi		Patch	7/26/2007	12:44:19pm	41.46828	-73.42682	3-5	3	0.1277
184	MyrSpi		Patch	7/26/2007	12:46:18pm	41.46838	-73.42746	3-5	3	0.4372
185	MyrSpi		Patch	7/26/2007	12:53:43pm	41.46621	-73.43819	3-5	3	1.4354
186	MyrSpi		Patch	7/26/2007	12:58:05pm	41.46774	-73.43929	3-5	3	0.0408
215	MyrSpi		Patch	7/27/2007	01:04:39pm	41.53314	-73.43848	1-3	1	0.2953
215	NajMin	NajasMinor in same area 0.5-1m D=1	Patch	7/27/2007	01:04:39pm	41.53314	-73.43848	0-1	1	0.3385
216	MyrSpi		Patch	7/27/2007	01:12:01pm	41.53281	-73.43848	3-5	4	0.2352
217	MyrSpi		Patch	7/27/2007	01:15:20pm	41.53185	-73.43868	3-5	3	0.2431
218	MyrSpi		Patch	7/27/2007	01:18:53pm	41.53062	-73.43883	3-5	2	0.0886
219	MyrSpi		Patch	7/27/2007	01:24:34pm	41.52908	-73.43863	3-5	3	0.0944
220	MyrSpi		Patch	7/27/2007	01:30:38pm	41.52599	-73.43828	3-5	3	0.0327
221	MyrSpi		Patch	7/27/2007	01:36:08pm	41.52593	-73.43788	3-5	4	0.0470
222	MyrSpi		Patch	7/27/2007	01:40:25pm	41.52525	-73.43802	3-5	3	0.1675
223	MyrSpi		Patch	7/27/2007	01:44:47pm	41.52736	-73.43735	3-5	2	1.9333
225	MyrSpi		Patch	7/27/2007	01:51:39pm	41.52343	-73.43650	3-5	3	0.3374
226	MyrSpi		Patch	7/27/2007	01:52:40pm	41.52272	-73.43631	3-5	3	0.0184
227	MyrSpi		Patch	7/27/2007	01:53:37pm	41.52219	-73.43613	3-5	3	0.0324
228	MyrSpi		Patch	7/27/2007	01:54:11pm	41.52212	-73.43574	3-5	3	4.2141
229	MyrSpi		Patch	7/27/2007	01:56:02pm	41.52026	-73.43565	3-5	3	0.0533
230	MyrSpi		Patch	7/27/2007	02:02:46pm	41.51951	-73.43574	3-5	3	0.0343
231	MyrSpi		Patch	7/27/2007	02:08:33pm	41.51781	-73.43877	3-5	2	0.0829
232	MyrSpi		Patch	7/27/2007	02:10:06pm	41.51750	-73.43903	3-5	3	0.7834
233	MyrSpi		Patch	7/27/2007	02:10:58pm	41.51583	-73.44083	3-5	4	0.9011
199	MyrSpi		Patch	7/27/2007	10:37:55am	41.48328	-73.43568	3-5	3	0.0259
200	MyrSpi		Patch	7/27/2007	10:45:29am	41.48512	-73.43543	3-5	4	0.5647
201	MyrSpi		Patch	7/27/2007	10:58:17am	41.49116	-73.43864	3-5	4	3.6746
202	MyrSpi		Patch	7/27/2007	11:13:08am	41.49597	-73.44214	3-5	3	0.5315
203	MyrSpi		Patch	7/27/2007	11:17:40am	41.49749	-73.44242	3-5	3	0.0059
204	MyrSpi		Patch	7/27/2007	11:20:27am	41.49852	-73.44248	3-5	3	0.0573

Appendix. Candlewood Lake invasive plant location data (6 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
205	MyrSpi		Patch	7/27/2007	11:23:44am	41.49953	-73.44263	3-5	3	0.0603
206	MyrSpi		Patch	7/27/2007	11:29:46am	41.50446	-73.44279	3-5	3	0.2034
207	MyrSpi		Patch	7/27/2007	11:39:20am	41.50596	-73.44181	3-5	4	0.0773
208	MyrSpi		Patch	7/27/2007	11:52:06am	41.50428	-73.44115	3-5	3	0.3269
209	MyrSpi		Patch	7/27/2007	11:59:41am	41.50325	-73.43805	3-5	3	0.6603
210	MyrSpi		Patch	7/27/2007	12:05:04pm	41.50681	-73.43842	3-5	3	0.3268
211	MyrSpi		Patch	7/27/2007	12:10:54pm	41.50907	-73.43885	3-5	2	0.5882
212	MyrSpi		Patch	7/27/2007	12:14:22pm	41.51034	-73.43902	3-5	2	0.2323
213	MyrSpi		Patch	7/27/2007	12:17:49pm	41.51186	-73.43919	3-5	1	0.0445
214	MyrSpi		Patch	7/27/2007	12:21:48pm	41.51340	-73.44075	3-5	2	2.3939
264	MyrSpi		Patch	8/2/2007	01:04:18pm	41.55269	-73.43960	3-5	2	2.6796
265	MyrSpi		Patch	8/2/2007	01:09:59pm	41.55400	-73.43979	3-5	2	0.0659
266	MyrSpi		Patch	8/2/2007	01:11:43pm	41.55423	-73.43972	3-5	2	0.0749
267	MyrSpi		Patch	8/2/2007	01:14:39pm	41.55547	-73.43957	3-5	1	0.2402
268	MyrSpi		Patch	8/2/2007	01:15:55pm	41.55608	-73.43963	3-5	2	0.0707
269	MyrSpi		Patch	8/2/2007	01:17:46pm	41.55684	-73.43962	3-5	2	0.0807
270	MyrSpi		Patch	8/2/2007	01:20:15pm	41.55829	-73.43986	3-5	2	0.2796
271	MyrSpi		Patch	8/2/2007	01:21:44pm	41.55914	-73.44013	3-5	3	1.2381
272	MyrSpi		Patch	8/2/2007	01:25:57pm	41.56066	-73.44084	3-5	3	2.0285
273	MyrSpi		Patch	8/2/2007	01:28:30pm	41.56218	-73.44059	3-5	3	0.2305
274	MyrSpi		Patch	8/2/2007	01:30:44pm	41.56318	-73.44062	3-5	2	0.2158
275	MyrSpi		Patch	8/2/2007	01:34:19pm	41.56474	-73.44081	3-5	3	0.3254
276	MyrSpi		Patch	8/2/2007	01:36:40pm	41.56596	-73.44159	3-5	2	0.1463
277	MyrSpi		Patch	8/2/2007	01:40:47pm	41.56859	-73.44287	3-5	3	1.9897
278	MyrSpi		Patch	8/2/2007	01:41:52pm	41.56911	-73.44291	3-5	3	2.2059
279	MyrSpi		Patch	8/2/2007	01:46:53pm	41.57100	-73.44318	3-5	3	0.7797
280	MyrSpi		Patch	8/2/2007	01:48:39pm	41.57141	-73.44302	1-3	1	0.4237
281	MyrSpi		Patch	8/2/2007	01:53:20pm	41.57251	-73.44468	3-5	3	0.4828
282	MyrSpi		Patch	8/2/2007	02:00:36pm	41.56883	-73.44553	3-5	2	0.0750
283	MyrSpi		Patch	8/2/2007	02:04:40pm	41.56735	-73.44517	3-5	2	0.0753
284	MyrSpi		Patch	8/2/2007	02:08:17pm	41.56620	-73.44488	3-5	2	0.1562
285	MyrSpi		Patch	8/2/2007	02:09:20pm	41.56522	-73.44477	3-5	1	0.0753
286	MyrSpi		Patch	8/2/2007	02:11:29pm	41.56361	-73.44466	3-5	2	0.0687
287	MyrSpi		Patch	8/2/2007	02:12:39pm	41.56333	-73.44469	3-5	2	0.2144
288	MyrSpi		Patch	8/2/2007	02:13:15pm	41.56296	-73.44462	3-5	2	0.1957
289	MyrSpi		Patch	8/2/2007	02:18:44pm	41.56177	-73.44399	3-5	3	0.3549
290	MyrSpi		Patch	8/2/2007	02:23:52pm	41.56027	-73.44375	3-5	2	0.2028
291	MyrSpi		Patch	8/2/2007	02:24:47pm	41.55973	-73.44394	3-5	2	0.2250
292	MyrSpi		Patch	8/2/2007	02:26:44pm	41.55909	-73.44375	3-5	2	0.4548
293	MyrSpi		Patch	8/2/2007	02:28:50pm	41.55801	-73.44362	3-5	2	0.0968
234	MyrSpi		Patch	8/2/2007	10:45:14am	41.51269	-73.44109	3-5	3	0.0468
235	MyrSpi		Patch	8/2/2007	10:49:05am	41.51221	-73.44134	3-5	4	0.0170
236	MyrSpi		Patch	8/2/2007	10:51:37am	41.51126	-73.44116	3-5	4	0.0125
237	MyrSpi		Patch	8/2/2007	10:59:04am	41.51285	-73.44161	3-5	4	0.0288
238	MyrSpi		Patch	8/2/2007	11:07:47am	41.52533	-73.44192	3-5	3	0.3580

Appendix. Candlewood Lake invasive plant location data (7 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
239	MyrSpi		Patch	8/2/2007	11:14:58am	41.52709	-73.44202	3-5	3	0.2029
240	MyrSpi		Patch	8/2/2007	11:17:13am	41.52744	-73.44167	3-5	2	0.0215
241	MyrSpi		Patch	8/2/2007	11:18:35am	41.52798	-73.44152	3-5	4	0.0823
242	MyrSpi		Patch	8/2/2007	11:20:14am	41.52841	-73.44162	3-5	3	1.3217
243	MyrSpi		Patch	8/2/2007	11:21:53am	41.52889	-73.44158	3-5	4	0.1517
244	MyrSpi		Patch	8/2/2007	11:24:27am	41.52957	-73.44186	3-5	3	0.1577
245	MyrSpi		Patch	8/2/2007	11:26:00am	41.53011	-73.44262	3-5	4	0.6254
246	MyrSpi		Patch	8/2/2007	11:29:27am	41.53034	-73.44324	3-5	4	0.2989
247	MyrSpi		Patch	8/2/2007	11:33:38am	41.53102	-73.44288	3-5	4	0.6242
248	MyrSpi		Patch	8/2/2007	11:37:26am	41.52871	-73.44310	3-5	3	0.0824
249	MyrSpi		Patch	8/2/2007	11:41:36am	41.52709	-73.44316	3-5	3	0.0384
250	MyrSpi		Patch	8/2/2007	11:55:29am	41.53568	-73.44025	3-5	3	0.1591
251	MyrSpi		Patch	8/2/2007	11:59:05am	41.53428	-73.43892	3-5	1	0.0485
252	MyrSpi		Patch	8/2/2007	12:07:00pm	41.53722	-73.44190	3-5	3	0.1277
253	MyrSpi		Patch	8/2/2007	12:17:31pm	41.53977	-73.44315	3-5	4	0.0360
254	MyrSpi		Patch	8/2/2007	12:21:01pm	41.54116	-73.44361	3-5	4	0.3275
255	MyrSpi		Patch	8/2/2007	12:24:38pm	41.54266	-73.44370	3-5	3	0.7340
256	MyrSpi		Patch	8/2/2007	12:29:38pm	41.54518	-73.44287	3-5	3	0.0647
257	MyrSpi		Patch	8/2/2007	12:36:02pm	41.54645	-73.44240	3-5	2	0.5216
258	MyrSpi		Patch	8/2/2007	12:39:04pm	41.54712	-73.44238	3-5	2	1.1114
259	MyrSpi		Patch	8/2/2007	12:41:02pm	41.54860	-73.44322	3-5	2	0.3074
260	MyrSpi		Patch	8/2/2007	12:43:21pm	41.54969	-73.44376	3-5	3	0.2990
261	MyrSpi		Patch	8/2/2007	12:47:50pm	41.55107	-73.44403	3-5	2	0.5294
262	MyrSpi		Patch	8/2/2007	12:52:54pm	41.55275	-73.44292	3-5	4	0.2187
263	MyrSpi		Patch	8/2/2007	12:59:25pm	41.55114	-73.44040	3-5	3	0.0607
298	MyrSpi		Patch	8/3/2007	01:01:51pm	41.55427	-73.44480	3-5	2	0.7808
299	MyrSpi		Patch	8/3/2007	01:04:53pm	41.55367	-73.44502	3-5	3	0.5121
300	MyrSpi		Patch	8/3/2007	01:06:44pm	41.55332	-73.44515	3-5	3	0.0026
301	MyrSpi		Patch	8/3/2007	01:09:57pm	41.55282	-73.44528	3-5	2	0.0983
302	MyrSpi		Patch	8/3/2007	01:12:50pm	41.55141	-73.44546	3-5	3	0.0715
303	MyrSpi		Patch	8/3/2007	01:15:06pm	41.55049	-73.44553	3-5	3	0.1414
304	MyrSpi		Patch	8/3/2007	01:18:12pm	41.54943	-73.44675	3-5	3	0.2204
305	MyrSpi		Patch	8/3/2007	01:25:14pm	41.54622	-73.44737	3-5	3	1.1860
306	MyrSpi		Patch	8/3/2007	01:35:30pm	41.54336	-73.44831	3-5	3	0.5700
307	MyrSpi		Patch	8/3/2007	01:40:47pm	41.54074	-73.44696	3-5	2	0.1567
308	MyrSpi		Patch	8/3/2007	01:45:01pm	41.53855	-73.44675	3-5	3	0.0049
309	MyrSpi		Patch	8/3/2007	01:48:16pm	41.53775	-73.44717	3-5	1	0.0087
310	MyrSpi		Patch	8/3/2007	01:51:08pm	41.53622	-73.44730	3-5	2	0.0054
311	MyrSpi		Patch	8/3/2007	01:53:08pm	41.53489	-73.44746	3-5	4	0.0403
315	MyrSpi		Patch	8/3/2007	02:15:06pm	41.52414	-73.44588	3-5	4	0.0011
316	MyrSpi		Patch	8/3/2007	02:20:25pm	41.52272	-73.44631	3-5	4	0.0052
317	MyrSpi		Patch	8/3/2007	02:22:17pm	41.52209	-73.44662	3-5	3	0.0920
318	MyrSpi		Patch	8/3/2007	02:26:04pm	41.52102	-73.44659	3-5	2	0.0557
319	MyrSpi		Patch	8/3/2007	02:30:24pm	41.51904	-73.44559	3-5	1	0.1043
320	MyrSpi		Patch	8/3/2007	02:47:48pm	41.50481	-73.44488	3-5	4	0.2180

Appendix. Candlewood Lake invasive plant location data (8 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
321	MyrSpi		Patch	8/3/2007	02:54:45pm	41.50208	-73.44497	3-5	4	0.1103
322	MyrSpi		Patch	8/3/2007	03:01:02pm	41.49629	-73.44585	3-5	4	0.0606
323	MyrSpi		Patch	8/3/2007	03:08:21pm	41.49552	-73.44654	3-5	3	0.0201
324	MyrSpi		Patch	8/3/2007	03:09:43pm	41.49689	-73.44701	3-5	4	0.0627
325	MyrSpi		Patch	8/3/2007	03:12:43pm	41.49693	-73.44651	1-3	2	0.2362
294	MyrSpi		Patch	8/3/2007	12:51:31pm	41.55691	-73.44385	3-5	3	0.2732
295	MyrSpi		Patch	8/3/2007	12:53:17pm	41.55660	-73.44422	3-5	2	0.3766
296	MyrSpi		Patch	8/3/2007	12:55:59pm	41.55599	-73.44456	3-5	2	0.0489
297	MyrSpi		Patch	8/3/2007	12:59:06pm	41.55512	-73.44480	3-5	2	0.0518
326	MyrSpi		Patch	8/5/2007	10:14:31am	41.49724	-73.44736	3-5	4	0.0560
327	MyrSpi		Patch	8/5/2007	10:18:13am	41.49757	-73.44826	3-5	2	0.0351
328	MyrSpi		Patch	8/5/2007	10:21:06am	41.49857	-73.44929	3-5	3	0.0335
329	MyrSpi		Patch	8/5/2007	10:31:10am	41.50017	-73.45092	3-5	3	0.0566
330	MyrSpi		Patch	8/5/2007	10:36:26am	41.50311	-73.45323	3-5	3	0.7527
331	MyrSpi		Patch	8/5/2007	10:56:15am	41.51051	-73.45568	3-5	4	0.0118
332	MyrSpi		Patch	8/5/2007	10:59:07am	41.51092	-73.45545	3-5	4	0.0498
333	MyrSpi		Patch	8/5/2007	11:01:42am	41.51179	-73.45524	3-5	3	0.1582
334	MyrSpi		Patch	8/5/2007	11:06:41am	41.51265	-73.45619	3-5	3	0.0694
335	MyrSpi		Patch	8/5/2007	11:10:32am	41.51346	-73.45630	3-5	4	0.0475
336	MyrSpi		Patch	8/5/2007	11:15:31am	41.51493	-73.45549	5-7	3	0.0340
337	MyrSpi		Patch	8/5/2007	11:19:50am	41.51652	-73.45574	3-5	3	0.0884
338	MyrSpi		Patch	8/5/2007	11:26:52am	41.51464	-73.45382	3-5	2	0.1771
339	MyrSpi		Patch	8/5/2007	11:29:09am	41.51409	-73.45335	1-3	2	0.0545
340	MyrSpi		Patch	8/5/2007	11:33:21am	41.51463	-73.45310	3-5	3	0.1250
341	MyrSpi		Patch	8/5/2007	11:35:22am	41.51524	-73.45298	3-5	4	0.0340
342	MyrSpi		Patch	8/5/2007	11:53:26am	41.51930	-73.45232	3-5	3	0.0317
343	MyrSpi		Patch	8/5/2007	12:07:08pm	41.52787	-73.45375	3-5	4	0.0792
344	MyrSpi		Patch	8/5/2007	12:11:52pm	41.52489	-73.45322	3-5	3	0.3075
345	MyrSpi		Patch	8/5/2007	12:19:55pm	41.53072	-73.45444	3-5	4	0.2746
346	MyrSpi		Patch	8/5/2007	12:24:42pm	41.53237	-73.45503	3-5	3	1.3800
347	MyrSpi		Patch	8/5/2007	12:26:23pm	41.53292	-73.45466	3-5	2	0.3737
348	MyrSpi		Patch	8/5/2007	12:29:27pm	41.53693	-73.45621	3-5	3	0.2374
349	MyrSpi		Patch	8/5/2007	12:32:06pm	41.53968	-73.45716	3-5	3	0.1576
350	MyrSpi		Patch	8/5/2007	12:34:33pm	41.54065	-73.45754	3-5	2	0.0421
351	MyrSpi		Patch	8/5/2007	12:36:43pm	41.54291	-73.45871	3-5	2	0.0869
352	MyrSpi		Patch	8/5/2007	12:41:07pm	41.54404	-73.45976	3-5	2	0.2985
353	MyrSpi		Patch	8/5/2007	12:43:56pm	41.54464	-73.46137	3-5	3	0.6517
354	MyrSpi		Patch	8/5/2007	12:48:41pm	41.54523	-73.46280	3-5	3	0.0004
384	MyrSpi		Patch	8/7/2007	01:06:14pm	41.57027	-73.48441	0-1	1	0.1335
385	MyrSpi		Patch	8/7/2007	01:07:41pm	41.56973	-73.48393	0-1	1	0.1556
385	NajMin	Najas Minor A=2	Patch	8/7/2007	01:07:41pm	41.56973	-73.48393	0-1	2	0.1883
386	MyrSpi		Patch	8/7/2007	01:10:59pm	41.56967	-73.48464	0-1	1	0.7999
386	NajMin	Najas minor A=2	Patch	8/7/2007	01:10:59pm	41.56967	-73.48464	0-1	2	0.2424
387	MyrSpi		Patch	8/7/2007	01:14:16pm	41.56912	-73.48450	1-3	3	0.8156
388	MyrSpi		Patch	8/7/2007	01:22:50pm	41.56810	-73.48368	1-3	1	0.0329

Appendix. Candlewood Lake invasive plant location data (9 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
388	NajMin	Najas minor A=2	Patch	8/7/2007	01:22:50pm	41.56810	-73.48368	1-3	2	0.1144
389	MyrSpi		Patch	8/7/2007	01:32:16pm	41.56688	-73.48312	3-5	3	0.0467
390	MyrSpi		Patch	8/7/2007	01:36:58pm	41.56690	-73.48484	3-5	3	0.0574
391	MyrSpi		Patch	8/7/2007	01:39:34pm	41.56747	-73.48562	1-3	1	0.3542
391	NajMin	Najas Minor A=2	Patch	8/7/2007	01:39:34pm	41.56747	-73.48562	1-3	2	0.9877
393	MyrSpi		Patch	8/7/2007	01:44:21pm	41.56704	-73.48677	3-5	2	5.3515
394	MyrSpi		Patch	8/7/2007	01:46:34pm	41.56609	-73.48730	3-5	2	0.5970
395	MyrSpi		Patch	8/7/2007	01:50:35pm	41.56607	-73.48776	0-1	1	0.2350
395	NajMin	Najas minor A=1	Patch	8/7/2007	01:50:35pm	41.56607	-73.48776	0-1	1	0.3452
396	MyrSpi		Patch	8/7/2007	01:57:57pm	41.56603	-73.48813	3-5	2	0.4315
397	MyrSpi		Patch	8/7/2007	02:00:43pm	41.56530	-73.48851	3-5	2	0.5070
398	MyrSpi		Patch	8/7/2007	02:03:52pm	41.56766	-73.48856	3-5	2	0.7875
399	MyrSpi		Patch	8/7/2007	02:09:56pm	41.57038	-73.48878	1-3	1	0.1433
400	NajMin		Patch	8/7/2007	02:12:51pm	41.57005	-73.48657	0-1	3	0.1329
401	MyrSpi		Patch	8/7/2007	02:21:01pm	41.57102	-73.48841	0-1	2	0.0573
402	MyrSpi		Patch	8/7/2007	02:39:24pm	41.57401	-73.49171	0-1	1	1.7820
402	NajMin	Najas minor A=3 dense in spots	Patch	8/7/2007	02:39:24pm	41.57401	-73.49171	0-1	3	0.6750
404	MyrSpi		Patch	8/7/2007	02:52:15pm	41.57125	-73.49209	1-3	1	0.3314
405	MyrSpi		Patch	8/7/2007	02:57:52pm	41.56883	-73.49053	3-5	2	0.7038
406	MyrSpi		Patch	8/7/2007	03:02:18pm	41.56479	-73.48889	0-1	1	0.0942
406	NajMin	najas Minor A=2	Patch	8/7/2007	03:02:18pm	41.56479	-73.48889	0-1	2	0.1065
407	MyrSpi		Patch	8/7/2007	03:09:13pm	41.56478	-73.48363	3-5	4	0.0791
408	MyrSpi		Patch	8/7/2007	03:13:52pm	41.56386	-73.48313	3-5	3	0.1369
409	MyrSpi		Patch	8/7/2007	03:21:28pm	41.56276	-73.48333	3-5	3	0.1294
410	MyrSpi		Patch	8/7/2007	03:29:08pm	41.56231	-73.48752	1-3	1	0.1944
410	NajMin	Najas minor A=3	Patch	8/7/2007	03:29:08pm	41.56231	-73.48752	1-3	3	0.0353
411	MyrSpi		Patch	8/7/2007	03:31:06pm	41.56017	-73.49151	1-3	1	0.4078
411	NajMin	Najas minor A=3	Patch	8/7/2007	03:31:06pm	41.56017	-73.49151	1-3	3	0.0159
355	MyrSpi		Patch	8/7/2007	11:20:54am	41.54536	-73.46365	3-5	3	0.0300
356	MyrSpi		Patch	8/7/2007	11:23:13am	41.54602	-73.46393	3-5	4	0.3809
357	MyrSpi		Patch	8/7/2007	11:28:24am	41.54765	-73.46378	3-5	3	0.3510
358	MyrSpi		Patch	8/7/2007	11:35:31am	41.54955	-73.46434	3-5	3	0.1671
359	MyrSpi		Patch	8/7/2007	11:42:00am	41.55042	-73.46502	3-5	2	0.0209
360	MyrSpi		Patch	8/7/2007	11:45:04am	41.55188	-73.46607	3-5	2	0.0573
361	MyrSpi		Patch	8/7/2007	11:48:21am	41.55221	-73.46619	3-5	2	0.0468
362	MyrSpi		Patch	8/7/2007	11:51:49am	41.55424	-73.46738	1-3	2	0.0403
363	MyrSpi		Patch	8/7/2007	11:53:40am	41.55428	-73.46789	1-3	3	0.0174
364	MyrSpi		Patch	8/7/2007	11:54:12am	41.55413	-73.46752	1-3	1	0.1084
365	MyrSpi		Patch	8/7/2007	11:56:12am	41.55418	-73.46819	1-3	3	0.6822
366	MyrSpi		Patch	8/7/2007	11:59:20am	41.55401	-73.46895	1-3	3	0.2356
367	MyrSpi		Patch	8/7/2007	12:01:03pm	41.55418	-73.46892	1-3	1	0.0540
368	MyrSpi		Patch	8/7/2007	12:03:07pm	41.55375	-73.47006	1-3	2	0.0250
369	MyrSpi		Patch	8/7/2007	12:05:14pm	41.55356	-73.47036	1-3	2	0.9293
370	MyrSpi		Patch	8/7/2007	12:08:10pm	41.55353	-73.47095	1-3	3	0.6957
371	MyrSpi		Patch	8/7/2007	12:09:39pm	41.55365	-73.47128	3-5	3	1.7817

Appendix. Candlewood Lake invasive plant location data (10 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
372	MyrSpi		Patch	8/7/2007	12:12:47pm	41.55465	-73.47208	3-5	2	0.3309
373	MyrSpi		Patch	8/7/2007	12:16:08pm	41.55530	-73.47240	0-1	1	0.0530
374	MyrSpi		Patch	8/7/2007	12:17:31pm	41.55491	-73.47271	3-5	3	0.3795
375	MyrSpi		Patch	8/7/2007	12:19:51pm	41.55501	-73.47353	3-5	3	0.1054
376	MyrSpi		Patch	8/7/2007	12:22:46pm	41.55594	-73.47399	3-5	4	0.0768
377	MyrSpi		Patch	8/7/2007	12:24:45pm	41.55671	-73.47413	3-5	4	0.1820
378	MyrSpi		Patch	8/7/2007	12:37:16pm	41.56020	-73.47519	3-5	3	0.1055
379	MyrSpi		Patch	8/7/2007	12:38:09pm	41.55849	-73.47483	3-5	4	0.1309
380	MyrSpi		Patch	8/7/2007	12:43:21pm	41.55876	-73.47579	3-5	3	0.2103
381	MyrSpi		Patch	8/7/2007	12:45:57pm	41.56027	-73.47606	3-5	3	0.0567
382	MyrSpi	some patches of A=3 within	Patch	8/7/2007	12:52:41pm	41.56172	-73.47613	3-5	2	0.4476
383	MyrSpi		Patch	8/7/2007	12:57:56pm	41.56356	-73.47838	3-5	3	0.9937
438	MyrSpi	LD=-1m	Patch	8/9/2007	01:03:50pm	41.55085	-73.47188	3-5	3	0.4288
439	MyrSpi	LD=-1m	Patch	8/9/2007	01:07:10pm	41.55241	-73.47145	3-5	3	0.6600
440	MyrSpi	LD=-1m	Patch	8/9/2007	01:09:00pm	41.55149	-73.47064	3-5	3	0.6167
441	MyrSpi	LD=-1m	Patch	8/9/2007	01:10:01pm	41.55132	-73.47033	3-5	2	0.5699
442	MyrSpi	LD=-1m	Patch	8/9/2007	01:12:11pm	41.55008	-73.46885	3-5	3	0.3429
443	MyrSpi	LD=-1m	Patch	8/9/2007	01:16:37pm	41.55051	-73.46978	0-1	1	0.3222
444	MyrSpi	LD=-1m	Patch	8/9/2007	01:18:26pm	41.54833	-73.46664	3-5	3	0.0314
445	MyrSpi	LD=-1m	Patch	8/9/2007	01:21:12pm	41.54551	-73.46618	3-5	3	0.1542
446	MyrSpi	LD=-1m	Patch	8/9/2007	01:26:00pm	41.54373	-73.46585	3-5	3	0.9085
447	MyrSpi	LD=-1m	Patch	8/9/2007	01:34:27pm	41.55903	-73.48083	3-5	3	0.2308
448	MyrSpi	LD=-1m	Patch	8/9/2007	01:39:59pm	41.55980	-73.48087	3-5	3	1.8394
449	MyrSpi	LD=-1m	Patch	8/9/2007	01:44:08pm	41.56156	-73.48677	3-5	2	0.4307
450	MyrSpi	LD=-1m	Patch	8/9/2007	01:49:17pm	41.55832	-73.48168	1-3	1	1.0104
451	MyrSpi	LD=-1m	Patch	8/9/2007	01:53:20pm	41.55604	-73.48022	3-5	2	0.3796
452	MyrSpi	LD=-1m	Patch	8/9/2007	01:55:56pm	41.55547	-73.47968	3-5	2	1.6434
453	MyrSpi	LD=-1m	Patch	8/9/2007	01:59:38pm	41.55822	-73.48236	1-3	1	0.4475
454	MyrSpi	LD=-1m	Patch	8/9/2007	02:00:46pm	41.55799	-73.48237	3-5	2	0.1128
455	MyrSpi	LD=-1m	Patch	8/9/2007	02:02:35pm	41.55836	-73.48241	0-1	2	0.4295
455	NajMin	LD=-1m Najas minor =2	Patch	8/9/2007	02:02:35pm	41.55836	-73.48241	0-1	2	0.2460
456	MyrSpi	LD=-1m Depth = 1.5 - 4	Patch	8/9/2007	02:04:52pm	41.55819	-73.48408	3-5	1	0.6391
457	MyrSpi	LD=-1m	Patch	8/9/2007	02:10:28pm	41.55696	-73.48238	1-3	2	0.0481
458	MyrSpi	LD=-1m	Patch	8/9/2007	02:15:38pm	41.55076	-73.47710	3-5	2	0.2060
459	MyrSpi	LD=-1m	Patch	8/9/2007	02:17:51pm	41.54948	-73.47564	3-5	2	0.0245
460	MyrSpi	LD=-1m	Patch	8/9/2007	02:19:25pm	41.54826	-73.47427	3-5	2	0.4145
461	MyrSpi	LD=-1m	Patch	8/9/2007	02:21:57pm	41.54748	-73.47411	3-5	2	0.0855
412	MyrSpi	-0.75 meters due to low lake level	Patch	8/9/2007	10:46:02am	41.49922	-73.45245	3-5	3	0.2792
413	MyrSpi	-1m lake level	Patch	8/9/2007	10:51:54am	41.49745	-73.45398	3-5	3	0.7157
414	MyrSpi	L=-1	Patch	8/9/2007	11:09:18am	41.50842	-73.45918	3-5	4	0.7202
415	MyrSpi	L=-1	Patch	8/9/2007	11:12:36am	41.50812	-73.45959	3-5	4	0.2292
416	MyrSpi	L=-1	Patch	8/9/2007	11:16:11am	41.50799	-73.45859	3-5	3	0.0715
417	MyrSpi	L=-1	Patch	8/9/2007	11:20:41am	41.50858	-73.45890	3-5	3	0.0523
418	MyrSpi	L=-1	Patch	8/9/2007	11:22:55am	41.50987	-73.45799	3-5	3	1.3395
419	MyrSpi	L=-1	Patch	8/9/2007	11:31:46am	41.53254	-73.46238	3-5	3	0.3219

Appendix. Candlewood Lake invasive plant location data (11 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
420	MyrSpi	L=-1	Patch	8/9/2007	11:37:34am	41.53290	-73.46416	3-5	2	0.5529
421	MyrSpi	L=-1	Patch	8/9/2007	11:40:17am	41.53346	-73.46552	3-5	4	0.0230
422	MyrSpi	L=-1	Patch	8/9/2007	11:44:51am	41.53458	-73.46563	3-5	3	0.6957
423	MyrSpi	L=-1	Patch	8/9/2007	11:49:04am	41.53681	-73.46668	3-5	3	0.2580
424	MyrSpi	L=-1	Patch	8/9/2007	11:55:59am	41.53572	-73.46701	3-5	3	0.0571
425	MyrSpi	L=-1	Patch	8/9/2007	11:59:34am	41.53928	-73.46686	3-5	3	0.1177
426	MyrSpi	L=-1	Patch	8/9/2007	12:05:11pm	41.53999	-73.46390	3-5	3	0.4010
427	MyrSpi	L=-1	Patch	8/9/2007	12:09:11pm	41.53684	-73.46207	3-5	4	0.1590
428	MyrSpi	L=-1	Patch	8/9/2007	12:10:04pm	41.53794	-73.46238	3-5	3	2.2239
429	MyrSpi	L=-1	Patch	8/9/2007	12:13:15pm	41.53598	-73.46167	3-5	3	0.1906
430	MyrSpi	L=-1	Patch	8/9/2007	12:15:19pm	41.53493	-73.46168	3-5	3	0.0361
431	MyrSpi	LD=-1m	Patch	8/9/2007	12:44:52pm	41.54262	-73.46655	3-5	4	0.2731
432	MyrSpi	LD=-1m	Patch	8/9/2007	12:46:24pm	41.54301	-73.46675	3-5	4	0.0041
433	MyrSpi	LD=-1m	Patch	8/9/2007	12:48:13pm	41.54273	-73.46635	3-5	3	0.0667
434	MyrSpi	LD=-1m	Patch	8/9/2007	12:49:20pm	41.54284	-73.46616	3-5	3	0.0465
435	MyrSpi	LD=-1m	Patch	8/9/2007	12:51:57pm	41.54381	-73.46665	3-5	2	0.0065
436	MyrSpi	LD=-1m	Patch	8/9/2007	12:54:03pm	41.54521	-73.46781	3-5	3	0.0560
437	MyrSpi	LD=-1m	Patch	8/9/2007	12:57:43pm	41.54742	-73.46991	3-5	3	0.0411
490	PotCri		Patch	8/11/2007	01:03:25pm	41.52146	-73.46340	0-1	2	0.0447
491	MyrSpi		Patch	8/11/2007	01:05:24pm	41.52309	-73.46429	1-3	1	0.5800
491	NajMin	Najas minor = 2 in o.5-2m	Patch	8/11/2007	01:05:24pm	41.52309	-73.46429	1-3	2	0.1966
492	MyrSpi		Patch	8/11/2007	01:10:26pm	41.52470	-73.46458	0-1	1	0.1469
492	NajMin	Najas minor = 2	Patch	8/11/2007	01:10:26pm	41.52470	-73.46458	0-1	2	0.0128
493	MyrSpi		Patch	8/11/2007	01:12:32pm	41.52543	-73.46439	0-1	1	0.9852
493	NajMin	Najas minor = 3	Patch	8/11/2007	01:12:32pm	41.52543	-73.46439	0-1	1	0.0191
494	MyrSpi		Patch	8/11/2007	01:14:14pm	41.52817	-73.47602	0-1	2	0.2509
494	NajMin	Najas minor = 3,fiz to shore contour,shallow muck	Patch	8/11/2007	01:14:14pm	41.52817	-73.47602	0-1	3	0.1045
495	MyrSpi		Patch	8/11/2007	01:21:57pm	41.52426	-73.46578	0-1	2	0.0850
495	NajMin	Najas minor = 3, fix insore line to shore. fix to	Patch	8/11/2007	01:21:57pm	41.52426	-73.46578	0-1	2	0.1150
496	MyrSpi		Patch	8/11/2007	01:32:12pm	41.52471	-73.46521	1-3	1	1.2307
497	MyrSpi		Patch	8/11/2007	01:38:19pm	41.52119	-73.46577	0-1	2	0.2799
497	NajMin	Najas minor = 2, fix inner line to shore, depth m	Patch	8/11/2007	01:38:19pm	41.52119	-73.46577	0-1	2	0.4927
498	NajMin		Patch	8/11/2007	01:43:33pm	41.52043	-73.46512	1-3	2	0.4650
499	MyrSpi		Patch	8/11/2007	01:44:51pm	41.51839	-73.46398	3-5	3	0.1335
500	MyrSpi		Patch	8/11/2007	01:51:12pm	41.51540	-73.46251	3-5	4	0.1226
501	MyrSpi	fix line off patch	Patch	8/11/2007	01:54:57pm	41.51377	-73.46160	3-5	3	0.2023
502	MyrSpi		Patch	8/11/2007	01:59:07pm	41.51304	-73.46195	3-5	4	0.6249
503	MyrSpi		Patch	8/11/2007	02:04:04pm	41.50865	-73.46053	3-5	4	0.0599
504	MyrSpi		Patch	8/11/2007	02:05:58pm	41.50823	-73.46010	3-5	3	0.0326
505	MyrSpi		Patch	8/11/2007	02:07:11pm	41.50815	-73.45970	3-5	3	0.0477
463	MyrSpi		Patch	8/11/2007	11:24:00am	41.54438	-73.47258	3-5	2	0.0041
464	MyrSpi		Patch	8/11/2007	11:26:54am	41.54283	-73.47256	3-5	2	4.9921
465	MyrSpi		Patch	8/11/2007	11:28:01am	41.54236	-73.47250	3-5	2	0.0290
466	MyrSpi		Patch	8/11/2007	11:30:09am	41.54076	-73.47182	3-5	2	0.1252
467	MyrSpi		Patch	8/11/2007	11:30:46am	41.54026	-73.47163	3-5	2	0.0630

Appendix. Candlewood Lake invasive plant location data (12 of 12).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
468	MyrSpi		Patch	8/11/2007	11:32:19am	41.53910	-73.47109	3-5	3	0.0033
469	MyrSpi		Patch	8/11/2007	11:34:40am	41.53831	-73.46991	3-5	3	0.3514
470	MyrSpi		Patch	8/11/2007	11:40:25am	41.53564	-73.46769	3-5	3	0.5407
471	MyrSpi		Patch	8/11/2007	11:42:45am	41.53404	-73.46670	3-5	2	0.0672
472	MyrSpi		Patch	8/11/2007	11:45:18am	41.53280	-73.46614	1-3	3	0.0153
473	MyrSpi		Patch	8/11/2007	11:48:09am	41.53118	-73.46516	1-3	3	0.0856
474	MyrSpi		Patch	8/11/2007	11:51:04am	41.53082	-73.46476	3-5	3	0.0627
475	MyrSpi		Patch	8/11/2007	11:53:46am	41.52970	-73.46284	3-5	3	0.0585
476	MyrSpi		Patch	8/11/2007	11:59:02am	41.52871	-73.46095	3-5	2	0.3127
477	MyrSpi		Patch	8/11/2007	12:00:35pm	41.52735	-73.45969	3-5	3	0.2482
478	MyrSpi		Patch	8/11/2007	12:02:58pm	41.52638	-73.45914	3-5	2	0.1215
479	MyrSpi		Patch	8/11/2007	12:04:29pm	41.52541	-73.45877	3-5	2	0.1646
480	MyrSpi		Patch	8/11/2007	12:08:48pm	41.52112	-73.45778	3-5	3	1.5123
481	MyrSpi		Patch	8/11/2007	12:10:03pm	41.52092	-73.45857	1-3	3	0.5754
482	MyrSpi		Patch	8/11/2007	12:12:24pm	41.52202	-73.45948	1-3	3	0.3973
483	MyrSpi		Patch	8/11/2007	12:15:03pm	41.52266	-73.46057	0-1	2	0.0825
483	NajMin	Najas minor - 2	Patch	8/11/2007	12:15:03pm	41.52266	-73.46057	0-1	2	0.2864
484	MyrSpi		Patch	8/11/2007	12:16:53pm	41.52280	-73.46023	0-1	2	0.0445
484	NajMin	Majas minor=1	Patch	8/11/2007	12:16:53pm	41.52280	-73.46023	0-1	1	0.0343
485	MyrSpi		Patch	8/11/2007	12:19:00pm	41.52253	-73.46029	1-3	1	0.0496
486	MyrSpi		Patch	8/11/2007	12:41:31pm	41.52167	-73.46028	1-3	2	0.0437
486	NajMin	Najas minor = 1	Patch	8/11/2007	12:41:31pm	41.52167	-73.46028	1-3	1	1.4166
487	MyrSpi	Delete the line coming from patch	Patch	8/11/2007	12:43:48pm	41.52077	-73.46166	1-3	3	0.0087
488	NajMin		Patch	8/11/2007	12:57:32pm	41.52122	-73.46174	0-1	2	0.0362
489	NajMin		Patch	8/11/2007	12:59:30pm	41.52136	-73.46301	0-1	2	0.0708

Appendix. Lake Lillinonah invasive plant location data (1 of 8).

FID	Invasive	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
0	2	NajMin		Patch	7/10/2007	11:01:56am	41.45916	-73.32470	0-1	3	0.0294
1	1	MyrSpi		Patch	7/10/2007	11:36:39am	41.46698	-73.32463	0-1	1	0.0229
2	1	MyrSpi		Patch	7/10/2007	11:59:31am	41.46199	-73.32335	1-3	1	0.1934
3	2	NajMin		Patch	7/10/2007	12:04:00pm	41.46150	-73.32365	0-1	4	0.0930
4	1	MyrSpi		Patch	7/10/2007	12:06:42pm	41.46162	-73.32349	1-3	1	0.0385
5	2	NajMin		Patch	7/10/2007	12:11:18pm	41.46111	-73.32381	0-1	4	0.0092
6	2	NajMin		Patch	7/10/2007	12:14:14pm	41.46048	-73.32421	0-1	4	0.0074
7	2	NajMin		Patch	7/10/2007	12:17:44pm	41.46010	-73.32448	0-1	4	0.1533
43	1	MyrSpi	docks and swimming areas in way	Patch	7/12/2007	01:12:41pm	41.47250	-73.33445	3-5	3	1.3927
44	2	NajMin		Patch	7/12/2007	01:32:55pm	41.47158	-73.33294	0-1	2	0.0088
45	2	NajMin	with PotFol, ZosDub	Patch	7/12/2007	01:36:28pm	41.47187	-73.33361	0-1	2	0.0192
46	2	NajMin	with MyrSpi, docks and boats in way	Patch	7/12/2007	01:49:15pm	41.47203	-73.33395	1-3	5	0.0094
47	2	NajMin	with PotFol	Patch	7/12/2007	01:55:03pm	41.47221	-73.33445	0-1	2	0.0437
48	2	NajMin		Patch	7/12/2007	02:00:06pm	41.47242	-73.33479	0-1	3	0.0471
49	2	NajMin	with MyrSpi	Patch	7/12/2007	02:08:34pm	41.47300	-73.33549	1-3	5	0.0488
50	1	MyrSpi		Patch	7/12/2007	02:18:52pm	41.47402	-73.33694	1-3	3	0.0210
51	1	MyrSpi		Patch	7/12/2007	02:21:15pm	41.47420	-73.33728	1-3	1	0.0198
33	1	MyrSpi	some NajMin	Patch	7/12/2007	11:19:07am	41.46727	-73.32475	1-3	1	0.0564
34	2	NajMin	patch interupted by dock	Patch	7/12/2007	11:22:17am	41.46718	-73.32478	0-1	3	0.0422
35	1	MyrSpi	some NajMin, dock in way	Patch	7/12/2007	11:27:40am	41.46801	-73.32513	1-3	1	0.7352
36	2	NajMin	abbundant PotFol by shallow depth some m. spi	Patch	7/12/2007	11:35:00am	41.46795	-73.32536	0-1	3	0.2624
37	1	MyrSpi		Patch	7/12/2007	11:54:32am	41.46941	-73.32836	1-3	1	0.0351
38	1	MyrSpi		Patch	7/12/2007	12:03:46pm	41.47119	-73.33178	3-5	2	0.3080
39	2	NajMin		Patch	7/12/2007	12:10:19pm	41.47084	-73.33142	0-1	4	0.0034
40	2	NajMin		Patch	7/12/2007	12:11:53pm	41.47106	-73.33175	0-1	4	0.0272
41	2	NajMin		Patch	7/12/2007	12:13:44pm	41.47118	-73.33190	1-3	3	0.0180
42	2	NajMin		Patch	7/12/2007	12:15:16pm	41.47139	-73.33227	1-3	4	0.0149
58	1	MyrSpi		Patch	7/13/2007	01:10:09pm	41.53524	-73.40388	1-3	3	0.1487
59	1	MyrSpi		Patch	7/13/2007	01:13:22pm	41.53387	-73.40400	1-3	4	1.1893
60	1	MyrSpi		Patch	7/13/2007	01:27:19pm	41.52968	-73.40336	1-3	4	0.2948
61	1	MyrSpi		Patch	7/13/2007	01:33:56pm	41.52907	-73.40330	1-3	1	0.0209
62	1	MyrSpi		Patch	7/13/2007	01:46:38pm	41.52595	-73.40003	1-3	3	0.6245
63	1	MyrSpi		Patch	7/13/2007	02:07:01pm	41.52096	-73.39677	1-3	1	0.0083
64	1	MyrSpi		Patch	7/13/2007	02:24:31pm	41.51660	-73.38890	1-3	1	0.0195
65	1	MyrSpi		Patch	7/13/2007	02:28:53pm	41.51631	-73.38752	1-3	4	0.1907
52	1	MyrSpi		Patch	7/13/2007	11:40:36am	41.54123	-73.40277	3-5	3	0.2772
53	1	MyrSpi	with ZosDub, PotCor,TypLat	Patch	7/13/2007	11:44:45am	41.54053	-73.40256	3-5	3	0.5085
54	1	MyrSpi		Patch	7/13/2007	11:58:11am	41.53984	-73.40264	1-3	1	0.0324
55	1	MyrSpi		Patch	7/13/2007	12:02:36pm	41.53913	-73.40299	1-3	1	0.0614
56	1	MyrSpi		Patch	7/13/2007	12:05:50pm	41.53879	-73.40305	1-3	1	0.1051
57	1	MyrSpi		Patch	7/13/2007	12:12:32pm	41.53633	-73.40374	1-3	3	0.5726
68	2	NajMin		Patch	7/16/2007	01:08:34pm	41.48654	-73.36927	0-1	1	0.0145
69	1	MyrSpi		Patch	7/16/2007	01:27:46pm	41.49220	-73.37941	0-1	1	0.0132
70	2	NajMin		Patch	7/16/2007	01:29:20pm	41.49207	-73.37948	0-1	2	0.0254
71	1	MyrSpi		Patch	7/16/2007	01:39:56pm	41.49043	-73.38115	0-1	1	0.0226

Appendix. Lake Lillinonah invasive plant location data (2 of 8).

FID	Invasive	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
72	1	MyrSpi		Patch	7/16/2007	01:41:15pm	41.49061	-73.38133	1-3	1	0.0121
73	2	NajMin		Patch	7/16/2007	01:42:43pm	41.49057	-73.38149	0-1	2	0.0250
66	1	MyrSpi		Patch	7/16/2007	11:45:31am	41.47435	-73.33756	3-5	1	0.0131
67	1	MyrSpi		Patch	7/16/2007	12:00:33pm	41.47820	-73.34977	1-3	2	0.0378
84	1	MyrSpi		Patch	7/17/2007	01:11:02pm	41.49530	-73.37767	1-3	3	0.0305
85	1	MyrSpi		Patch	7/17/2007	01:13:27pm	41.49560	-73.37786	1-3	4	0.0555
86	2	NajMin		Patch	7/17/2007	01:15:19pm	41.49559	-73.37800	0-1	5	0.0280
87	1	MyrSpi		Patch	7/17/2007	01:20:14pm	41.49581	-73.37805	1-3	3	0.0204
88	1	MyrSpi		Patch	7/17/2007	01:22:24pm	41.49624	-73.37839	1-3	4	0.0308
89	1	MyrSpi		Patch	7/17/2007	01:25:23pm	41.49646	-73.37848	1-3	1	0.0187
90	1	MyrSpi		Patch	7/17/2007	01:34:28pm	41.49731	-73.37849	1-3	2	0.0839
91	2	NajMin		Patch	7/17/2007	01:37:35pm	41.49725	-73.37860	0-1	3	0.0110
92	1	MyrSpi		Patch	7/17/2007	01:40:04pm	41.49772	-73.37834	1-3	3	0.0711
93	2	NajMin		Patch	7/17/2007	01:43:32pm	41.49769	-73.37838	0-1	5	0.0057
94	1	MyrSpi		Patch	7/17/2007	01:44:43pm	41.49842	-73.37826	1-3	4	0.3535
95	2	NajMin	with MyrSpi	Patch	7/17/2007	01:49:41pm	41.49869	-73.37829	0-1	4	0.2031
96	1	MyrSpi		Patch	7/17/2007	01:56:35pm	41.49894	-73.37809	1-3	4	0.3405
97	1	MyrSpi	with NajMin, boats and docks	Patch	7/17/2007	02:03:42pm	41.50050	-73.37908	1-3	4	0.6043
98	2	NajMin		Patch	7/17/2007	02:15:26pm	41.50046	-73.37917	0-1	4	0.1711
99	1	MyrSpi		Patch	7/17/2007	02:47:29pm	41.50213	-73.38143	1-3	4	0.2599
100	2	NajMin		Patch	7/17/2007	02:52:59pm	41.50214	-73.38172	0-1	4	0.1503
101	1	MyrSpi		Patch	7/17/2007	03:22:08pm	41.51097	-73.38858	1-3	2	0.2365
102	1	MyrSpi		Patch	7/17/2007	03:32:28pm	41.51125	-73.38698	1-3	3	0.0286
103	2	NajMin	with ZosDub, MyrSpi, ZanPal	Patch	7/17/2007	03:37:29pm	41.51163	-73.38651	0-1	5	0.1067
104	1	MyrSpi		Patch	7/17/2007	03:43:11pm	41.51173	-73.38636	1-3	2	0.0146
105	1	MyrSpi		Patch	7/17/2007	03:44:52pm	41.51191	-73.38638	1-3	1	0.0078
106	2	NajMin		Patch	7/17/2007	03:50:49pm	41.51343	-73.38707	1-3	5	0.0223
107	1	MyrSpi		Patch	7/17/2007	03:59:36pm	41.51505	-73.38949	0-1	1	0.0035
74	1	MyrSpi	with NajMin, PotCri	Patch	7/17/2007	11:24:00am	41.48999	-73.38411	1-3	1	0.4923
75	1	MyrSpi		Patch	7/17/2007	11:35:49am	41.49054	-73.38379	1-3	1	0.1035
76	1	MyrSpi		Patch	7/17/2007	11:37:59am	41.49081	-73.38361	1-3	2	0.0933
77	1	MyrSpi		Patch	7/17/2007	11:44:44am	41.49277	-73.38338	1-3	1	0.1308
78	1	MyrSpi		Patch	7/17/2007	11:55:38am	41.49373	-73.38141	0-1	1	0.0831
79	1	MyrSpi		Patch	7/17/2007	12:02:46pm	41.49364	-73.37998	1-3	1	0.0301
80	1	MyrSpi		Patch	7/17/2007	12:06:01pm	41.49348	-73.37953	1-3	2	0.0418
81	1	MyrSpi		Patch	7/17/2007	12:09:35pm	41.49318	-73.37904	1-3	2	0.1293
82	1	MyrSpi		Patch	7/17/2007	12:18:12pm	41.49282	-73.37787	1-3	2	0.0170
83	1	MyrSpi		Patch	7/17/2007	12:20:09pm	41.49301	-73.37738	1-3	1	0.0305
113	1	MyrSpi		Patch	7/19/2007	01:40:13pm	41.51571	-73.38659	1-3	4	0.1251
114	2	NajMin		Patch	7/19/2007	01:44:27pm	41.51594	-73.38666	0-1	5	0.0275
115	1	MyrSpi		Patch	7/19/2007	02:28:46pm	41.50583	-73.38548	1-3	4	0.0359
116	1	MyrSpi		Patch	7/19/2007	02:32:26pm	41.50535	-73.38413	1-3	4	0.0627
117	2	NajMin	with MyrSpi	Patch	7/19/2007	02:35:16pm	41.50548	-73.38385	0-1	5	0.0524
118	1	MyrSpi		Patch	7/19/2007	02:40:16pm	41.50548	-73.38363	1-3	4	0.1012
119	1	MyrSpi		Patch	7/19/2007	02:43:49pm	41.50544	-73.38314	1-3	3	0.0317

Appendix. Lake Lillinonah invasive plant location data (3 of 8).

FID	Invasive	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
120	1	MyrSpi		Patch	7/19/2007	02:45:29pm	41.50542	-73.38274	1-3	3	0.0338
108	1	MyrSpi		Patch	7/19/2007	10:51:21am	41.53613	-73.40626	1-3	3	0.5502
109	1	MyrSpi		Patch	7/19/2007	10:57:12am	41.53692	-73.40621	1-3	1	0.0266
110	1	MyrSpi	with ZosDub, PotCri, ZanPal, CerDem, PotIll	Patch	7/19/2007	11:03:27am	41.53858	-73.40540	0-1	3	1.1136
111	1	MyrSpi		Patch	7/19/2007	11:39:29am	41.54149	-73.40376	1-3	4	0.1744
112	1	MyrSpi		Patch	7/19/2007	11:44:44am	41.54168	-73.40231	1-3	4	0.7143
126	1	MyrSpi		Patch	7/24/2007	01:08:29pm	41.49638	-73.37467	1-3	3	0.0425
127	1	MyrSpi		Patch	7/24/2007	01:14:01pm	41.49502	-73.37479	1-3	4	0.0215
128	1	MyrSpi		Patch	7/24/2007	01:18:41pm	41.49451	-73.37481	1-3	1	0.0156
129	1	MyrSpi		Patch	7/24/2007	01:23:08pm	41.49368	-73.37497	1-3	3	0.0046
130	1	MyrSpi		Patch	7/24/2007	01:31:42pm	41.49163	-73.37474	1-3	2	0.0026
131	1	MyrSpi		Patch	7/24/2007	01:33:12pm	41.49129	-73.37440	1-3	3	0.0126
132	1	MyrSpi		Patch	7/24/2007	01:35:56pm	41.49107	-73.37355	1-3	4	0.3207
133	2	NajMin		Patch	7/24/2007	01:49:05pm	41.49121	-73.37415	0-1	5	0.0116
134	2	NajMin	with MyrSpi	Patch	7/24/2007	01:53:26pm	41.49113	-73.37307	0-1	4	0.0188
135	1	MyrSpi	boats and docks in way	Patch	7/24/2007	01:57:24pm	41.49043	-73.37141	1-3	4	0.6271
136	2	NajMin		Patch	7/24/2007	02:09:11pm	41.49046	-73.37177	0-1	4	0.0058
121	1	MyrSpi		Patch	7/24/2007	11:46:33am	41.50289	-73.37494	1-3	3	0.2542
122	2	NajMin	with PotFol, MyrSpi	Patch	7/24/2007	11:51:36am	41.50308	-73.37475	0-1	3	0.1225
123	1	MyrSpi		Patch	7/24/2007	12:40:08pm	41.49995	-73.37370	1-3	3	0.0076
124	2	NajMin		Patch	7/24/2007	12:41:54pm	41.49938	-73.37386	0-1	3	0.1713
125	1	MyrSpi	with NajMin	Patch	7/24/2007	12:49:53pm	41.49938	-73.37421	1-3	4	1.5675
144	1	MyrSpi		Patch	7/26/2007	01:43:24pm	41.48269	-73.35007	0-1	1	0.0244
145	2	NajMin		Patch	7/26/2007	01:47:25pm	41.48190	-73.34938	0-1	5	0.0859
146	2	NajMin		Patch	7/26/2007	03:09:00pm	41.46865	-73.31241	1-3	5	0.0130
147	1	MyrSpi		Patch	7/26/2007	03:11:42pm	41.46929	-73.31311	1-3	2	0.2391
148	2	NajMin		Patch	7/26/2007	03:16:09pm	41.46934	-73.31327	1-3	5	0.0467
149	1	MyrSpi		Patch	7/26/2007	03:24:57pm	41.47267	-73.31747	1-3	4	0.0044
150	1	MyrSpi	with NajMin	Patch	7/26/2007	03:26:09pm	41.47278	-73.31784	1-3	2	0.1280
151	2	NajMin		Patch	7/26/2007	03:41:28pm	41.47287	-73.31854	0-1	2	0.0063
152	1	MyrSpi		Patch	7/26/2007	03:47:39pm	41.47311	-73.31898	1-3	3	0.0718
153	1	MyrSpi		Patch	7/26/2007	03:49:44pm	41.47325	-73.31919	1-3	3	0.0324
154	2	NajMin	with MyrSpi	Patch	7/26/2007	03:53:11pm	41.47385	-73.31944	0-1	5	0.0267
155	1	MyrSpi		Patch	7/26/2007	03:55:36pm	41.47400	-73.31911	1-3	3	0.8376
156	2	NajMin	with MyrSpi	Patch	7/26/2007	04:04:33pm	41.47386	-73.31915	0-1	3	0.0347
157	1	MyrSpi		Patch	7/26/2007	04:40:20pm	41.49400	-73.32957	1-3	3	0.0116
137	1	MyrSpi	with NajMin	Patch	7/26/2007	11:42:19am	41.48838	-73.36640	1-3	4	0.6274
138	2	NajMin	with MyrSpi	Patch	7/26/2007	11:48:36am	41.48853	-73.36664	0-1	4	0.0332
139	1	MyrSpi		Patch	7/26/2007	12:03:05pm	41.48411	-73.36050	1-3	1	0.0205
140	1	MyrSpi		Patch	7/26/2007	12:04:44pm	41.48398	-73.36034	1-3	1	0.0201
141	1	MyrSpi	with NajMin	Patch	7/26/2007	12:06:22pm	41.48352	-73.35917	1-3	4	1.2116
142	2	NajMin		Patch	7/26/2007	12:15:54pm	41.48381	-73.35979	0-1	4	0.0074
143	2	NajMin	with MyrSpi	Patch	7/26/2007	12:20:55pm	41.48361	-73.35888	0-1	3	0.0164
164	2	NajMin	with CalVer	Patch	7/27/2007	01:08:34pm	41.51008	-73.31995	0-1	5	0.1572
158	2	NajMin		Patch	7/27/2007	11:51:02am	41.49669	-73.32771	0-1	5	0.6186

Appendix. Lake Lillinonah invasive plant location data (4 of 8).

FID	Invasive	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
159	2	NajMin		Patch	7/27/2007	12:00:59pm	41.49714	-73.32645	0-1	5	0.0308
160	2	NajMin		Patch	7/27/2007	12:02:01pm	41.49800	-73.32482	0-1	4	1.5023
161	2	NajMin		Patch	7/27/2007	12:18:33pm	41.50027	-73.32333	0-1	4	0.0276
162	2	NajMin		Patch	7/27/2007	12:30:46pm	41.50572	-73.32015	1-3	5	0.8379
163	2	NajMin	with IsoSp, EleSp, CalSp	Patch	7/27/2007	12:48:35pm	41.50961	-73.32034	0-1	5	0.3518
6	1	MyrSpi	dock and boat in way	Patch	8/6/2007	01:06:00pm	41.50287	-73.31968	1-3	4	0.0215
7	2	NajMin	dock in way	Patch	8/6/2007	01:09:35pm	41.50245	-73.31988	0-1	5	0.0618
8	2	NajMin		Patch	8/6/2007	02:10:11pm	41.48239	-73.32199	0-1	4	0.0183
9	2	NajMin		Patch	8/6/2007	02:13:13pm	41.48167	-73.32180	0-1	4	0.0546
0	2	NajMin	with PotCri, MyrSpi	Patch	8/6/2007	11:16:01am	41.51061	-73.31812	0-1	5	0.6573
1	2	NajMin		Patch	8/6/2007	11:38:48am	41.51027	-73.31757	0-1	4	0.0150
2	2	NajMin		Patch	8/6/2007	11:41:12am	41.51019	-73.31702	0-1	5	0.0251
3	2	NajMin		Patch	8/6/2007	11:50:54am	41.51172	-73.31552	0-1	5	0.0662
4	2	NajMin		Patch	8/6/2007	12:43:22pm	41.50930	-73.31919	0-1	5	0.4671
5	2	NajMin	with MyrSpi	Patch	8/6/2007	12:52:25pm	41.50845	-73.31878	1-3	3	0.1109
14	1	MyrSpi		Patch	8/7/2007	01:19:31pm	41.46913	-73.29613	1-3	4	0.0355
15	1	MyrSpi		Patch	8/7/2007	01:51:26pm	41.45834	-73.29677	1-3	4	0.1677
16	1	MyrSpi		Patch	8/7/2007	02:01:29pm	41.45552	-73.29792	1-3	4	0.1472
17	1	MyrSpi		Patch	8/7/2007	02:06:17pm	41.45385	-73.29816	1-3	3	0.0298
18	1	MyrSpi		Patch	8/7/2007	02:13:13pm	41.45052	-73.29684	1-3	4	0.0432
19	1	MyrSpi		Patch	8/7/2007	02:20:52pm	41.44704	-73.29979	3-5	1	0.0378
20	1	MyrSpi		Patch	8/7/2007	02:23:41pm	41.44707	-73.30025	1-3	3	0.0668
21	1	MyrSpi	with NajMin	Patch	8/7/2007	02:25:32pm	41.44698	-73.30067	1-3	4	0.2330
22	2	NajMin	with MyrSpi	Patch	8/7/2007	02:29:32pm	41.44679	-73.30069	0-1	5	0.0195
23	1	MyrSpi		Patch	8/7/2007	02:39:24pm	41.44660	-73.30095	1-3	4	0.1692
24	1	MyrSpi	with NajMin	Patch	8/7/2007	02:48:23pm	41.44618	-73.30247	1-3	2	0.0120
25	1	MyrSpi		Patch	8/7/2007	02:51:56pm	41.44567	-73.30284	1-3	2	0.5480
26	2	NajMin	with MyrSpi	Patch	8/7/2007	02:59:49pm	41.44597	-73.30266	1-3	1	0.0106
27	1	MyrSpi		Patch	8/7/2007	03:11:19pm	41.44624	-73.30523	1-3	3	0.0237
28	1	MyrSpi		Patch	8/7/2007	03:16:43pm	41.44812	-73.30394	1-3	2	0.0036
29	1	MyrSpi		Patch	8/7/2007	03:18:18pm	41.44796	-73.30345	1-3	3	0.1006
10	2	NajMin	with MyrSpi	Patch	8/7/2007	11:43:23am	41.47259	-73.31377	0-1	4	0.1097
11	1	MyrSpi	with NajMin	Patch	8/7/2007	11:48:16am	41.47249	-73.31352	1-3	3	0.1952
12	1	MyrSpi	with NajMin	Patch	8/7/2007	11:53:40am	41.47243	-73.31206	1-3	4	0.0753
13	2	NajMin	with MyrSpi	Patch	8/7/2007	11:55:31am	41.47258	-73.31212	0-1	5	0.1818
30	2	NajMin		Patch	8/9/2007	11:18:21am	41.46127	-73.30183	0-1	5	0.0289
31	1	MyrSpi		Patch	8/9/2007	11:27:48am	41.46276	-73.30178	1-3	2	0.0025
32	1	MyrSpi		Patch	8/9/2007	11:34:06am	41.46500	-73.30084	1-3	1	0.0192
0	3	PotCri	with NajMin	Point	8/6/2007	11:14:01am	41.51035	-73.31885	0-1	3	0.0002
1	3	PotCri	with NajMin	Point	8/6/2007	11:29:48am	41.51063	-73.31857	0-1	1	0.0002
2	1	MyrSpi		Point	8/6/2007	11:34:38am	41.51065	-73.31814	1-3	1	0.0002
3	1	MyrSpi	with NajMin	Point	8/6/2007	11:35:40am	41.51072	-73.31809	0-1	2	0.0002
4	3	PotCri		Point	8/6/2007	11:37:49am	41.51046	-73.31788	0-1	3	0.0002
5	2	NajMin		Point	8/6/2007	11:45:14am	41.51050	-73.31632	0-1	4	0.0002
6	2	NajMin		Point	8/6/2007	11:46:56am	41.51083	-73.31611	0-1	4	0.0002

Appendix. Lake Lillinonah invasive plant location data (5 of 8).

FID	Invasive	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
7	1	MyrSpi		Point	8/6/2007	12:51:53pm	41.50881	-73.31883	1-3	2	0.0002
8	1	MyrSpi		Point	8/6/2007	01:31:02pm	41.49360	-73.32487	1-3	1	0.0002
9	1	MyrSpi		Point	8/7/2007	12:19:38pm	41.47241	-73.31115	1-3	1	0.0002
10	1	MyrSpi		Point	8/7/2007	12:20:24pm	41.47230	-73.31116	1-3	1	0.0002
11	1	MyrSpi		Point	8/7/2007	01:22:30pm	41.46861	-73.29503	1-3	1	0.0002
12	1	MyrSpi		Point	8/7/2007	01:32:11pm	41.46303	-73.29556	1-3	1	0.0002
13	1	MyrSpi		Point	8/7/2007	01:47:53pm	41.46000	-73.29634	1-3	1	0.0002
14	1	MyrSpi		Point	8/7/2007	01:50:23pm	41.45896	-73.29664	1-3	1	0.0002
15	1	MyrSpi		Point	8/7/2007	01:57:13pm	41.45743	-73.29708	1-3	2	0.0002
16	1	MyrSpi		Point	8/7/2007	02:10:02pm	41.45233	-73.29820	3-5	1	0.0002
17	3	PotCri		Point	8/7/2007	02:37:40pm	41.44676	-73.30072	0-1	2	0.0002
18	1	MyrSpi		Point	8/7/2007	02:47:14pm	41.44650	-73.30227	1-3	3	0.0002
19	2	NajMin	with MyrSpi	Point	8/7/2007	02:49:37pm	41.44621	-73.30245	1-3	4	0.0002
20	2	NajMin	with MyrSpi	Point	8/7/2007	03:02:46pm	41.44528	-73.30356	1-3	2	0.0002
21	1	MyrSpi		Point	8/7/2007	03:10:10pm	41.44590	-73.30525	1-3	1	0.0002
22	1	MyrSpi		Point	8/9/2007	11:10:21am	41.45499	-73.30383	1-3	1	0.0002
23	1	MyrSpi	with NajMin	Point	8/9/2007	11:24:57am	41.46130	-73.30187	0-1	1	0.0002
24	1	MyrSpi		Point	8/9/2007	11:30:06am	41.46337	-73.30143	1-3	2	0.0002
25	1	MyrSpi		Point	8/9/2007	11:32:08am	41.46440	-73.30091	3-5	2	0.0002
26	1	MyrSpi		Point	7/12/2007	11:50:38am	41.46859	-73.32648	3-5	1	0.0002
27	1	MyrSpi		Point	7/12/2007	11:51:27am	41.46876	-73.32666	1-3	1	0.0002
28	1	MyrSpi		Point	7/12/2007	11:58:32am	41.46995	-73.32982	3-5	1	0.0002
29	1	MyrSpi		Point	7/12/2007	11:59:57am	41.46999	-73.32992	3-5	1	0.0002
30	1	MyrSpi		Point	7/12/2007	12:01:25pm	41.47034	-73.33059	3-5	1	0.0002
31	1	MyrSpi		Point	7/12/2007	12:01:57pm	41.47039	-73.33064	3-5	1	0.0002
32	1	MyrSpi		Point	7/12/2007	12:02:34pm	41.47042	-73.33071	3-5	1	0.0002
33	1	MyrSpi		Point	7/12/2007	12:03:12pm	41.47060	-73.33093	3-5	1	0.0002
34	2	NajMin	patch but boat and docks in way	Point	7/12/2007	01:46:52pm	41.47195	-73.33378	1-3	5	0.0002
35	2	NajMin	patch but docks and boats in way	Point	7/12/2007	02:04:32pm	41.47262	-73.33498	1-3	5	0.0002
36	2	NajMin	patch but docks and boats in way	Point	7/12/2007	02:06:47pm	41.47278	-73.33519	1-3	5	0.0002
37	2	NajMin	small patch but docks in way	Point	7/12/2007	02:15:05pm	41.47349	-73.33633	0-1	3	0.0002
38	1	MyrSpi		Point	7/12/2007	02:17:52pm	41.47392	-73.33683	1-3	1	0.0002
39	1	MyrSpi		Point	7/13/2007	01:44:16pm	41.52658	-73.40065	0-1	1	0.0002
40	1	MyrSpi		Point	7/13/2007	01:45:17pm	41.52647	-73.40056	0-1	1	0.0002
41	1	MyrSpi		Point	7/13/2007	01:53:43pm	41.52480	-73.40024	1-3	1	0.0002
42	1	MyrSpi		Point	7/13/2007	01:58:10pm	41.52300	-73.39865	1-3	1	0.0002
43	1	MyrSpi		Point	7/13/2007	01:59:11pm	41.52283	-73.39846	1-3	1	0.0002
44	1	MyrSpi		Point	7/13/2007	02:00:16pm	41.52259	-73.39820	1-3	1	0.0002
45	1	MyrSpi		Point	7/13/2007	02:01:38pm	41.52216	-73.39788	1-3	1	0.0002
46	1	MyrSpi		Point	7/13/2007	02:02:58pm	41.52170	-73.39755	1-3	1	0.0002
47	1	MyrSpi		Point	7/13/2007	02:03:28pm	41.52163	-73.39750	1-3	1	0.0002
48	1	MyrSpi		Point	7/13/2007	02:03:58pm	41.52159	-73.39746	1-3	1	0.0002
49	1	MyrSpi		Point	7/13/2007	02:04:34pm	41.52151	-73.39732	1-3	1	0.0002
50	1	MyrSpi		Point	7/13/2007	02:05:10pm	41.52139	-73.39724	1-3	1	0.0002
51	1	MyrSpi		Point	7/13/2007	02:06:10pm	41.52109	-73.39681	1-3	1	0.0002

Appendix. Lake Lillinonah invasive plant location data (6 of 8).

FID	Invasive	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
52	1	MyrSpi		Point	7/13/2007	02:06:42pm	41.52103	-73.39678	1-3	1	0.0002
53	1	MyrSpi		Point	7/13/2007	02:08:32pm	41.52072	-73.39661	1-3	1	0.0002
54	1	MyrSpi		Point	7/13/2007	02:09:00pm	41.52064	-73.39659	1-3	1	0.0002
55	1	MyrSpi		Point	7/13/2007	02:09:48pm	41.52054	-73.39652	1-3	1	0.0002
56	1	MyrSpi		Point	7/13/2007	02:11:47pm	41.52040	-73.39692	1-3	1	0.0002
57	1	MyrSpi		Point	7/13/2007	02:27:25pm	41.51635	-73.38807	1-3	2	0.0002
58	1	MyrSpi		Point	7/13/2007	02:28:28pm	41.51636	-73.38782	1-3	1	0.0002
59	1	MyrSpi		Point	7/13/2007	02:31:47pm	41.51629	-73.38719	1-3	2	0.0002
60	1	MyrSpi		Point	7/16/2007	11:48:23am	41.47468	-73.33843	3-5	1	0.0002
61	1	MyrSpi		Point	7/16/2007	01:06:45pm	41.48649	-73.36897	1-3	2	0.0002
62	1	MyrSpi		Point	7/16/2007	01:38:01pm	41.49072	-73.38127	0-1	1	0.0002
63	2	NajMin		Point	7/16/2007	01:49:06pm	41.48977	-73.38346	0-1	1	0.0002
64	1	MyrSpi		Point	7/16/2007	01:50:37pm	41.48964	-73.38366	1-3	2	0.0002
65	1	MyrSpi		Point	7/16/2007	01:51:50pm	41.48958	-73.38370	1-3	1	0.0002
66	1	MyrSpi		Point	7/16/2007	01:52:24pm	41.48953	-73.38376	1-3	1	0.0002
67	1	MyrSpi		Point	7/16/2007	01:52:57pm	41.48947	-73.38383	1-3	1	0.0002
68	1	MyrSpi		Point	7/16/2007	01:53:15pm	41.48942	-73.38391	1-3	1	0.0002
69	1	MyrSpi		Point	7/16/2007	01:56:37pm	41.48937	-73.38430	0-1	1	0.0002
70	1	MyrSpi		Point	7/16/2007	01:57:08pm	41.48939	-73.38425	0-1	2	0.0002
71	2	NajMin		Point	7/16/2007	01:58:24pm	41.48979	-73.38427	1-3	1	0.0002
72	2	NajMin	with MyrSpi, PotCri	Point	7/17/2007	11:33:19am	41.48999	-73.38403	1-3	1	0.0002
73	3	PotCri	with MyrSpi, NajMin	Point	7/17/2007	11:34:18am	41.48996	-73.38400	1-3	1	0.0002
74	1	MyrSpi		Point	7/17/2007	11:40:18am	41.49126	-73.38361	1-3	1	0.0002
75	1	MyrSpi		Point	7/17/2007	11:41:52am	41.49184	-73.38351	1-3	2	0.0002
76	1	MyrSpi		Point	7/17/2007	11:42:37am	41.49199	-73.38347	1-3	2	0.0002
77	1	MyrSpi		Point	7/17/2007	11:43:22am	41.49217	-73.38342	1-3	1	0.0002
78	2	NajMin		Point	7/17/2007	11:47:24am	41.49257	-73.38347	0-1	1	0.0002
79	2	NajMin		Point	7/17/2007	11:48:20am	41.49261	-73.38348	0-1	3	0.0002
80	1	MyrSpi		Point	7/17/2007	11:49:35am	41.49272	-73.38313	1-3	2	0.0002
81	1	MyrSpi	boats and docks in way	Point	7/17/2007	11:51:49am	41.49342	-73.38249	1-3	3	0.0002
82	1	MyrSpi		Point	7/17/2007	11:53:26am	41.49345	-73.38233	1-3	1	0.0002
83	1	MyrSpi		Point	7/17/2007	11:54:48am	41.49371	-73.38188	1-3	1	0.0002
84	1	MyrSpi		Point	7/17/2007	12:02:10pm	41.49358	-73.38009	1-3	1	0.0002
85	1	MyrSpi		Point	7/17/2007	12:04:36pm	41.49350	-73.37990	1-3	3	0.0002
86	2	NajMin		Point	7/17/2007	12:14:04pm	41.49316	-73.37877	0-1	3	0.0002
87	2	NajMin		Point	7/17/2007	12:15:34pm	41.49302	-73.37863	0-1	3	0.0002
88	1	MyrSpi		Point	7/17/2007	12:16:57pm	41.49283	-73.37827	1-3	2	0.0002
89	1	MyrSpi		Point	7/17/2007	12:22:10pm	41.49349	-73.37717	1-3	1	0.0002
90	1	MyrSpi		Point	7/17/2007	12:24:16pm	41.49451	-73.37722	1-3	2	0.0002
91	1	MyrSpi		Point	7/17/2007	12:24:59pm	41.49458	-73.37729	1-3	1	0.0002
92	1	MyrSpi		Point	7/17/2007	12:25:23pm	41.49464	-73.37734	1-3	1	0.0002
93	1	MyrSpi		Point	7/17/2007	12:26:26pm	41.49476	-73.37734	1-3	1	0.0002
94	1	MyrSpi		Point	7/17/2007	12:27:44pm	41.49508	-73.37752	1-3	4	0.0002
95	1	MyrSpi		Point	7/17/2007	01:19:28pm	41.49573	-73.37801	1-3	1	0.0002
96	1	MyrSpi		Point	7/17/2007	01:23:54pm	41.49631	-73.37840	1-3	2	0.0002

Appendix. Lake Lillinonah invasive plant location data (7 of 8).

FID	Invasive	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
97	1	MyrSpi		Point	7/17/2007	01:27:00pm	41.49664	-73.37848	1-3	1	0.0002
98	1	MyrSpi		Point	7/17/2007	01:27:39pm	41.49672	-73.37847	1-3	2	0.0002
99	1	MyrSpi		Point	7/17/2007	01:32:45pm	41.49691	-73.37850	1-3	2	0.0002
100	1	MyrSpi		Point	7/17/2007	01:33:30pm	41.49699	-73.37849	1-3	1	0.0002
101	1	MyrSpi		Point	7/17/2007	02:03:04pm	41.49972	-73.37840	1-3	2	0.0002
102	1	MyrSpi		Point	7/17/2007	02:45:45pm	41.50195	-73.38077	1-3	1	0.0002
103	1	MyrSpi		Point	7/17/2007	02:46:52pm	41.50202	-73.38083	1-3	2	0.0002
104	2	NajMin		Point	7/17/2007	03:34:42pm	41.51131	-73.38693	0-1	5	0.0002
105	1	MyrSpi		Point	7/17/2007	03:42:29pm	41.51171	-73.38642	1-3	2	0.0002
106	1	MyrSpi		Point	7/17/2007	03:46:55pm	41.51254	-73.38639	1-3	2	0.0002
107	1	MyrSpi		Point	7/17/2007	03:48:56pm	41.51321	-73.38679	1-3	2	0.0002
108	1	MyrSpi		Point	7/17/2007	03:56:31pm	41.51449	-73.38864	0-1	1	0.0002
109	1	MyrSpi		Point	7/17/2007	03:57:38pm	41.51472	-73.38887	1-3	1	0.0002
110	1	MyrSpi		Point	7/17/2007	04:12:18pm	41.51770	-73.39725	1-3	1	0.0002
111	1	MyrSpi		Point	7/17/2007	04:13:09pm	41.51769	-73.39744	1-3	1	0.0002
112	1	MyrSpi		Point	7/17/2007	04:13:58pm	41.51778	-73.39756	0-1	1	0.0002
113	1	MyrSpi		Point	7/17/2007	04:15:19pm	41.51800	-73.39777	0-1	3	0.0002
114	1	MyrSpi		Point	7/17/2007	04:16:05pm	41.51804	-73.39782	0-1	1	0.0002
115	1	MyrSpi		Point	7/17/2007	04:23:17pm	41.52038	-73.40091	1-3	1	0.0002
116	1	MyrSpi		Point	7/17/2007	04:24:37pm	41.52061	-73.40116	1-3	2	0.0002
117	1	MyrSpi		Point	7/19/2007	10:44:44am	41.53465	-73.40592	0-1	1	0.0002
118	1	MyrSpi		Point	7/19/2007	10:58:43am	41.53705	-73.40609	1-3	1	0.0002
119	1	MyrSpi		Point	7/19/2007	11:01:35am	41.53832	-73.40585	1-3	2	0.0002
120	1	MyrSpi		Point	7/19/2007	11:02:30am	41.53857	-73.40570	1-3	1	0.0002
121	3	PotCri	with ZanPal	Point	7/19/2007	11:14:48am	41.53893	-73.40496	0-1	4	0.0002
122	3	PotCri		Point	7/19/2007	11:20:40am	41.53867	-73.40505	0-1	4	0.0002
123	3	PotCri	with MyrSpi	Point	7/19/2007	11:31:45am	41.53920	-73.40536	0-1	4	0.0002
124	1	MyrSpi		Point	7/19/2007	01:47:31pm	41.51590	-73.38658	0-1	1	0.0002
125	3	PotCri		Point	7/19/2007	01:49:54pm	41.51599	-73.38672	0-1	2	0.0002
126	1	MyrSpi		Point	7/19/2007	02:22:18pm	41.50751	-73.38693	1-3	1	0.0002
127	1	MyrSpi		Point	7/19/2007	02:23:20pm	41.50734	-73.38677	1-3	1	0.0002
128	1	MyrSpi		Point	7/19/2007	02:24:28pm	41.50735	-73.38676	1-3	1	0.0002
129	1	MyrSpi		Point	7/19/2007	02:58:33pm	41.50248	-73.37537	1-3	1	0.0002
130	1	MyrSpi		Point	7/19/2007	02:59:09pm	41.50259	-73.37529	1-3	2	0.0002
131	1	MyrSpi		Point	7/24/2007	11:56:25am	41.50260	-73.37491	1-3	3	0.0002
132	1	MyrSpi		Point	7/24/2007	12:41:32pm	41.49980	-73.37367	1-3	3	0.0002
133	1	MyrSpi		Point	7/24/2007	01:00:53pm	41.49800	-73.37462	1-3	3	0.0002
134	1	MyrSpi		Point	7/24/2007	01:04:22pm	41.49659	-73.37467	1-3	2	0.0002
135	1	MyrSpi		Point	7/24/2007	01:05:07pm	41.49654	-73.37463	1-3	1	0.0002
136	1	MyrSpi		Point	7/24/2007	01:05:41pm	41.49651	-73.37466	1-3	2	0.0002
137	2	NajMin		Point	7/24/2007	01:06:09pm	41.49651	-73.37466	1-3	1	0.0002
138	1	MyrSpi		Point	7/24/2007	01:06:41pm	41.49642	-73.37459	1-3	4	0.0002
139	1	MyrSpi		Point	7/24/2007	01:07:40pm	41.49638	-73.37461	1-3	3	0.0002
140	1	MyrSpi		Point	7/24/2007	01:10:39pm	41.49592	-73.37465	1-3	2	0.0002
141	1	MyrSpi		Point	7/24/2007	01:11:16pm	41.49587	-73.37464	1-3	2	0.0002

Appendix. Lake Lillinonah invasive plant location data (8 of 8).

FID	Invasive	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
142	1	MyrSpi		Point	7/24/2007	01:11:47pm	41.49573	-73.37460	1-3	1	0.0002
143	1	MyrSpi		Point	7/24/2007	01:12:20pm	41.49560	-73.37465	1-3	2	0.0002
144	1	MyrSpi	docks and boats in way of patch	Point	7/24/2007	01:16:44pm	41.49481	-73.37479	1-3	4	0.0002
145	1	MyrSpi		Point	7/24/2007	01:17:42pm	41.49473	-73.37480	1-3	3	0.0002
146	1	MyrSpi		Point	7/24/2007	01:20:21pm	41.49413	-73.37486	1-3	4	0.0002
147	1	MyrSpi		Point	7/24/2007	01:21:01pm	41.49407	-73.37484	1-3	1	0.0002
148	1	MyrSpi		Point	7/24/2007	01:21:59pm	41.49377	-73.37500	1-3	1	0.0002
149	1	MyrSpi		Point	7/24/2007	01:26:17pm	41.49319	-73.37502	1-3	1	0.0002
150	1	MyrSpi		Point	7/24/2007	01:28:26pm	41.49259	-73.37507	1-3	2	0.0002
151	1	MyrSpi		Point	7/24/2007	01:30:23pm	41.49173	-73.37481	1-3	1	0.0002
152	2	NajMin	boats and docks in way	Point	7/24/2007	01:34:32pm	41.49131	-73.37437	0-1	5	0.0002
153	2	NajMin		Point	7/24/2007	01:51:35pm	41.49119	-73.37342	0-1	4	0.0002
154	2	NajMin		Point	7/24/2007	01:52:33pm	41.49112	-73.37342	1-3	5	0.0002
155	2	NajMin		Point	7/24/2007	02:08:37pm	41.49051	-73.37182	0-1	3	0.0002
156	2	NajMin		Point	7/24/2007	02:10:44pm	41.49050	-73.37141	0-1	2	0.0002
157	2	NajMin		Point	7/24/2007	02:12:23pm	41.49054	-73.37087	0-1	3	0.0002
158	2	NajMin		Point	7/24/2007	02:12:58pm	41.49048	-73.37078	0-1	2	0.0002
159	1	MyrSpi		Point	7/24/2007	02:15:37pm	41.48991	-73.37025	3-5	1	0.0002
160	1	MyrSpi		Point	7/24/2007	02:16:39pm	41.48987	-73.37015	3-5	1	0.0002
161	1	MyrSpi		Point	7/24/2007	02:17:19pm	41.48983	-73.37003	1-3	1	0.0002
162	1	MyrSpi		Point	7/24/2007	02:17:51pm	41.48977	-73.36996	1-3	1	0.0002
163	1	MyrSpi		Point	7/24/2007	02:18:20pm	41.48969	-73.36988	1-3	2	0.0002
164	1	MyrSpi		Point	7/24/2007	02:19:21pm	41.48954	-73.36967	1-3	1	0.0002
165	2	NajMin	with MyrSpi	Point	7/26/2007	12:19:01pm	41.48389	-73.35931	0-1	2	0.0002
166	2	NajMin	with MyrSpi	Point	7/26/2007	12:19:59pm	41.48377	-73.35900	0-1	4	0.0002
167	1	MyrSpi		Point	7/26/2007	01:45:12pm	41.48262	-73.35000	0-1	1	0.0002
168	1	MyrSpi		Point	7/26/2007	01:50:33pm	41.48208	-73.34959	1-3	1	0.0002
169	2	NajMin		Point	7/26/2007	03:29:44pm	41.47268	-73.31783	1-3	2	0.0002
170	2	NajMin		Point	7/26/2007	03:30:31pm	41.47270	-73.31793	0-1	2	0.0002
171	2	NajMin		Point	7/26/2007	03:30:50pm	41.47273	-73.31798	0-1	1	0.0002
172	2	NajMin	with StuPec, PotFol, MyrSpi	Point	7/26/2007	03:38:09pm	41.47287	-73.31844	0-1	2	0.0002
173	1	MyrSpi	with NajMin, PotFol, StuPec	Point	7/26/2007	03:39:03pm	41.47286	-73.31843	0-1	2	0.0002
174	1	MyrSpi		Point	7/26/2007	04:10:07pm	41.47538	-73.32000	1-3	2	0.0002
175	1	MyrSpi		Point	7/26/2007	04:28:04pm	41.48606	-73.32807	1-3	1	0.0002
176	1	MyrSpi		Point	7/27/2007	12:14:36pm	41.49774	-73.32530	1-3	1	0.0002
177	1	MyrSpi		Point	7/27/2007	12:22:43pm	41.49989	-73.32237	1-3	2	0.0002
178	1	MyrSpi		Point	7/27/2007	12:27:54pm	41.50362	-73.32154	3-5	2	0.0002
179	1	MyrSpi		Point	7/27/2007	12:40:16pm	41.50489	-73.32055	1-3	2	0.0002
180	3	PotCri	with NajMin	Point	7/27/2007	12:43:38pm	41.50607	-73.32007	0-1	3	0.0002

Appendix. Lake Zoar invasive plant location data (1 of 9).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
0	NajMin	with MyrSpi	Patch	8/14/2007	01:14:49pm	41.43167	-73.22744	0-1	3	0.3069
1	NajMin		Patch	8/14/2007	01:25:40pm	41.43143	-73.22699	0-1	4	0.0153
2	MyrSpi	with ValAme, NajMin	Patch	8/14/2007	01:35:47pm	41.43090	-73.22508	1-3	1	0.0400
3	NajMin	with ValAme, MyrSpi	Patch	8/14/2007	01:38:04pm	41.43088	-73.22495	1-3	4	0.0161
4	MyrSpi		Patch	8/14/2007	02:00:41pm	41.42927	-73.21691	1-3	2	0.0397
5	MyrSpi		Patch	8/14/2007	02:03:44pm	41.42900	-73.21655	1-3	2	0.0139
6	MyrSpi		Patch	8/14/2007	02:26:06pm	41.42306	-73.21042	1-3	1	0.0113
7	MyrSpi		Patch	8/14/2007	02:35:07pm	41.42246	-73.20760	1-3	1	0.0238
8	MyrSpi		Patch	8/14/2007	02:38:04pm	41.42291	-73.20743	1-3	1	0.0299
9	MyrSpi	with NajMin, PotPus	Patch	8/15/2007	11:26:48am	41.42389	-73.20666	0-1	1	2.3782
10	NajMin	with MyrSpi	Patch	8/15/2007	11:46:26am	41.42407	-73.20727	0-1	1	0.0192
11	NajMin	with MyrSpi	Patch	8/15/2007	11:48:51am	41.42412	-73.20644	0-1	1	0.2268
12	NajMin	with MyrSpi	Patch	8/15/2007	12:46:27pm	41.42125	-73.20651	0-1	5	0.0084
13	MyrSpi	with NajMin	Patch	8/15/2007	12:47:51pm	41.42077	-73.20646	1-3	1	0.2502
14	NajMin		Patch	8/15/2007	12:59:38pm	41.42051	-73.20606	0-1	3	0.0202
15	MyrSpi	with NajMin, ZosDub, ValAme	Patch	8/15/2007	01:04:52pm	41.41951	-73.20514	1-3	2	0.0519
16	MyrSpi		Patch	8/15/2007	01:15:18pm	41.41768	-73.20257	1-3	3	0.0614
17	MyrSpi		Patch	8/15/2007	01:43:00pm	41.41166	-73.19502	1-3	2	0.0087
18	MyrSpi		Patch	8/15/2007	01:44:52pm	41.41166	-73.19475	1-3	2	0.0473
19	MyrSpi		Patch	8/15/2007	01:49:23pm	41.41153	-73.19433	1-3	1	0.0281
20	MyrSpi	with NajMin	Patch	8/15/2007	01:54:51pm	41.41133	-73.19277	1-3	1	0.1921
21	NajMin	with PotPus	Patch	8/15/2007	02:03:35pm	41.41133	-73.19235	0-1	4	0.0412
22	NajMin	with MyrSpi	Patch	8/15/2007	02:12:13pm	41.41154	-73.19076	0-1	4	0.0420
23	NajMin	with MyrSpi	Patch	8/20/2007	10:30:38am	41.41150	-73.19071	0-1	4	0.0138
24	MyrSpi	with ZosDub	Patch	8/20/2007	10:36:39am	41.41087	-73.19072	1-3	1	0.0177
25	MyrSpi		Patch	8/20/2007	10:41:30am	41.41062	-73.18997	1-3	2	0.0127
26	NajMin		Patch	8/20/2007	10:43:03am	41.41065	-73.18992	0-1	4	0.0039
27	MyrSpi		Patch	8/20/2007	10:45:38am	41.41051	-73.18960	1-3	3	0.0502
28	MyrSpi		Patch	8/20/2007	10:48:58am	41.41037	-73.18895	1-3	3	0.0307
29	MyrSpi	with NajMin, ValAme	Patch	8/20/2007	10:52:44am	41.41045	-73.18793	1-3	2	0.3524
30	NajMin	with MyrSpi	Patch	8/20/2007	11:00:16am	41.41086	-73.18805	0-1	2	0.0148
31	MyrSpi		Patch	8/20/2007	11:04:07am	41.40988	-73.18719	1-3	1	0.0082
32	MyrSpi		Patch	8/20/2007	11:37:48am	41.39575	-73.18577	1-3	2	0.0276
33	MyrSpi		Patch	8/20/2007	11:42:25am	41.39539	-73.18477	1-3	3	0.0071
34	MyrSpi		Patch	8/20/2007	11:45:45am	41.39488	-73.18410	1-3	3	0.1946
35	MyrSpi		Patch	8/20/2007	11:52:29am	41.39422	-73.18300	1-3	2	0.0512
36	MyrSpi		Patch	8/20/2007	11:55:44am	41.39399	-73.18258	1-3	2	0.0424
37	NajMin		Patch	8/20/2007	12:08:30pm	41.39037	-73.17926	0-1	3	0.0091
38	MyrSpi	with NajMin	Patch	8/20/2007	12:11:14pm	41.38986	-73.17856	1-3	3	0.4968
39	NajMin	with MyrSpi	Patch	8/20/2007	12:16:37pm	41.38997	-73.17860	0-1	4	0.1061
40	NajMin	withStuPec	Patch	8/20/2007	12:20:10pm	41.38979	-73.17815	0-1	4	0.0229
41	MyrSpi		Patch	8/20/2007	12:26:23pm	41.38950	-73.17770	1-3	1	0.0154
42	MyrSpi		Patch	8/20/2007	01:25:40pm	41.39040	-73.17571	1-3	2	0.0213
43	MyrSpi		Patch	8/20/2007	01:27:52pm	41.39070	-73.17550	1-3	1	0.0170
44	NajMin		Patch	8/20/2007	01:32:26pm	41.39171	-73.17452	0-1	3	0.0894

Appendix. Lake Zoar invasive plant location data (2 of 9).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
45	MyrSpi		Patch	8/20/2007	01:36:29pm	41.39166	-73.17457	1-3	2	0.0280
46	NajMin		Patch	8/20/2007	01:38:21pm	41.39169	-73.17429	0-1	5	0.0092
47	MyrSpi		Patch	8/20/2007	01:44:24pm	41.38974	-73.17501	1-3	2	0.0146
48	MyrSpi	with NajMin	Patch	8/20/2007	01:46:43pm	41.38867	-73.17530	1-3	2	0.2467
49	NajMin	with MyrSpi	Patch	8/20/2007	01:50:55pm	41.38870	-73.17516	0-1	3	0.0029
50	MyrSpi		Patch	8/20/2007	01:54:19pm	41.38771	-73.17469	1-3	1	0.0283
51	MyrSpi		Patch	8/20/2007	01:56:17pm	41.38695	-73.17423	1-3	1	0.1533
52	MyrSpi		Patch	8/20/2007	02:01:31pm	41.38659	-73.17393	1-3	2	0.0467
53	MyrSpi		Patch	8/20/2007	02:03:30pm	41.38611	-73.17384	1-3	2	0.0352
54	MyrSpi	with NajMin	Patch	8/20/2007	02:06:34pm	41.38558	-73.17318	1-3	3	0.1075
55	MyrSpi		Patch	8/20/2007	02:17:03pm	41.38214	-73.17446	1-3	4	0.3675
56	MyrSpi	with NajMin	Patch	8/20/2007	02:26:01pm	41.38179	-73.17610	1-3	4	1.3527
57	NajMin		Patch	8/21/2007	11:54:51am	41.38155	-73.17512	0-1	1	0.0097
58	NajMin	with MyrSpi	Patch	8/21/2007	11:57:22am	41.38170	-73.17537	0-1	5	0.1604
59	NajMin	with MyrSpi	Patch	8/21/2007	12:16:31pm	41.38162	-73.17710	0-1	5	0.0139
60	NajMin	with MyrSpi	Patch	8/21/2007	12:18:24pm	41.38210	-73.17741	0-1	1	0.0312
61	MyrSpi		Patch	8/21/2007	12:27:19pm	41.38381	-73.17768	1-3	1	0.0146
62	MyrSpi		Patch	8/21/2007	12:32:17pm	41.38450	-73.17823	1-3	3	0.0083
63	MyrSpi		Patch	8/21/2007	12:34:45pm	41.38497	-73.17869	1-3	4	0.0575
64	MyrSpi		Patch	8/21/2007	12:44:11pm	41.38805	-73.18130	1-3	4	0.0777
65	MyrSpi		Patch	8/21/2007	12:47:31pm	41.38843	-73.18171	1-3	4	0.0423
66	MyrSpi	with ValAme	Patch	8/21/2007	01:42:26pm	41.41279	-73.20175	0-1	3	0.0174
67	MyrSpi		Patch	8/21/2007	01:47:08pm	41.41355	-73.20223	1-3	1	0.0099
68	MyrSpi		Patch	8/21/2007	01:48:43pm	41.41381	-73.20245	1-3	1	0.0031
69	NajMin	with MyrSpi	Patch	8/24/2007	01:36:06pm	41.42893	-73.22285	0-1	5	0.0097
70	NajMin	with ValAme, ZosDub	Patch	8/24/2007	02:10:35pm	41.42513	-73.23677	0-1	3	0.0091
71	MyrSpi	with NajMin	Patch	8/24/2007	02:14:24pm	41.42483	-73.23714	1-3	2	0.0778
72	NajMin	wwith MyrSpi	Patch	8/24/2007	02:16:28pm	41.42486	-73.23721	0-1	4	0.0705
73	NajMin		Patch	8/24/2007	02:19:06pm	41.42507	-73.23771	0-1	5	0.0058
74	NajMin	with MyrSpi	Patch	8/24/2007	02:32:36pm	41.42936	-73.24441	0-1	3	0.0581
75	MyrSpi	with NajMin	Patch	8/24/2007	02:35:02pm	41.42932	-73.24434	1-3	3	0.0633
76	MyrSpi	with NajMin, PotCri, ValAme	Patch	8/27/2007	11:26:07am	41.43147	-73.24511	0-1	2	1.3520
77	NajMin	with NajFle, MyrSpi, PotCri, ValAme	Patch	8/27/2007	11:36:20am	41.43152	-73.24513	0-1	4	0.8157
78	PotCri	with NajMin, NajFle, MyrSpi, ValAme	Patch	8/27/2007	11:44:01am	41.43144	-73.24523	0-1	2	0.2797
79	NajMin	with MyrSpi, ValAme, swim area in way	Patch	8/27/2007	11:59:46am	41.43442	-73.24589	0-1	4	0.0388
80	MyrSpi	with NajMin	Patch	8/27/2007	12:02:31pm	41.43434	-73.24585	0-1	2	0.0059
81	NajMin	with MyrSpi, PotCri, ZosDub	Patch	8/27/2007	12:06:11pm	41.43556	-73.24523	0-1	3	0.0159
82	MyrSpi	with NajMin, PotCri, ZosDub	Patch	8/27/2007	12:07:58pm	41.43587	-73.24473	0-1	1	0.2824
83	NajMin	with MyrSpi, ValAme, CerDem, ZosDub	Patch	8/27/2007	12:16:02pm	41.43595	-73.24473	0-1	4	0.2999
84	MyrSpi	with NajMinr, PotCri, ZosDub	Patch	8/27/2007	12:24:20pm	41.43660	-73.24407	0-1	1	0.0156
85	NajMin	with MyrSpi, PotCri, CerDem, ZosDub	Patch	8/27/2007	12:26:27pm	41.43659	-73.24408	0-1	5	0.0160
86	MyrSpi	with ValAme, ZosDub	Patch	8/27/2007	01:29:29pm	41.43755	-73.24368	0-1	1	0.0183
87	NajMin	with MyrSpi, CerDem, NajFle, ZosDub	Patch	8/27/2007	01:34:58pm	41.43814	-73.24415	0-1	5	0.0349
88	MyrSpi	with NajMin, ZosDub	Patch	8/27/2007	01:56:52pm	41.43708	-73.25118	0-1	1	0.0527
89	NajMin	with MyrSpi, ZosDub, NajFle	Patch	8/27/2007	02:01:10pm	41.43703	-73.25121	0-1	5	0.0615

Appendix. Lake Zoar invasive plant location data (3 of 9).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
90	NajMin	with ValAme, MyrSpi, ZosDub	Patch	8/27/2007	02:16:28pm	41.43302	-73.25869	0-1	2	0.0039
91	MyrSpi	with ValAme, NajMin, NajFle	Patch	8/27/2007	02:39:26pm	41.43306	-73.25949	0-1	2	0.0318
92	NajMin	with ZosDub, MyrSpi, NajFle, ValAme, CerDem,PotCri	Patch	8/27/2007	02:42:31pm	41.43305	-73.25947	0-1	3	0.0372
93	PotCri	w/ZosDub,MyrSpi,NajMin,NajFle PotNat,PotNod,ValAme	Patch	8/27/2007	02:44:42pm	41.43305	-73.25946	0-1	3	0.0309
94	MyrSpi	with PotCri, ValAme, PotNod, StuPec, NajMin	Patch	8/28/2007	11:34:37am	41.43522	-73.26499	0-1	3	0.0408
95	PotCri	with NajMin, ValAme, StuPec, ZosDub, PotNod,MyrSpi	Patch	8/28/2007	11:42:21am	41.43517	-73.26495	0-1	2	0.0362
96	NajMin	w/CerDem,PotCri,MyrSpi,ZosDub,PotNod,ValAme,StuPec	Patch	8/28/2007	11:46:02am	41.43513	-73.26492	0-1	3	0.0413
97	MyrSpi	with NajMin, ValAme, ZosDub, PotCri	Patch	8/28/2007	11:51:42am	41.43566	-73.26528	1-3	3	0.0076
98	MyrSpi	with NajMin, PotCri, PotPus, StuPec	Patch	8/28/2007	11:57:43am	41.43607	-73.26556	1-3	1	0.0258
99	NajMin	w/MyrSpi,ValAme,PotCri,PotNod,ZosDub,StuPec,NajFle	Patch	8/28/2007	12:00:54pm	41.43632	-73.26578	0-1	3	0.3340
100	PotCri	with StuPec, NajMin, MyrSpi, ValAme	Patch	8/28/2007	12:10:05pm	41.43617	-73.26564	0-1	2	0.0424
101	NajMin	NajM,EloNu,StuPe,MyrS,PotFo,ZosDu,ValAm,PotNo,PotC	Patch	8/28/2007	01:24:27pm	41.43831	-73.26708	0-1	4	3.9050
102	MyrSpi	with NajMin, ValAme, PotNod, PotCri	Patch	8/28/2007	02:18:51pm	41.43749	-73.26634	1-3	1	0.2354
103	MyrSpi	with NajMin, PotCri, ValAme	Patch	8/28/2007	02:24:26pm	41.43803	-73.26641	1-3	1	0.0306
104	MyrSpi	PotNod,NajMi,NajFle,PotCr,CerDem,ValAm,ZosDu,EloNu	Patch	8/29/2007	10:44:40am	41.44088	-73.26723	1-3	3	0.8861
105	NajMin	PotC,CerDe,EloNu,ValAm,ZosDu,MyrS,PotNo,PotCr,StuP	Patch	8/29/2007	11:31:02am	41.44469	-73.26931	0-1	5	2.2092
106	MyrSpi	w/PotPer,ValAme,PotNod,NajMin,NajFle,PotCri,CerDem	Patch	8/29/2007	11:51:55am	41.44471	-73.26905	0-1	2	1.9349
107	PotCri	with ValAme, MyrSpi, NajMin, EloNut, NajFle	Patch	8/29/2007	01:29:04pm	41.44470	-73.26887	1-3	1	0.1529
108	NajMin	w/MyrSpi,PotNod,EloNut,StuPec,MarQua,CerDem,IsoSp	Patch	8/29/2007	01:35:39pm	41.44604	-73.27055	0-1	4	2.9280
109	MyrSpi	NjM,ValA,CerD,ZosD,PotC,PotNo,StuP,PotFo,EloN,NajF	Patch	8/30/2007	11:11:28am	41.44675	-73.27047	1-3	3	2.1153
110	PotCri	NjM,NajF,StuP,MyrS,ZosD,CerD,ValA,PotNo,PotFo,EloN	Patch	8/30/2007	11:58:48am	41.44672	-73.27047	1-3	2	2.2920
111	MyrSpi	with ZosDub,ValAme, PotNod, PotCri, NajMin, StuPec	Patch	9/4/2007	10:42:53am	41.45124	-73.28432	1-3	4	1.7522
112	NajMin	PotC, MyrSp, EloNu, StuPec, ValAme, ZosDub, PotNod	Patch	9/4/2007	11:16:54am	41.45183	-73.28192	0-1	3	0.3075
113	PotCri	with NajMin, MyrSpi, PotNod, EloNut, ValAme	Patch	9/4/2007	11:35:41am	41.45191	-73.28164	0-1	2	0.1279
114	MyrSpi	with PotNod, StuPec, ZosDub, PotCri, PotPer	Patch	9/4/2007	11:54:20am	41.45054	-73.28841	1-3	3	0.3409
115	PotCri	with PotNod, MyrSpi	Patch	9/4/2007	12:08:59pm	41.45086	-73.28795	1-3	3	0.0081
116	MyrSpi	with ZosDub, PotCri, ValAme	Patch	9/4/2007	01:22:04pm	41.45168	-73.28621	1-3	3	0.0676
117	MyrSpi	with ZosDub	Patch	9/4/2007	01:31:40pm	41.45206	-73.28504	1-3	3	0.0085
118	MyrSpi	with ValAme	Patch	9/4/2007	01:37:00pm	41.45239	-73.28329	1-3	2	0.0082
119	MyrSpi	with PotCri, PotNod, NajMin, ValAme	Patch	9/4/2007	01:38:41pm	41.45292	-73.27841	1-3	4	2.2601
120	NajMin	with MyrSpi, EloNut, ValAme, CerDem, PotCri	Patch	9/4/2007	02:24:09pm	41.45337	-73.28072	0-1	3	0.1808
121	PotCri	with NajMin, MyrSpi, CerDem, EloNut, ValAme	Patch	9/4/2007	02:30:38pm	41.45343	-73.28073	0-1	3	0.0493
122	NajMin	with ZosDub, StuPec	Patch	9/4/2007	02:43:25pm	41.45067	-73.27184	0-1	4	0.0096
123	NajMin	with ValAme	Patch	9/5/2007	11:41:24am	41.44994	-73.27124	0-1	3	0.0013
124	NajMin	MyrS,PotC,ValA,StuP,EloN,PotNo,PotFo,CerD,PotPe	Patch	9/5/2007	11:42:54am	41.44732	-73.26880	0-1	4	1.4492
125	MyrSpi	ValA,PtC,NjM,StuP,PotNo,PotFo,EloN,ZosD,CerD,PotPe	Patch	9/6/2007	10:43:08am	41.44672	-73.26841	1-3	3	2.1721
126	PotCri	MyrS,NajM,ZosD,ValA,PotNo,PotFo,EloN,CerD,PotPe	Patch	9/6/2007	11:26:47am	41.44734	-73.26880	0-1	2	0.6339
127	MyrSpi	with NajMin, CerDem, PotCri, ValAme, ZosDub,PotCri	Patch	9/6/2007	12:00:12pm	41.44372	-73.26673	0-1	3	0.0204
128	NajMin	with MyrSpi, PotCri, EloNut, NajFle, CerDem,ZosDub	Patch	9/6/2007	12:03:33pm	41.44368	-73.26669	0-1	3	0.0098
129	MyrSpi	StuP,NajM,CerD,PotC,ZosD,ValA,NajF,EloN,SagSp	Patch	9/6/2007	01:17:54pm	41.43461	-73.25957	1-3	3	2.3883
130	NajMin	with MyrSpi, ValAme, PotCri	Patch	9/10/2007	12:39:46pm	41.43598	-73.26416	0-1	3	0.1629
131	PotCri	with NajMin, MyrSpi, ValAme, ZosDub, EloNut	Patch	9/10/2007	12:43:47pm	41.43598	-73.26417	0-1	2	0.1131
132	NajMin	with MyrSpi, EloNut, PotCri, ZosDub	Patch	9/10/2007	12:48:29pm	41.43445	-73.26035	0-1	3	1.0150
133	PotCri	w/MyrSpi,NajMin,PotNod,EloNut,ValAme,CerDem	Patch	9/10/2007	01:18:43pm	41.43464	-73.26229	0-1	2	0.2711
134	PotCri	with MyrSpi, ValAme	Patch	9/10/2007	01:34:19pm	41.43473	-73.25649	0-1	3	0.0185

Appendix. Lake Zoar invasive plant location data (4 of 9).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
135	MyrSpi	with NajMin, ValAme, ZosDub	Patch	9/10/2007	01:38:08pm	41.43553	-73.25500	0-1	1	0.1086
136	NajMin	StuPec,MyrSpi,PotCri,ValAme,CerDem,ZosDub,PotFol	Patch	9/10/2007	01:42:19pm	41.43636	-73.25409	0-1	4	0.6653
137	MyrSpi	with NajMin, PotFol, ValAme, ZosDub, StuPec	Patch	9/10/2007	01:54:29pm	41.43640	-73.25403	1-3	1	0.3355
138	PotCri	w/NajMin, CerDem, ZosDub, MyrSpi, PotFol, StuPec	Patch	9/10/2007	02:03:22pm	41.43654	-73.25388	0-1	1	0.2975
139	MyrSpi	with PotCri, NajMin, ValAme, StuPec	Patch	9/10/2007	02:12:07pm	41.43844	-73.25119	0-1	3	0.7421
140	NajMin	with MyrSpi, PotCri, ValAme	Patch	9/10/2007	02:21:08pm	41.43762	-73.25247	0-1	3	0.0774
141	PotCri	with MyrSpi, NajMin, StuPec	Patch	9/10/2007	02:23:59pm	41.43797	-73.25196	0-1	2	0.0197
142	PotCri	with MyrSpi, NajMin, ValAme, StuPec	Patch	9/10/2007	02:26:16pm	41.43835	-73.25134	0-1	3	0.1217
143	MyrSpi	with NajMin	Patch	9/10/2007	02:31:19pm	41.43924	-73.25113	0-1	2	0.0283
144	NajMin	with MyrSpi	Patch	9/10/2007	02:32:47pm	41.43925	-73.25111	0-1	2	0.0166
145	NajMin	with MyrSpi, StuPec, PotFol, PotCri	Patch	9/13/2007	10:24:49am	41.43939	-73.25051	0-1	3	0.0585
146	MyrSpi	with NajMin	Patch	9/13/2007	10:27:53am	41.43940	-73.25068	1-3	3	0.0225
147	PotCri	with MyrSpi, ZosDub, NajMin, PotFol, StuPec	Patch	9/13/2007	10:29:18am	41.43942	-73.25059	0-1	2	0.0353
148	PotCri	with NajMin	Patch	9/13/2007	10:31:48am	41.43926	-73.25005	0-1	2	0.0244
149	NajMin	with PotCri, StuPec	Patch	9/13/2007	10:34:13am	41.43921	-73.24931	0-1	3	0.2344
150	PotCri	with NajMin, StuPec	Patch	9/13/2007	10:37:24am	41.43920	-73.24934	0-1	2	0.1698
151	MyrSpi	with PotCri, NajMin	Patch	9/13/2007	10:46:44am	41.43960	-73.24725	0-1	1	0.0701
152	PotCri	with EloNut, MyrSpi, NajMin	Patch	9/13/2007	11:33:42am	41.43999	-73.24640	0-1	3	0.2725
153	NajMin	with MyrSpi, ValAme, StuPec	Patch	9/13/2007	11:47:38am	41.43602	-73.24150	1-3	4	0.1327
154	MyrSpi	w/ ValAme, NajMin, PotCri, ZosDub, StuPec, CerDem	Patch	9/13/2007	11:51:32am	41.43602	-73.24151	1-3	3	0.1067
155	NajMin	with MyrSpi, ValAme, ZosDub	Patch	9/13/2007	11:59:55am	41.43485	-73.24105	0-1	5	0.0490
156	MyrSpi	with NajMin, ZosDub, ValAme	Patch	9/13/2007	12:10:15pm	41.43229	-73.24063	1-3	1	0.0189
157	NajMin	with MyrSpi, ValAme, ZosDub	Patch	9/13/2007	12:13:42pm	41.43157	-73.24053	0-1	5	0.0348
158	MyrSpi	with NajMin, ZosDub, StuPec, CerDem, PotNod	Patch	9/13/2007	01:26:03pm	41.43313	-73.24334	0-1	4	26.5073
159	NajMin	with MyrSpi, ValAme, PotCri, StuPec, PotNod	Patch	9/13/2007	01:51:29pm	41.43352	-73.24315	1-3	1	11.3466
160	PotCri	MyrSpi,ValAme,NajMin,PotNod,StuPec,PotFol,CerDem	Patch	9/13/2007	02:09:19pm	41.43370	-73.24300	1-3	2	9.3957
161	NajMin	w/ ValAme, MyrSpi, CerDem, PotCri, ZosDub, StuPec	Patch	9/14/2007	12:56:45pm	41.42803	-73.23903	1-3	2	1.6337
162	MyrSpi	w/ ValAme, MyrSpi, PotCri, ZosDub, CerDem, StuPec	Patch	9/14/2007	01:11:36pm	41.42766	-73.23832	1-3	1	2.9899
163	PotCri	w/NajM,EloN,StuP, MyrS,PotFo,ZosD,ValA, PotNod	Patch	9/14/2007	12:00:00pm	41.43789	-73.26707	0-1	2	2.5036
164	PotCri	NajMin,EloNut,StuPec,MyrSp,PotFo,ZosDu,ValAm,PotNo	Patch	8/28/2007	01:24:27pm	41.43831	-73.26708	0-1	2	3.9050
165	MyrSpi	w/NajMin, PotCri, EloNut, ValAme, ZosDub, CerDem	Patch	9/13/2007	10:50:37am	41.44015	-73.24570	1-3	3	8.2956
166	NajMin	with MyrSpi, CerDem, ValAme, ZosDub, EloNut	Patch	9/13/2007	11:20:02am	41.44006	-73.24545	1-3	3	3.0171
0	MyrSpi		Point	8/14/2007	11:29:56am	41.4279	-73.2360	0-1	1	0.0002
1	MyrSpi		Point	8/14/2007	11:31:58am	41.4280	-73.2359	0-1	3	0.0002
2	MyrSpi		Point	8/14/2007	11:41:29am	41.4280	-73.2355	1-3	1	0.0002
3	MyrSpi		Point	8/14/2007	11:45:12am	41.4280	-73.2347	1-3	1	0.0002
4	MyrSpi	with PotCri, ValAme	Point	8/14/2007	11:47:15am	41.4282	-73.2346	1-3	1	0.0002
5	PotCri	with MyrSpi, ValAme	Point	8/14/2007	11:49:05am	41.4283	-73.2345	1-3	1	0.0002
6	MyrSpi	with ValAme	Point	8/14/2007	11:51:34am	41.4285	-73.2345	1-3	2	0.0002
7	MyrSpi		Point	8/14/2007	11:54:27am	41.4292	-73.2337	0-1	1	0.0002
8	MyrSpi		Point	8/14/2007	11:55:03am	41.4292	-73.2336	0-1	1	0.0002
9	MyrSpi		Point	8/14/2007	11:56:31am	41.4293	-73.2334	1-3	1	0.0002
10	MyrSpi		Point	8/14/2007	11:56:58am	41.4293	-73.2333	1-3	1	0.0002
11	MyrSpi		Point	8/14/2007	11:57:42am	41.4294	-73.2332	1-3	3	0.0002
12	MyrSpi		Point	8/14/2007	11:58:55am	41.4294	-73.2329	1-3	2	0.0002

Appendix. Lake Zoar invasive plant location data (5 of 9).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
13	PotCri	with MyrSpi, ValAme	Point	8/14/2007	11:59:19am	41.4294	-73.2329	1-3	2	0.0002
14	MyrSpi		Point	8/14/2007	12:00:14pm	41.4295	-73.2328	1-3	1	0.0002
15	NajMin	with ValAme	Point	8/14/2007	12:02:28pm	41.4294	-73.2326	1-3	5	0.0002
16	MyrSpi		Point	8/14/2007	12:04:16pm	41.4295	-73.2324	1-3	1	0.0002
17	MyrSpi		Point	8/14/2007	12:04:56pm	41.4293	-73.2325	1-3	2	0.0002
18	PotCri	with NajMin	Point	8/14/2007	12:05:31pm	41.4293	-73.2325	1-3	1	0.0002
19	NajMin	with PotCri	Point	8/14/2007	12:05:59pm	41.4293	-73.2325	1-3	5	0.0002
20	NajMin	with ValAme	Point	8/14/2007	12:07:11pm	41.4295	-73.2323	1-3	5	0.0002
21	PotCri	with ValAme	Point	8/14/2007	12:08:03pm	41.4296	-73.2322	1-3	1	0.0002
22	MyrSpi		Point	8/14/2007	12:09:14pm	41.4297	-73.2322	1-3	1	0.0002
23	PotCri		Point	8/14/2007	12:09:39pm	41.4297	-73.2321	1-3	1	0.0002
24	MyrSpi	with ValAme	Point	8/14/2007	12:09:57pm	41.4296	-73.2321	1-3	1	0.0002
25	NajMin	with ValAme	Point	8/14/2007	12:10:16pm	41.4296	-73.2321	1-3	5	0.0002
26	NajMin	with ValAme	Point	8/14/2007	12:10:40pm	41.4295	-73.2321	1-3	5	0.0002
27	MyrSpi		Point	8/14/2007	12:11:01pm	41.4295	-73.2320	1-3	1	0.0002
28	MyrSpi		Point	8/14/2007	12:11:53pm	41.4295	-73.2319	1-3	1	0.0002
29	NajMin		Point	8/14/2007	12:12:10pm	41.4296	-73.2319	1-3	5	0.0002
30	MyrSpi		Point	8/14/2007	12:14:54pm	41.4296	-73.2317	1-3	1	0.0002
31	MyrSpi		Point	8/14/2007	12:17:37pm	41.4298	-73.2316	1-3	1	0.0002
32	MyrSpi		Point	8/14/2007	12:18:18pm	41.4298	-73.2317	1-3	1	0.0002
33	MyrSpi		Point	8/14/2007	12:18:44pm	41.4299	-73.2317	1-3	1	0.0002
34	MyrSpi		Point	8/14/2007	12:19:21pm	41.4299	-73.2317	1-3	2	0.0002
35	MyrSpi	with ValAme	Point	8/14/2007	12:20:11pm	41.4301	-73.2316	0-1	2	0.0002
36	MyrSpi		Point	8/14/2007	12:20:47pm	41.4301	-73.2315	0-1	2	0.0002
37	MyrSpi		Point	8/14/2007	01:14:05pm	41.4313	-73.2277	1-3	2	0.0002
38	MyrSpi	with NajMin	Point	8/14/2007	01:19:26pm	41.4314	-73.2276	1-3	2	0.0002
39	MyrSpi	with NajMin	Point	8/14/2007	01:20:36pm	41.4316	-73.2275	0-1	1	0.0002
40	PotCri	with NajMin, MyrSpi	Point	8/14/2007	01:21:30pm	41.4317	-73.2275	0-1	2	0.0002
41	MyrSpi		Point	8/14/2007	01:21:59pm	41.4317	-73.2275	0-1	3	0.0002
42	MyrSpi	with NajMin	Point	8/14/2007	01:22:25pm	41.4317	-73.2273	0-1	1	0.0002
43	MyrSpi	with NajMin	Point	8/14/2007	01:22:55pm	41.4317	-73.2272	0-1	2	0.0002
44	MyrSpi	with NajMin	Point	8/14/2007	01:23:29pm	41.4317	-73.2272	0-1	2	0.0002
45	MyrSpi		Point	8/14/2007	01:24:37pm	41.4314	-73.2274	1-3	1	0.0002
46	NajMin	docks and boats in way of patch	Point	8/14/2007	01:29:16pm	41.4311	-73.2268	1-3	5	0.0002
47	NajMin	docks and boats in way of patch	Point	8/14/2007	01:30:34pm	41.4310	-73.2265	1-3	5	0.0002
48	MyrSpi		Point	8/14/2007	01:32:15pm	41.4310	-73.2264	1-3	2	0.0002
49	MyrSpi	with NajMin	Point	8/14/2007	01:34:11pm	41.4309	-73.2255	1-3	1	0.0002
50	NajMin	with MyrSpi	Point	8/14/2007	01:34:25pm	41.4309	-73.2254	1-3	5	0.0002
51	NajMin	with ValAme, MyrSpi	Point	8/14/2007	01:44:15pm	41.4309	-73.2224	0-1	4	0.0002
52	MyrSpi	with ValAme, NajMin	Point	8/14/2007	01:45:04pm	41.4309	-73.2224	0-1	1	0.0002
53	MyrSpi		Point	8/14/2007	01:45:48pm	41.4308	-73.2222	1-3	1	0.0002
54	PotCri	with ValAme	Point	8/14/2007	01:46:35pm	41.4308	-73.2220	0-1	1	0.0002
55	MyrSpi		Point	8/14/2007	01:51:23pm	41.4305	-73.2202	1-3	1	0.0002
56	MyrSpi		Point	8/14/2007	01:52:02pm	41.4305	-73.2202	1-3	1	0.0002
57	MyrSpi		Point	8/14/2007	01:52:27pm	41.4305	-73.2201	1-3	1	0.0002

Appendix. Lake Zoar invasive plant location data (6 of 9).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
58	MyrSpi		Point	8/14/2007	01:56:21pm	41.4296	-73.2178	1-3	2	0.0002
59	MyrSpi		Point	8/14/2007	01:57:36pm	41.4296	-73.2173	1-3	2	0.0002
60	MyrSpi		Point	8/14/2007	01:58:27pm	41.4294	-73.2171	1-3	2	0.0002
61	MyrSpi		Point	8/14/2007	01:59:08pm	41.4294	-73.2170	1-3	2	0.0002
62	MyrSpi	with ValAme	Point	8/14/2007	02:03:04pm	41.4291	-73.2167	1-3	1	0.0002
63	MyrSpi		Point	8/14/2007	02:05:14pm	41.4289	-73.2164	1-3	1	0.0002
64	MyrSpi		Point	8/14/2007	02:07:17pm	41.4286	-73.2161	1-3	2	0.0002
65	MyrSpi		Point	8/14/2007	02:09:23pm	41.4279	-73.2153	1-3	1	0.0002
66	MyrSpi		Point	8/14/2007	02:09:55pm	41.4279	-73.2152	1-3	1	0.0002
67	MyrSpi		Point	8/14/2007	02:13:29pm	41.4257	-73.2140	1-3	2	0.0002
68	MyrSpi		Point	8/14/2007	02:14:04pm	41.4257	-73.2140	1-3	1	0.0002
69	MyrSpi		Point	8/14/2007	02:14:56pm	41.4254	-73.2138	1-3	2	0.0002
70	MyrSpi		Point	8/14/2007	02:16:06pm	41.4253	-73.2136	1-3	1	0.0002
71	MyrSpi		Point	8/14/2007	02:19:17pm	41.4242	-73.2119	1-3	1	0.0002
72	MyrSpi		Point	8/14/2007	02:20:02pm	41.4240	-73.2116	1-3	1	0.0002
73	MyrSpi		Point	8/14/2007	02:21:19pm	41.4239	-73.2115	1-3	1	0.0002
74	NajMin		Point	8/14/2007	02:21:46pm	41.4239	-73.2115	0-1	2	0.0002
75	MyrSpi		Point	8/14/2007	02:22:34pm	41.4238	-73.2114	1-3	1	0.0002
76	NajMin		Point	8/14/2007	02:23:08pm	41.4238	-73.2114	0-1	2	0.0002
77	MyrSpi		Point	8/14/2007	02:24:48pm	41.4233	-73.2108	1-3	1	0.0002
78	MyrSpi		Point	8/14/2007	02:25:30pm	41.4232	-73.2106	1-3	1	0.0002
79	MyrSpi		Point	8/14/2007	02:34:13pm	41.4224	-73.2076	1-3	1	0.0002
80	MyrSpi		Point	8/14/2007	02:37:08pm	41.4227	-73.2075	1-3	1	0.0002
81	MyrSpi		Point	8/15/2007	11:23:40am	41.4232	-73.2074	1-3	2	0.0002
82	MyrSpi		Point	8/15/2007	11:24:52am	41.4233	-73.2074	1-3	1	0.0002
83	MyrSpi		Point	8/15/2007	11:25:16am	41.4234	-73.2074	1-3	2	0.0002
84	MyrSpi		Point	8/15/2007	12:40:28pm	41.4233	-73.2061	1-3	1	0.0002
85	NajMin		Point	8/15/2007	12:57:30pm	41.4210	-73.2064	0-1	2	0.0002
86	MyrSpi		Point	8/15/2007	01:02:59pm	41.4202	-73.2060	1-3	1	0.0002
87	MyrSpi		Point	8/15/2007	01:04:09pm	41.4198	-73.2056	1-3	1	0.0002
88	NajMin		Point	8/15/2007	01:06:24pm	41.4195	-73.2051	0-1	1	0.0002
89	NajMin		Point	8/15/2007	01:08:47pm	41.4196	-73.2051	0-1	1	0.0002
90	MyrSpi		Point	8/15/2007	01:13:54pm	41.4179	-73.2032	1-3	3	0.0002
91	MyrSpi		Point	8/15/2007	01:14:38pm	41.4179	-73.2031	1-3	3	0.0002
92	NajMin		Point	8/15/2007	01:18:58pm	41.4178	-73.2027	0-1	1	0.0002
93	MyrSpi		Point	8/15/2007	01:20:02pm	41.4177	-73.2025	0-1	2	0.0002
94	MyrSpi		Point	8/15/2007	01:24:17pm	41.4163	-73.2005	1-3	1	0.0002
95	MyrSpi		Point	8/15/2007	01:25:06pm	41.4162	-73.2003	1-3	1	0.0002
96	MyrSpi		Point	8/15/2007	01:25:46pm	41.4161	-73.2002	1-3	2	0.0002
97	MyrSpi		Point	8/15/2007	01:30:37pm	41.4138	-73.1990	1-3	1	0.0002
98	MyrSpi		Point	8/15/2007	01:32:32pm	41.4135	-73.1985	1-3	1	0.0002
99	MyrSpi		Point	8/15/2007	01:33:51pm	41.4133	-73.1983	1-3	1	0.0002
100	MyrSpi		Point	8/15/2007	01:35:39pm	41.4127	-73.1975	1-3	1	0.0002
101	MyrSpi		Point	8/15/2007	01:36:24pm	41.4126	-73.1973	1-3	4	0.0002
102	MyrSpi		Point	8/15/2007	01:37:04pm	41.4125	-73.1972	1-3	3	0.0002

Appendix. Lake Zoar invasive plant location data (7 of 9).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
103	MyrSpi		Point	8/15/2007	01:37:45pm	41.4124	-73.1970	1-3	2	0.0002
104	MyrSpi		Point	8/15/2007	01:38:26pm	41.4123	-73.1969	1-3	1	0.0002
105	MyrSpi		Point	8/15/2007	01:39:35pm	41.4121	-73.1966	1-3	1	0.0002
106	MyrSpi		Point	8/15/2007	01:41:25pm	41.4118	-73.1957	1-3	1	0.0002
107	MyrSpi		Point	8/15/2007	01:42:25pm	41.4117	-73.1954	1-3	1	0.0002
108	MyrSpi		Point	8/15/2007	02:10:14pm	41.4112	-73.1912	1-3	2	0.0002
109	MyrSpi		Point	8/15/2007	02:10:56pm	41.4113	-73.1911	1-3	1	0.0002
110	MyrSpi		Point	8/15/2007	02:11:29pm	41.4114	-73.1910	1-3	2	0.0002
111	MyrSpi		Point	8/15/2007	02:11:50pm	41.4115	-73.1910	1-3	1	0.0002
112	NajMin		Point	8/20/2007	10:33:16am	41.4113	-73.1907	0-1	1	0.0002
113	MyrSpi		Point	8/20/2007	10:35:18am	41.4110	-73.1907	0-1	3	0.0002
114	MyrSpi		Point	8/20/2007	10:35:53am	41.4110	-73.1907	1-3	2	0.0002
115	MyrSpi		Point	8/20/2007	10:39:26am	41.4107	-73.1906	1-3	1	0.0002
116	MyrSpi		Point	8/20/2007	10:40:00am	41.4107	-73.1905	1-3	1	0.0002
117	MyrSpi		Point	8/20/2007	11:06:47am	41.4097	-73.1866	1-3	1	0.0002
118	MyrSpi		Point	8/20/2007	11:08:07am	41.4096	-73.1862	1-3	2	0.0002
119	MyrSpi		Point	8/20/2007	11:09:25am	41.4094	-73.1859	1-3	1	0.0002
120	MyrSpi		Point	8/20/2007	11:10:46am	41.4091	-73.1855	1-3	1	0.0002
121	MyrSpi		Point	8/20/2007	11:11:03am	41.4091	-73.1855	1-3	1	0.0002
122	MyrSpi		Point	8/20/2007	11:11:53am	41.4089	-73.1852	1-3	1	0.0002
123	MyrSpi		Point	8/20/2007	11:12:14am	41.4089	-73.1851	1-3	2	0.0002
124	MyrSpi		Point	8/20/2007	11:12:54am	41.4088	-73.1849	1-3	1	0.0002
125	MyrSpi		Point	8/20/2007	11:34:41am	41.3961	-73.1862	1-3	1	0.0002
126	MyrSpi		Point	8/20/2007	11:36:34am	41.3961	-73.1857	1-3	1	0.0002
127	MyrSpi		Point	8/20/2007	11:40:43am	41.3956	-73.1855	1-3	1	0.0002
128	MyrSpi		Point	8/20/2007	11:55:10am	41.3941	-73.1827	1-3	3	0.0002
129	MyrSpi		Point	8/20/2007	11:57:39am	41.3940	-73.1823	3-5	1	0.0002
130	MyrSpi		Point	8/20/2007	11:58:41am	41.3937	-73.1822	1-3	1	0.0002
131	MyrSpi		Point	8/20/2007	11:59:22am	41.3936	-73.1821	1-3	2	0.0002
132	MyrSpi		Point	8/20/2007	11:59:45am	41.3936	-73.1820	1-3	2	0.0002
133	MyrSpi		Point	8/20/2007	12:00:07pm	41.3935	-73.1820	1-3	1	0.0002
134	MyrSpi		Point	8/20/2007	12:00:27pm	41.3935	-73.1820	1-3	1	0.0002
135	MyrSpi		Point	8/20/2007	12:07:54pm	41.3904	-73.1793	1-3	1	0.0002
136	NajMin		Point	8/20/2007	12:09:41pm	41.3903	-73.1791	0-1	2	0.0002
137	MyrSpi		Point	8/20/2007	12:24:30pm	41.3899	-73.1776	1-3	2	0.0002
138	NajMin		Point	8/20/2007	12:25:21pm	41.3898	-73.1775	0-1	3	0.0002
139	MyrSpi		Point	8/20/2007	01:16:57pm	41.3891	-73.1770	1-3	1	0.0002
140	MyrSpi		Point	8/20/2007	01:18:02pm	41.3890	-73.1769	1-3	2	0.0002
141	MyrSpi		Point	8/20/2007	01:18:34pm	41.3890	-73.1768	1-3	3	0.0002
142	MyrSpi		Point	8/20/2007	01:20:56pm	41.3897	-73.1762	1-3	1	0.0002
143	MyrSpi		Point	8/20/2007	01:21:49pm	41.3898	-73.1761	1-3	1	0.0002
144	NajMin	with StuPec	Point	8/20/2007	01:22:25pm	41.3899	-73.1761	0-1	3	0.0002
145	MyrSpi		Point	8/20/2007	01:23:50pm	41.3901	-73.1760	1-3	1	0.0002
146	MyrSpi		Point	8/20/2007	01:24:30pm	41.3902	-73.1759	1-3	1	0.0002
147	MyrSpi		Point	8/20/2007	01:24:52pm	41.3902	-73.1759	1-3	2	0.0002

Appendix. Lake Zoar invasive plant location data (8 of 9).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
148	MyrSpi		Point	8/20/2007	01:29:55pm	41.3910	-73.1755	1-3	1	0.0002
149	MyrSpi		Point	8/20/2007	01:35:43pm	41.3917	-73.1748	1-3	3	0.0002
150	MyrSpi		Point	8/20/2007	01:43:46pm	41.3899	-73.1750	1-3	3	0.0002
151	MyrSpi		Point	8/20/2007	02:05:43pm	41.3860	-73.1736	1-3	2	0.0002
152	NajMin	with MyrSpi	Point	8/20/2007	02:11:28pm	41.3855	-73.1732	1-3	5	0.0002
153	MyrSpi		Point	8/20/2007	02:24:44pm	41.3819	-73.1746	1-3	3	0.0002
154	NajMin	with a lot of NajFle	Point	8/21/2007	12:09:33pm	41.3816	-73.1761	0-1	5	0.0002
155	MyrSpi		Point	8/21/2007	12:22:26pm	41.3831	-73.1772	1-3	3	0.0002
156	MyrSpi		Point	8/21/2007	12:23:48pm	41.3833	-73.1773	1-3	1	0.0002
157	MyrSpi		Point	8/21/2007	12:25:29pm	41.3836	-73.1775	1-3	1	0.0002
158	MyrSpi		Point	8/21/2007	12:26:24pm	41.3837	-73.1776	1-3	1	0.0002
159	MyrSpi		Point	8/21/2007	12:30:11pm	41.3842	-73.1780	1-3	3	0.0002
160	MyrSpi		Point	8/21/2007	12:31:04pm	41.3843	-73.1781	1-3	1	0.0002
161	MyrSpi		Point	8/21/2007	12:39:06pm	41.3863	-73.1801	1-3	1	0.0002
162	NajMin		Point	8/21/2007	12:39:53pm	41.3863	-73.1801	0-1	1	0.0002
163	MyrSpi		Point	8/21/2007	12:43:00pm	41.3876	-73.1809	1-3	1	0.0002
164	MyrSpi		Point	8/24/2007	01:20:32pm	41.4253	-73.2158	1-3	1	0.0002
165	MyrSpi	with NajMin	Point	8/24/2007	01:38:59pm	41.4289	-73.2228	1-3	1	0.0002
166	MyrSpi		Point	8/24/2007	01:50:14pm	41.4291	-73.2285	1-3	1	0.0002
167	NajMin	with NajFle	Point	8/24/2007	02:02:59pm	41.4260	-73.2349	0-1	5	0.0002
168	NajMin		Point	8/24/2007	02:05:34pm	41.4260	-73.2349	0-1	4	0.0002
169	MyrSpi		Point	8/24/2007	02:13:45pm	41.4250	-73.2369	1-3	1	0.0002
170	NajMin	with NajFle	Point	8/24/2007	02:28:53pm	41.4280	-73.2432	0-1	4	0.0002
171	PotCri	with NajMin, MyrSpi	Point	8/27/2007	11:28:26am	41.4312	-73.2452	0-1	2	0.0002
172	MyrSpi		Point	8/27/2007	12:03:51pm	41.4345	-73.2459	1-3	1	0.0002
173	PotCri	with NajMin, MyrSpi, ZosDub	Point	8/27/2007	12:14:47pm	41.4355	-73.2453	1-3	2	0.0002
174	PotCri	with MyrSpi, ZosDub	Point	8/27/2007	12:22:30pm	41.4360	-73.2445	1-3	3	0.0002
175	PotCri	with MyrSpi, NajMin	Point	8/27/2007	12:28:46pm	41.4366	-73.2441	0-1	1	0.0002
176	MyrSpi	with ValAme	Point	8/27/2007	01:33:21pm	41.4378	-73.2437	1-3	3	0.0002
177	MyrSpi	NajMin, NajFle, ZosDub, CerDem	Point	8/27/2007	01:40:54pm	41.4382	-73.2443	0-1	1	0.0002
178	MyrSpi	with NajFle, ValAme	Point	8/27/2007	02:20:09pm	41.4330	-73.2587	1-3	1	0.0002
179	MyrSpi	dock with NajMin, StuPec, PotCri	Point	8/27/2007	02:21:34pm	41.4330	-73.2590	1-3	2	0.0002
180	NajMin	docks with MyrSpi, PotCri, StuPec	Point	8/27/2007	02:22:08pm	41.4330	-73.2590	0-1	5	0.0002
181	PotCri	withNajMin, MyrSpi	Point	8/27/2007	02:22:25pm	41.4330	-73.2590	1-3	3	0.0002
182	PotCri	dock, ValAme, PotNat, PotNod, MyrSpi, NajMin	Point	8/27/2007	02:32:30pm	41.4330	-73.2592	0-1	4	0.0002
183	NajMin	docks,PotNat,PotNod,MyrSpi,ValAme,NajFle,StuPec	Point	8/27/2007	02:36:31pm	41.4330	-73.2593	0-1	5	0.0002
184	MyrSpi	docks, NajMin, ValAme, PotCri	Point	8/27/2007	02:38:04pm	41.4331	-73.2593	0-1	2	0.0002
185	MyrSpi	with PotCri, ValAme	Point	8/28/2007	11:24:41am	41.4339	-73.2630	0-1	3	0.0002
186	PotCri	with MyrSpi, ValAme	Point	8/28/2007	11:26:03am	41.4339	-73.2630	0-1	4	0.0002
187	MyrSpi	with ValAme	Point	8/28/2007	11:26:55am	41.4339	-73.2630	0-1	3	0.0002
188	PotCri	with NajMin, MyrSpi	Point	8/28/2007	11:27:31am	41.4339	-73.2631	1-3	2	0.0002
189	NajMin	with PotCri, PotNod, ZosDub	Point	8/28/2007	11:28:50am	41.4339	-73.2631	0-1	4	0.0002
190	MyrSpi		Point	8/28/2007	11:30:17am	41.4340	-73.2631	1-3	2	0.0002
191	MyrSpi	with ValAme, CerDem	Point	8/28/2007	11:30:56am	41.4340	-73.2632	0-1	2	0.0002
192	NajMin		Point	8/28/2007	11:50:35am	41.4355	-73.2652	1-3	5	0.0002

Appendix. Lake Zoar invasive plant location data (9 of 9).

FID	Invasive	Notes	Type	Date	Time	Latitude	Longitude	Depth (m)	Abundance	Acres
193	NajMin	with NajFle, MyrSpi	Point	8/28/2007	11:54:14am	41.4356	-73.2653	0-1	4	0.0002
194	PotCri	with MyrSpi, NajMin	Point	8/28/2007	11:54:54am	41.4356	-73.2653	0-1	2	0.0002
195	MyrSpi	with ValAme	Point	8/28/2007	11:56:27am	41.4358	-73.2652	1-3	2	0.0002
196	MyrSpi	with ValAme	Point	8/29/2007	11:26:15am	41.4435	-73.2680	1-3	3	0.0002
197	MarQua	too shallow for a patch, seems to come from inflow	Point	8/29/2007	01:52:37pm	41.4468	-73.2720	0-1	4	0.0002
198	MarQua	with MyrSpi, ZosDub, NajMin	Point	8/29/2007	02:01:05pm	41.4467	-73.2715	0-1	3	0.0002
199	PotCri	with NajMin	Point	8/29/2007	02:05:20pm	41.4462	-73.2710	0-1	3	0.0002
200	PotCri	with MyrSpi, ZosDub	Point	9/4/2007	01:28:46pm	41.4519	-73.2859	0-1	3	0.0002
201	MyrSpi	with ZosDub	Point	9/4/2007	01:30:43pm	41.4520	-73.2854	0-1	2	0.0002
202	MyrSpi	with ValAme	Point	9/4/2007	01:33:55pm	41.4522	-73.2843	1-3	2	0.0002
203	MyrSpi	with PotNod, ValAme	Point	9/4/2007	01:35:12pm	41.4523	-73.2841	1-3	2	0.0002
204	PotCri	with NajMin, MyrSpi, ValAme, ZosDub	Point	9/4/2007	02:15:54pm	41.4526	-73.2830	1-3	3	0.0002
205	NajMin	with PotCri, MyrSpi, ZosDub, ValAme	Point	9/4/2007	02:17:03pm	41.4526	-73.2830	0-1	2	0.0002
206	PotCri	with MyrSpi	Point	9/4/2007	02:19:53pm	41.4527	-73.2826	0-1	4	0.0002
207	NajMin	with MyrSpi, CerDem	Point	9/4/2007	02:22:24pm	41.4531	-73.2817	1-3	4	0.0002
208	MyrSpi	with StuPec	Point	9/4/2007	02:46:02pm	41.4505	-73.2717	1-3	2	0.0002
209	MyrSpi	with ValAme	Point	9/5/2007	11:33:39am	41.4501	-73.2715	1-3	2	0.0002
210	NajMin	with ValAme, StuPec	Point	9/5/2007	11:35:01am	41.4502	-73.2715	0-1	3	0.0002
211	NajMin	with MyrSpi, ValAme	Point	9/5/2007	11:36:19am	41.4501	-73.2714	0-1	2	0.0002
212	MyrSpi	withValAme, NajMin	Point	9/5/2007	11:36:50am	41.4501	-73.2714	0-1	3	0.0002
213	MyrSpi		Point	9/5/2007	11:38:34am	41.4500	-73.2714	1-3	1	0.0002
214	MyrSpi		Point	9/5/2007	11:40:54am	41.4500	-73.2713	1-3	1	0.0002
215	PotCri	with NajFle, NajMin, MyrSpi, ZosDub, ValAme	Point	9/6/2007	12:06:15pm	41.4436	-73.2666	0-1	1	0.0002
216	MyrSpi	with ValAme	Point	9/6/2007	12:10:49pm	41.4415	-73.2660	1-3	3	0.0002
217	PotCri	with MyrSpi, ValAme	Point	9/10/2007	01:37:11pm	41.4353	-73.2554	1-3	3	0.0002
218	NajMin		Point	9/10/2007	02:34:26pm	41.4396	-73.2511	0-1	5	0.0002
219	MyrSpi		Point	9/10/2007	02:35:01pm	41.4395	-73.2510	0-1	1	0.0002
220	NajMin	with PotCri	Point	9/13/2007	10:33:20am	41.4393	-73.2501	0-1	2	0.0002
221	MyrSpi	with CerDem	Point	9/13/2007	10:40:38am	41.4393	-73.2487	0-1	3	0.0002
222	NajMin	with StuPec	Point	9/13/2007	10:41:45am	41.4394	-73.2484	0-1	3	0.0002
223	PotCri	with NajMin	Point	9/13/2007	10:42:15am	41.4394	-73.2484	0-1	2	0.0002
224	NajMin		Point	9/13/2007	10:43:39am	41.4395	-73.2480	0-1	2	0.0002
225	MyrSpi		Point	9/13/2007	10:44:25am	41.4397	-73.2475	0-1	2	0.0002
226	MyrSpi		Point	9/13/2007	10:44:50am	41.4397	-73.2476	0-1	2	0.0002
227	PotCri		Point	9/13/2007	10:45:26am	41.4397	-73.2474	0-1	3	0.0002
228	PotCri	with NajMin, MyrSpi, ValAme	Point	9/13/2007	11:55:02am	41.4361	-73.2416	1-3	2	0.0002
229	MyrSpi	with NajMin	Point	9/13/2007	12:02:31pm	41.4350	-73.2411	1-3	3	0.0002
230	NajMin	with ValAme, MyrSpi	Point	9/13/2007	12:05:42pm	41.4334	-73.2407	1-3	2	0.0002
231	MyrSpi	with ValAme, NajMin	Point	9/13/2007	12:06:22pm	41.4334	-73.2407	1-3	1	0.0002
232	MyrSpi	with ValAme, NajMin	Point	9/13/2007	12:07:40pm	41.4332	-73.2407	1-3	1	0.0002
233	NajMin	with MyrSpi, ValAme, NajFle	Point	9/13/2007	12:08:03pm	41.4332	-73.2407	0-1	4	0.0002
234	NajMin	with ValAme, MyrSpi, ZosDub	Point	9/13/2007	12:11:41pm	41.4323	-73.2406	1-3	3	0.0002
235	MyrSpi	with NajMin, ValAme	Point	9/13/2007	12:15:21pm	41.4316	-73.2406	1-3	2	0.0002
236	NajMin	with ValAme	Point	9/13/2007	12:17:39pm	41.4309	-73.2404	1-3	3	0.0002
237	MyrSpi	with CerDem, ValAme	Point	9/13/2007	12:18:34pm	41.4308	-73.2405	1-3	1	0.0002
238	PotCri	with NajMin, MyrSpi, ValAme	Point	9/14/2007	01:34:27pm	41.4290	-73.2402	1-3	3	0.0002

Transect Data

Appendix. Lake Candlewood transects (1 of 10).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
1	1	0	Bob C & Roz S	41.57056	-73.49008	6/20/2005	0.2	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	2	5	Bob C & Roz S	41.57057	-73.49014	6/20/2005	2.0	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	3	10	Bob C & Roz S	41.57054	-73.49021	6/20/2005	ND	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	4	20	Bob C & Roz S	41.57051	-73.49033	6/20/2005	3.0	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	5	30	Bob C & Roz S	41.57045	-73.49044	6/20/2005	3.0	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	6	40	Bob C & Roz S	41.57041	-73.49054	6/20/2005	3.5	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	7	50	Bob C & Roz S	41.57041	-73.49068	6/20/2005	2.5	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	8	60	Bob C & Roz S	41.57037	-73.49076	6/20/2005	2.2	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	9	70	Bob C & Roz S	41.57031	-73.49087	6/20/2005	2.2	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	10	80	Bob C & Roz S	41.57027	-73.49099	6/20/2005	2.5	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	0	Greg Bugbee	41.57088	-73.48850	6/20/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0
2	2	5	Greg Bugbee	41.57093	-73.48183	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	3	10	Greg Bugbee	41.57090	-73.48865	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	4	20	Greg Bugbee	41.57087	-73.48865	6/20/2005	ND	ND	sunny			0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
2	5	30	Greg Bugbee	41.57073	-73.48868	6/20/2005	ND	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
2	6	40	Greg Bugbee	41.57070	-73.48872	6/20/2005	ND	ND	sunny			0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
2	7	50	Greg Bugbee	41.57057	-73.48870	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	8	60	Greg Bugbee	41.57048	-73.48878	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	9	70	Greg Bugbee	41.57040	-73.48880	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	10	80	Greg Bugbee	41.57030	-73.48887	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	1	0	Robert Capers	41.55695	-73.47403	6/21/2005	0.2	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	2	5	Robert Capers	41.55696	-73.47411	6/21/2005	ND	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	0	Robert Capers	41.55693	-73.47416	6/21/2005	ND	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
3	4	20	Robert Capers	41.55696	-73.47432	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	5	20	Robert Capers	41.55697	-73.47433	6/21/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
3	6	30	Robert Capers	41.55687	-73.47439	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	7	40	Robert Capers	41.55693	-73.47452	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	8	50	Robert Capers	41.55686	-73.47462	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	3	10	Roslyn Selsky	41.55081	-73.47179	6/21/2005	4.5	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
4	1	0	Bob C & Roz S	41.56745	-73.49020	6/20/2005	0.2	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	2	5	Bob C & Roz S	41.56747	-73.49015	6/20/2005	2.0	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	3	10	Bob C & Roz S	41.56747	-73.49009	6/20/2005	2.2	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	4	20	Bob C & Roz S	41.56753	-73.48999	6/20/2005	5.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	30	Bob C & Roz S	41.56756	-73.48986	6/20/2005	5.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	6	40	Bob C & Roz S	41.56756	-73.48976	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	7	50	Bob C & Roz S	41.56759	-73.48964	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	8	60	Bob C & Roz S	41.56763	-73.48951	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	9	70	Bob C & Roz S	41.56766	-73.48940	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	10	80	Bob C & Roz S	41.56763	-73.48927	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	1	0	Greg Bugbee	41.56605	-73.48777	6/20/2005	0.2	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5	2	5	Greg Bugbee	41.56603	-73.48783	6/20/2005	ND	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
5	3	10	Greg Bugbee	41.56602	-73.48790	6/20/2005	ND	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
5	4	20	Greg Bugbee	41.56600	-73.48795	6/20/2005	ND	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
5	5	30	Greg Bugbee	41.56588	-73.48802	6/20/2005	ND	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
5	6	40	Greg Bugbee	41.56593	-73.48820	6/20/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
5	7	50	Greg Bugbee	41.56590	-73.48835	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	8	60	Greg Bugbee	41.56585	-73.48845	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	9	70	Greg Bugbee	41.56582	-73.48853	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	10	80	Greg Bugbee	41.56568	-73.48858	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	1	0	Robert Capers	41.55193	-73.46602	6/21/2005	0.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	2	5	Robert Capers	41.55192	-73.46604	6/21/2005	ND	Rock	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
6	3	10	Robert Capers	41.55187	-73.46613	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	4	20	Robert Capers	41.55185	-73.46620	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	5	30	Robert Capers	41.55180	-73.46637	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	6	40	Robert Capers	41.55176	-73.46653	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	7	50	Robert Capers	41.55174	-73.46664	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	8	60	Robert Capers	41.55163	-73.46663	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	9	70	Robert Capers	41.55169	-73.46683	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	10	80	Robert Capers	41.55169	-73.46692	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	1	0	Bob C & Roz S	41.56712	-73.48368	6/20/2005	0.2	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	2	5	Bob C & Roz S	41.56708	-73.48367	6/20/2005	0.7	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	3	10	Bob C & Roz S	41.56702	-73.48366	6/20/2005	1.9	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	4	20	Bob C & Roz S	41.56694	-73.48366	6/20/2005	2.2	Sand	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
7	5	30	Bob C & Roz S	41.56685	-73.48365	6/20/2005	2.2	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
7	6	40	Bob C & Roz S	41.56677	-73.48358	6/20/2005	3.0	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
7	7	50	Bob C & Roz S	41.56668	-73.48351	6/20/2005	3.8	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
7	8	60	Bob C & Roz S	41.56662	-73.48343	6/20/2005	5.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	9	70	Bob C & Roz S	41.56653	-73.48336	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	10	80	Bob C & Roz S	41.56644	-73.48328	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	1	0	Greg Bugbee	41.56147	-73.48690	6/20/2005	0.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	2	5	Greg Bugbee	41.55648	-73.48683	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	3	10	Greg Bugbee	41.56153	-73.48683	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	4	20	Greg Bugbee	41.56163	-73.48678	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	5	30	Greg Bugbee	41.56173	-73.48670	6/20/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
8	6	40	Greg Bugbee	41.56177	-73.48660	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	7	50	Greg Bugbee	41.56182	-73.48653	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	8	60	Greg Bugbee	41.56192	-73.48653	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	9	70	Greg Bugbee	41.56200	-73.48645	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	10	80	Greg Bugbee	41.56207	-73.48648	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Candlewood transects (2 of 10).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
9	1	0	Robert Capers	41.54282	-73.45859	6/21/2005	0.2	Rock	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
9	2	5	Robert Capers	41.54277	-73.45862	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	3	10	Robert Capers	41.54274	-73.45866	6/21/2005	ND	Silt	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
9	4	20	Robert Capers	41.54271	-73.45881	6/21/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	1	0	Bob C & Roz S	41.56302	-73.47768	6/20/2005	0.3	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	2	5	Bob C & Roz S	41.56299	-73.47776	6/20/2005	3.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	3	10	Bob C & Roz S	41.56296	-73.47778	6/20/2005	5.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	4	20	Bob C & Roz S	41.56290	-73.47789	6/20/2005	10.0	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
10	5	30	Bob C & Roz S	41.56283	-73.47793	6/20/2005	0.2	ND	sunny		too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	1	0	Greg Bugbee	41.55830	-73.48185	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	2	5	Greg Bugbee	41.55833	-73.48180	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	3	10	Greg Bugbee	41.55838	-73.48177	6/20/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
11	4	20	Greg Bugbee	41.55888	-73.47515	6/20/2005	ND	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
11	5	30	Greg Bugbee	41.55852	-73.43160	6/20/2005	ND	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
11	6	40	Greg Bugbee	41.55862	-73.48158	6/20/2005	ND	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
11	7	50	Greg Bugbee	41.55872	-73.48160	6/20/2005	ND	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11	8	60	Greg Bugbee	41.55880	-73.48158	6/20/2005	ND	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
11	9	70	Greg Bugbee	41.55888	-73.48143	6/20/2005	ND	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
11	10	80	Greg Bugbee	41.55897	-73.48142	6/20/2005	ND	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
12	1	0	Robert Capers	41.53916	-73.45686	6/21/2005	1.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	2	5	Robert Capers	41.53914	-73.45688	6/21/2005	3.5	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	3	10	Robert Capers	41.53913	-73.45698	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	4	20	Robert Capers	41.53909	-73.45714	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	5	30	Robert Capers	41.53904	-73.45722	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	6	40	Robert Capers	41.53905	-73.45730	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	7	50	Robert Capers	41.53897	-73.45745	6/21/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	1	0	Greg Bugbee	41.55870	-73.48475	6/20/2005	0.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	2	5	Greg Bugbee	41.55867	-73.48473	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	3	10	Greg Bugbee	41.55862	-73.48472	6/20/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
13	4	20	Greg Bugbee	41.55857	-73.48465	6/20/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
13	5	30	Greg Bugbee	41.55852	-73.48453	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	6	40	Greg Bugbee	41.55852	-73.48437	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	7	50	Greg Bugbee	41.55845	-73.48428	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	8	60	Greg Bugbee	41.55837	-73.48420	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	9	70	Greg Bugbee	41.55832	-73.48413	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	10	80	Greg Bugbee	41.55822	-73.48410	6/20/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	1	0	Robert Capers	41.53125	-73.45427	6/21/2005	0.2	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	2	0	Robert Capers	41.53124	-73.45427	6/21/2005	0.5	Sand	sunny		StuPec collected	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3
14	3	10	Robert Capers	41.53118	-73.45436	6/21/2005	1.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	4	20	Robert Capers	41.53108	-73.45439	6/21/2005	2.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	5	30	Robert Capers	41.53100	-73.45445	6/21/2005	3.0	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
14	6	40	Robert Capers	41.53093	-73.45452	6/21/2005	4.0	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
14	7	50	Robert Capers	41.53082	-73.45457	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	8	60	Robert Capers	41.53074	-73.45460	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	9	70	Robert Capers	41.53068	-73.45470	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	10	80	Robert Capers	41.53061	-73.45470	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	1	0	Roslyn Selsky	41.55083	-73.47170	6/21/2005	1.0	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	2	5	Roslyn Selsky	41.55079	-73.47174	6/21/2005	2.0	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	4	20	Roslyn Selsky	41.55082	-73.47194	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	5	30	Roslyn Selsky	41.55076	-73.47207	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	6	40	Roslyn Selsky	41.55077	-73.47217	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	7	50	Roslyn Selsky	41.55067	-73.47227	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	8	60	Roslyn Selsky	41.55072	-73.47241	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	9	70	Roslyn Selsky	41.55082	-73.47254	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	10	80	Roslyn Selsky	41.55072	-73.47266	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	1	0	Greg Bugbee	41.55447	-73.48042	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	2	5	Greg Bugbee	41.55450	-73.48033	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	3	10	Greg Bugbee	41.55456	-73.48028	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	4	20	Greg Bugbee	41.55461	-73.48022	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	5	30	Greg Bugbee	41.55467	-73.48008	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	6	40	Greg Bugbee	41.55475	-73.48008	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	7	50	Greg Bugbee	41.55489	-73.47967	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	8	60	Greg Bugbee	41.55486	-73.47986	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	9	70	Greg Bugbee	41.55489	-73.47975	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	10	80	Greg Bugbee	41.55503	-73.47975	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	1	0	Robert Capers	41.51994	-73.45175	6/21/2005	0.3	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	2	5	Robert Capers	41.51992	-73.45180	6/21/2005	2.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	3	10	Robert Capers	41.51994	-73.45188	6/21/2005	3.0	Sand	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
17	4	20	Robert Capers	41.51991	-73.45198	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	5	30	Robert Capers	41.51991	-73.45213	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	6	40	Robert Capers	41.51986	-73.45225	6/21/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	1	0	Roslyn Selsky	41.54385	-73.46590	6/21/2005	0.3	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	2	5	Roslyn Selsky	41.54389	-73.46589	6/21/2005	2.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	3	10	Roslyn Selsky	41.54394	-73.46584	6/21/2005	11.0	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
18	4	20	Roslyn Selsky	41.54392	-73.46569	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	5	30	Roslyn Selsky	41.54400	-73.46556	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	6	40	Roslyn Selsky	41.54408	-73.46552	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	7	50	Roslyn Selsky	41.54408	-73.46534	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	8	60	Roslyn Selsky	41.54388	-73.46519	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Candlewood transects (3 of 10).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
18	9	70	Roslyn Selsky	41.54387	-73.46507	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	10	80	Roslyn Selsky	41.54400	-73.46506	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	1	0	Greg Bugbee	41.55018	-73.47655	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	2	5	Greg Bugbee	41.55021	-73.47649	6/21/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
19	3	10	Greg Bugbee	41.55025	-73.47645	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	4	20	Greg Bugbee	41.55033	-73.47643	6/21/2005	ND	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
19	5	30	Greg Bugbee	41.55045	-73.47643	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	6	40	Greg Bugbee	41.55050	-73.47639	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	7	50	Greg Bugbee	41.55061	-73.47639	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	8	60	Greg Bugbee	41.55072	-73.47634	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	9	70	Greg Bugbee	41.55079	-73.47628	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	10	80	Greg Bugbee	41.55086	-73.47622	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	1	0	Roslyn Selsky	41.53457	-73.46198	6/21/2005	0.3	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	2	5	Roslyn Selsky	41.53455	-73.46192	6/21/2005	2.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	3	10	Roslyn Selsky	41.53460	-73.46183	6/21/2005	6.0	Gravel	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
20	4	20	Roslyn Selsky	41.53456	-73.46174	6/21/2005	ND	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
20	5	30	Roslyn Selsky	41.53458	-73.46161	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	6	40	Roslyn Selsky	41.53456	-73.46150	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	7	50	Roslyn Selsky	41.53471	-73.46132	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	8	60	Roslyn Selsky	41.53469	-73.46128	6/21/2005	ND	ND	sunny		too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	1	0	Greg Bugbee	41.54716	-73.47415	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	2	5	Greg Bugbee	41.54719	-73.47412	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	3	10	Greg Bugbee	41.54722	-73.47408	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	4	20	Greg Bugbee	41.54728	-73.47398	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	5	30	Greg Bugbee	41.54735	-73.47390	6/21/2005	4.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	6	40	Greg Bugbee	41.54736	-73.47375	6/21/2005	5.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	7	50	Greg Bugbee	41.54749	-73.47375	6/21/2005	5.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	8	60	Greg Bugbee	41.54750	-73.47358	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	9	70	Greg Bugbee	41.54754	-73.47351	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	10	80	Greg Bugbee	41.54757	-73.47338	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	1	0	Robert Capers	41.51386	-73.45339	6/21/2005	0.2	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	3	2	0
22	2	5	Robert Capers	41.51391	-73.45342	6/21/2005	0.6	Sand	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
22	3	10	Robert Capers	41.51397	-73.45339	6/21/2005	1.6	Sand	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
22	4	20	Robert Capers	41.51405	-73.45344	6/21/2005	2.0	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
22	5	30	Robert Capers	41.51414	-73.45346	6/21/2005	2.2	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
22	6	40	Robert Capers	41.51423	-73.45347	6/21/2005	2.5	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
22	7	50	Robert Capers	41.51433	-73.45342	6/21/2005	3.0	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
22	8	60	Robert Capers	41.51440	-73.45343	6/21/2005	4.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	9	70	Robert Capers	41.51448	-73.45349	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	10	80	Robert Capers	41.51450	-73.45345	6/21/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
23	1	0	Roslyn Selsky	41.52254	-73.45242	6/21/2005	0.1	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	2	5	Roslyn Selsky	41.52253	-73.45247	6/21/2005	1.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	3	10	Roslyn Selsky	41.52251	-73.45251	6/21/2005	10.0	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
23	4	20	Roslyn Selsky	41.52248	-73.45271	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	5	30	Roslyn Selsky	41.52251	-73.45281	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	6	40	Roslyn Selsky	41.52259	-73.45294	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	7	50	Roslyn Selsky	41.52275	-73.45301	6/21/2005	ND	ND	sunny		too deep to survey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	1	0	Greg Bugbee	41.54196	-73.47237	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	2	5	Greg Bugbee	41.54195	-73.47236	6/21/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
24	3	10	Greg Bugbee	41.54198	-73.47231	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	4	20	Greg Bugbee	41.54207	-73.47221	6/21/2005	7.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	5	30	Greg Bugbee	41.54208	-73.47208	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	6	40	Greg Bugbee	41.54216	-73.47202	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	7	50	Greg Bugbee	41.54223	-73.47190	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	8	60	Greg Bugbee	41.54225	-73.47181	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	9	70	Greg Bugbee	41.54229	-73.47171	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	10	80	Greg Bugbee	41.54232	-73.47158	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	1	0	Robert Capers	41.50213	-73.45150	6/21/2005	0.2	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	2	5	Robert Capers	41.50213	-73.45156	6/21/2005	0.7	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
25	3	10	Robert Capers	41.50213	-73.45163	6/21/2005	1.5	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
25	4	20	Robert Capers	41.50213	-73.45174	6/21/2005	2.0	Sand	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
25	5	30	Robert Capers	41.50214	-73.45186	6/21/2005	2.5	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
25	6	40	Robert Capers	41.50209	-73.45199	6/21/2005	3.2	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
25	7	50	Robert Capers	41.50202	-73.45208	6/21/2005	4.0	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
25	8	60	Robert Capers	41.50204	-73.45221	6/21/2005	0.0	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
25	9	70	Robert Capers	41.50202	-73.45235	6/21/2005	0.0	ND	sunny		PotCri collection	0	0	0	0	4	2	0	0	0	0	0	0	0	0	0	0
25	10	80	Robert Capers	41.50193	-73.45239	6/21/2005	0.0	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
26	1	0	Roslyn Selsky	41.51345	-73.45540	6/21/2005	0.1	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	2	5	Roslyn Selsky	41.51350	-73.45543	6/21/2005	1.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	3	10	Roslyn Selsky	41.51354	-73.45541	6/21/2005	2.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	4	20	Roslyn Selsky	41.51362	-73.45550	6/21/2005	5.0	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
26	5	30	Roslyn Selsky	41.51373	-73.45544	6/21/2005	9.0	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
26	6	40	Roslyn Selsky	41.51384	-73.45546	6/21/2005	11.0	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
26	7	50	Roslyn Selsky	41.51390	-73.45544	6/21/2005	ND	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
26	8	60	Roslyn Selsky	41.51401	-73.45547	6/21/2005	ND	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
26	9	70	Roslyn Selsky	41.51408	-73.45551	6/21/2005	ND	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
26	10	80	Roslyn Selsky	41.51418	-73.45547	6/21/2005	ND	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
27	1	0	Greg Bugbee	41.53898	-73.46696	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	2	5	Greg Bugbee	41.53897	-73.46701	6/21/2005	2.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Candlewood transects (4 of 10).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
27	3	10	Greg Bugbee	41.53895	-73.46710	6/21/2005	2.6	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
27	4	20	Greg Bugbee	41.53896	-73.46722	6/21/2005	4.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	5	30	Greg Bugbee	41.53901	-73.46733	6/21/2005	6.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	6	40	Greg Bugbee	41.53891	-73.46745	6/21/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	7	50	Greg Bugbee	41.53885	-73.46756	6/21/2005	8.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	8	60	Greg Bugbee	41.53885	-73.46767	6/21/2005	8.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	9	70	Greg Bugbee	41.53885	-73.46780	6/21/2005	8.9	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	10	80	Greg Bugbee	41.53884	-73.46791	6/21/2005	9.1	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	1	0	Robert Capers	41.49827	-73.44867	6/21/2005	0.3	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	2	5	Robert Capers	41.49828	-73.44866	6/21/2005	1.7	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	3	0	Robert Capers	41.49822	-73.44877	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	4	20	Robert Capers	41.49815	-73.44887	6/21/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	1	0	Roslyn Selsky	41.50741	-73.45395	6/21/2005	0.3	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	2	5	Roslyn Selsky	41.50736	-73.45398	6/21/2005	2.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	3	10	Roslyn Selsky	41.50740	-73.45404	6/21/2005	7.0	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
29	4	20	Roslyn Selsky	41.50728	-73.45401	6/21/2005	10.0	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
29	5	30	Roslyn Selsky	41.50731	-73.45426	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	6	40	Roslyn Selsky	41.50729	-73.45439	6/21/2005	0.0	Sand	sunny		too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	1	0	Greg Bugbee	41.53746	-73.46925	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	2	5	Greg Bugbee	41.53747	-73.46917	6/21/2005	0.2	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
30	3	10	Greg Bugbee	41.53748	-73.46912	6/21/2005	2.3	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
30	4	20	Greg Bugbee	41.53753	-73.46903	6/21/2005	4.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	5	30	Greg Bugbee	41.53759	-73.46893	6/21/2005	6.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	6	40	Greg Bugbee	41.53762	-73.46883	6/21/2005	7.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	7	50	Greg Bugbee	41.53769	-73.46872	6/21/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	8	60	Greg Bugbee	41.53771	-73.46861	6/21/2005	8.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	9	70	Greg Bugbee	41.53775	-73.46848	6/21/2005	8.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	10	80	Greg Bugbee	41.53775	-73.46836	6/21/2005	8.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	1	0	Robert Capers	41.49851	-73.44557	6/21/2005	0.7	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	2	5	Robert Capers	41.49853	-73.44553	6/21/2005	3.2	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	3	10	Robert Capers	41.49854	-73.44546	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	4	20	Robert Capers	41.49855	-73.44533	6/21/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	1	0	Roslyn Selsky	41.49890	-73.45310	6/21/2005	0.1	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	2	5	Roslyn Selsky	41.49896	-73.45317	6/21/2005	7.0	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
32	3	10	Roslyn Selsky	41.49895	-73.45326	6/21/2005	10.0	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
32	4	20	Roslyn Selsky	41.49900	-73.45333	6/21/2005	12.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	5	30	Roslyn Selsky	41.49913	-73.45335	6/21/2005	0.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	6	40	Roslyn Selsky	41.49918	-73.45348	6/21/2005	0.0	Sand	sunny		too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	1	0	Greg Bugbee	41.53249	-73.46291	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	2	5	Greg Bugbee	41.53247	-73.46297	6/21/2005	1.1	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
33	3	10	Greg Bugbee	41.53244	-73.46299	6/21/2005	1.4	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	4	20	Greg Bugbee	41.53239	-73.46310	6/21/2005	1.7	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
33	5	30	Greg Bugbee	41.53230	-73.46313	6/21/2005	0.0	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
33	6	40	Greg Bugbee	41.53225	-73.46326	6/21/2005	3.6	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
33	7	50	Greg Bugbee	41.53214	-73.46323	6/21/2005	4.4	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	8	60	Greg Bugbee	41.53205	-73.46333	6/21/2005	5.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	9	70	Greg Bugbee	41.53197	-73.46335	6/21/2005	8.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	10	80	Greg Bugbee	41.53191	-73.46344	6/21/2005	8.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	1	0	Roslyn Selsky	41.50578	-73.44482	6/22/2005	0.2	Rock	Coudy	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	2	5	Roslyn Selsky	41.50571	-73.44474	6/22/2005	8.0	Sand	Coudy	Northeast		0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
34	3	10	Roslyn Selsky	41.50572	-73.44467	6/22/2005	11.0	Sand	Coudy	Northeast		0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
34	4	20	Roslyn Selsky	41.50576	-73.44455	6/22/2005	0.0	ND	Coudy	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	5	30	Roslyn Selsky	41.50572	-73.44450	6/22/2005	0.0	ND	Coudy		too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	1	0	Greg Bugbee	41.52966	-73.46416	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	2	5	Greg Bugbee	41.52964	-73.46409	6/21/2005	1.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	3	10	Greg Bugbee	41.52970	-73.46409	6/21/2005	1.7	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
35	4	20	Greg Bugbee	41.52974	-73.46397	6/21/2005	3.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	5	30	Greg Bugbee	41.52979	-73.46387	6/21/2005	3.6	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
35	6	40	Greg Bugbee	41.52981	-73.46373	6/21/2005	0.0	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
35	7	50	Greg Bugbee	41.52987	-73.46336	6/21/2005	0.0	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
35	8	60	Greg Bugbee	41.53004	-73.46362	6/21/2005	3.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	9	70	Greg Bugbee	41.53011	-73.46358	6/21/2005	4.4	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	10	80	Greg Bugbee	41.53016	-73.46349	6/21/2005	4.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	1	0	Robert Capers	41.50400	-73.44563	6/22/2005	0.3	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	2	5	Robert Capers	41.50409	-73.44557	6/22/2005	1.2	Sand	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
36	3	10	Robert Capers	41.50400	-73.44551	6/22/2005	2.0	Sand	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
36	4	4	Robert Capers	41.50391	-73.44541	6/22/2005	4.0	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
36	5	30	Robert Capers	41.50379	-73.44531	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	6	40	Robert Capers	41.50379	-73.44524	6/22/2005	0.0	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
36	7	50	Robert Capers	41.50379	-73.44507	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	8	60	Robert Capers	41.50367	-73.44501	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	9	70	Robert Capers	41.50360	-73.44492	6/22/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	1	0	Roslyn Selsky	41.51369	-73.44428	6/22/2005	0.5	Rock	Coudy	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	2	5	Roslyn Selsky	41.51366	-73.44426	6/22/2005	12.0	Sand	Coudy	Northeast		0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
37	3	10	Roslyn Selsky	41.51361	-73.44410	6/22/2005	0.0	ND	Coudy	Northeast	too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	1	0	Greg Bugbee	41.52536	-73.45895	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	2	5	Greg Bugbee	41.52538	-73.45889	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	3	10	Greg Bugbee	41.52544	-73.45886	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	4	20	Greg Bugbee	41.52545	-73.45872	6/21/2005	5.6	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Candlewood transects (5 of 10).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
38	5	30	Greg Bugbee	41.52551	-73.45860	6/21/2005	5.9	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	6	40	Greg Bugbee	41.52552	-73.45849	6/21/2005	10.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	1	0	Robert Capers	41.51030	-73.44566	6/22/2005	0.5	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	2	5	Robert Capers	41.51026	-73.44549	6/22/2005	1.7	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	3	10	Robert Capers	41.51027	-73.44551	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39	4	20	Robert Capers	41.51024	-73.44538	6/22/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	1	0	Roslyn Selsky	41.52096	-73.44668	6/22/2005	0.3	Rock	partially sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	2	5	Roslyn Selsky	41.52095	-73.44664	6/22/2005	8.0	Sand	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	3	10	Roslyn Selsky	41.52092	-73.44660	6/22/2005	5.0	Gravel	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	4	20	Roslyn Selsky	41.52096	-73.44654	6/22/2005	0.0	ND	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	5	30	Roslyn Selsky	41.52100	-73.44631	6/22/2005	0.0	ND	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	6	40	Roslyn Selsky	41.52102	-73.44621	6/22/2005	0.0	ND	partially sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	7	50	Roslyn Selsky	41.52110	-73.44612	6/22/2005	0.0	ND	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	8	60	Roslyn Selsky	41.52115	-73.44597	6/22/2005	0.0	ND	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	9	70	Roslyn Selsky	41.52115	-73.44587	6/22/2005	0.0	ND	partially sunny	Northeast	too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	1	0	Greg Bugbee	41.52098	-73.45808	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	2	5	Greg Bugbee	41.52094	-73.45802	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	3	10	Greg Bugbee	41.52092	-73.45800	6/21/2005	0.0	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
41	4	20	Greg Bugbee	41.52083	-73.45792	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	5	30	Greg Bugbee	41.52072	-73.45803	6/21/2005	1.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	6	40	Greg Bugbee	41.52062	-73.45808	6/21/2005	2.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
41	7	50	Greg Bugbee	41.52051	-73.45818	6/21/2005	2.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	1	0	Robert Capers	41.51769	-73.44582	6/22/2005	0.5	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	2	5	Robert Capers	41.51776	-73.44580	6/22/2005	2.5	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	3	10	Robert Capers	41.51778	-73.44572	6/22/2005	3.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	4	20	Robert Capers	41.51776	-73.44560	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	5	30	Robert Capers	41.51782	-73.44550	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
42	6	40	Robert Capers	41.51779	-73.44534	6/22/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	1	0	Roslyn Selsky	41.52607	-73.44290	6/22/2005	0.3	Gravel	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	2	5	Roslyn Selsky	41.52604	-73.44296	6/22/2005	1.0	Gravel	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	3	10	Roslyn Selsky	41.52605	-73.44299	6/22/2005	2.0	Sand	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	4	20	Roslyn Selsky	41.52602	-73.44304	6/22/2005	4.0	Sand	partially sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	5	30	Roslyn Selsky	41.52596	-73.44314	6/22/2005	12.0	Sand	partially sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	6	40	Roslyn Selsky	41.52599	-73.44327	6/22/2005	0.0	ND	partially sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	7	50	Roslyn Selsky	41.52594	-73.44340	6/22/2005	0.0	ND	partially sunny		too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	1	0	Greg Bugbee	41.52614	-73.46571	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	2	5	Greg Bugbee	41.52608	-73.46559	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	3	10	Greg Bugbee	41.52604	-73.46553	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	4	20	Greg Bugbee	41.52591	-73.46563	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	5	30	Greg Bugbee	41.52586	-73.46558	6/21/2005	0.0	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
44	6	40	Greg Bugbee	41.52586	-73.46550	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	7	50	Greg Bugbee	41.52576	-73.46552	6/21/2005	0.0	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
44	8	60	Greg Bugbee	41.52559	-73.46539	6/21/2005	1.5	ND	sunny	0.449954		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	9	70	Greg Bugbee	41.52555	-73.46532	6/21/2005	1.4	ND	sunny	0.431589		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	10	80	Greg Bugbee	41.52545	-73.46530	6/21/2005	1.6	ND	sunny	0.477502		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	1	0	Robert Capers	41.52568	-73.44604	6/22/2005	ND	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	2	5	Robert Capers	41.52568	-73.44599	6/22/2005	3.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	3	10	Robert Capers	41.52573	-73.44594	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	4	20	Robert Capers	41.52572	-73.44583	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45	5	30	Robert Capers	41.52570	-73.44566	6/22/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	1	0	Roslyn Selsky	41.52288	-73.43807	6/22/2005	1.0	Rock	partially sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	2	5	Roslyn Selsky	41.52284	-73.43803	6/22/2005	2.5	Rock	partially sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
46	3	10	Roslyn Selsky	41.52276	-73.43806	6/22/2005	7.0	Rock	partially sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
46	4	20	Roslyn Selsky	41.52269	-73.43797	6/22/2005	10.0	ND	partially sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
46	5	30	Roslyn Selsky	41.52260	-73.43800	6/22/2005	0.0	ND	partially sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	6	40	Roslyn Selsky	41.52250	-73.43800	6/22/2005	0.0	ND	partially sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	7	50	Roslyn Selsky	41.52242	-73.43795	6/22/2005	0.0	ND	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	8	60	Roslyn Selsky	41.52232	-73.43795	6/22/2005	0.0	ND	partially sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
46	9	70	Roslyn Selsky	41.52226	-73.43795	6/22/2005	0.0	ND	partially sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46	10	80	Roslyn Selsky	41.52216	-73.43794	6/22/2005	0.0	ND	partially sunny	Northeast		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	1	0	Greg Bugbee	41.51533	-73.46265	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	2	5	Greg Bugbee	41.51534	-73.46260	6/21/2005	0.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	3	10	Greg Bugbee	41.51538	-73.46259	6/21/2005	1.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	4	20	Greg Bugbee	41.51531	-73.46241	6/21/2005	3.3	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
47	5	30	Greg Bugbee	41.51543	-73.46234	6/21/2005	5.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	6	40	Greg Bugbee	41.51549	-73.46221	6/21/2005	5.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47	7	50	Greg Bugbee	41.51554	-73.46219	6/21/2005	8.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	1	0	Robert Capers	41.52889	-73.43834	6/22/2005	0.5	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	2	0	Robert Capers	41.52888	-73.43841	6/22/2005	1.5	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	3	10	Robert Capers	41.52885	-73.43846	6/22/2005	2.0	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	4	20	Robert Capers	41.52884	-73.43859	6/22/2005	4.5	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
48	5	30	Robert Capers	41.52881	-73.43870	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	6	40	Robert Capers	41.52882	-73.43881	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	7	50	Robert Capers	41.52883	-73.43894	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	8	60	Robert Capers	41.52869	-73.43903	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	9	70	Robert Capers	41.52869	-73.43921	6/22/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	1	0	Roslyn Selsky	41.50334	-73.43767	6/22/2005	0.3	Rock	partially sunny	Northwest		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	2	5	Roslyn Selsky	41.50332	-73.43770	6/22/2005	1.0	Rock	partially sunny	Northwest		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	3	10	Roslyn Selsky	41.50335	-73.43777	6/22/2005	2.0	Sand	partially sunny	Northwest		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Candlewood transects (6 of 10).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
49	4	20	Roslyn Selsky	41.50334	-73.43790	6/22/2005	7.0	Sand	partially sunny	Northwest		0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
49	5	30	Roslyn Selsky	41.50342	-73.43803	6/22/2005	0.0	ND	partially sunny	Northwest		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	6	40	Roslyn Selsky	41.50345	-73.43811	6/22/2005	0.0	ND	partially sunny	Northwest		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49	7	50	Roslyn Selsky	41.50346	-73.43828	6/22/2005	0.0	ND	partially sunny	Northwest	too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	1	0	Greg Bugbee	41.50939	-73.46131	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	2	5	Greg Bugbee	41.50939	-73.46125	6/21/2005	3.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	3	10	Greg Bugbee	41.50943	-73.46120	6/21/2005	5.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50	4	20	Greg Bugbee	41.50953	-73.46115	6/21/2005	7.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	1	0	Robert Capers	41.52549	-73.43662	6/22/2005	0.7	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	2	5	Robert Capers	41.52545	-73.43663	6/22/2005	2.5	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	3	10	Robert Capers	41.52552	-73.43675	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	4	20	Robert Capers	41.52550	-73.43688	6/22/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	1	0	Roslyn Selsky	41.48041	-73.43463	6/23/2005	0.3	Sand	sunny			0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0
52	2	5	Roslyn Selsky	41.48039	-73.43467	6/23/2005	1.0	Sand	sunny	Northwest		2	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
52	3	10	Roslyn Selsky	41.48033	-73.43470	6/23/2005	2.0	Sand	sunny			0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
52	4	20	Roslyn Selsky	41.48032	-73.43485	6/23/2005	3.0	Sand	sunny			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	5	30	Roslyn Selsky	41.48027	-73.43496	6/23/2005	4.0	Sand	sunny	Northwest		0	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0
52	6	40	Roslyn Selsky	41.48027	-73.43509	6/23/2005	5.0	Sand	sunny			0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
52	7	50	Roslyn Selsky	41.48025	-73.43518	6/23/2005	5.0	Sand	sunny			0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
52	8	60	Roslyn Selsky	41.48022	-73.43529	6/23/2005	0.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	9	70	Roslyn Selsky	41.48018	-73.43541	6/23/2005	4.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	10	80	Roslyn Selsky	41.48008	-73.43547	6/23/2005	0.0	Sand	sunny			0	0	0	2	0	1	0	0	3	0	0	0	0	0	0	0
53	1	0	Greg Bugbee	41.50499	-73.46056	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	2	5	Greg Bugbee	41.50499	-73.46053	6/21/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	3	10	Greg Bugbee	41.50501	-73.46046	6/21/2005	6.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	4	20	Greg Bugbee	41.50499	-73.46033	6/21/2005	9.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	1	0	Robert Capers	41.51683	-73.43928	6/22/2005	0.3	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	2	5	Robert Capers	41.51687	-73.43932	6/22/2005	1.0	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	3	10	Robert Capers	41.51688	-73.43940	6/22/2005	1.5	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	4	20	Robert Capers	41.51696	-73.43947	6/22/2005	3.0	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
54	5	30	Robert Capers	41.51701	-73.43955	6/22/2005	4.0	Sand	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
54	6	40	Robert Capers	41.51710	-73.43962	6/22/2005	0.0	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
54	7	50	Robert Capers	41.51716	-73.43970	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	8	60	Robert Capers	41.51726	-73.43976	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
54	9	70	Robert Capers	41.51729	-73.43986	6/22/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	1	0	Roslyn Selsky	41.46671	-73.44218	6/23/2005	0.3	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	2	5	Roslyn Selsky	41.46675	-73.44216	6/23/2005	1.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	3	10	Roslyn Selsky	41.46680	-73.44219	6/23/2005	1.5	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	4	20	Roslyn Selsky	41.46689	-73.44217	6/23/2005	6.0	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
55	5	30	Roslyn Selsky	41.46693	-73.44201	6/23/2005	0.0	ND	sunny		too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56	1	0	Greg Bugbee	41.50273	-73.46109	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
56	2	5	Greg Bugbee	41.50270	-73.46111	6/21/2005	4.6	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
56	3	10	Greg Bugbee	41.50266	-73.46115	6/21/2005	5.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	1	0	Robert Capers	41.51293	-73.44122	6/22/2005	0.5	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	2	5	Robert Capers	41.51287	-73.44121	6/22/2005	0.7	Sand	sunny			0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
57	3	10	Robert Capers	41.51285	-73.44123	6/22/2005	0.6	Sand	sunny			0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0
57	4	20	Robert Capers	41.51274	-73.44120	6/22/2005	1.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	5	30	Robert Capers	41.51265	-73.44121	6/22/2005	1.0	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	6	40	Robert Capers	41.51255	-73.44120	6/22/2005	1.0	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	7	50	Robert Capers	41.51247	-73.44123	6/22/2005	2.0	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
57	8	60	Robert Capers	41.51237	-73.44125	6/22/2005	3.0	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
57	9	70	Robert Capers	41.51231	-73.44125	6/22/2005	3.0	Sand	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
57	10	80	Robert Capers	41.51221	-73.44128	6/22/2005	0.0	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
58	1	0	Roslyn Selsky	41.44710	-73.42995	6/23/2005	0.1	Sand	sunny			0	0	0	0	0	2	0	4	0	0	0	0	0	0	2	0	0
58	2	5	Roslyn Selsky	41.44712	-73.42989	6/23/2005	0.5	Sand	sunny			0	0	0	0	0	2	0	4	0	0	2	0	0	0	0	0	0
58	3	10	Roslyn Selsky	41.44717	-73.42984	6/23/2005	1.5	Sand	sunny			0	0	0	0	0	2	2	3	0	0	0	2	0	0	0	0	0
58	4	20	Roslyn Selsky	41.44717	-73.42972	6/23/2005	2.0	Silt	sunny			0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0
58	5	30	Roslyn Selsky	41.44724	-73.42960	6/23/2005	1.0	Silt	sunny			0	0	0	0	0	2	3	3	0	0	4	0	0	0	0	0	0
58	6	40	Roslyn Selsky	41.44725	-73.42951	6/23/2005	1.0	Silt	sunny			0	0	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0
58	7	42	Roslyn Selsky	41.44725	-73.42947	6/23/2005	0.0	ND	sunny		land in way	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	1	0	Greg Bugbee	41.51050	-73.47077	6/21/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	2	5	Greg Bugbee	41.51047	-73.47070	6/21/2005	4.4	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	3	10	Greg Bugbee	41.51051	-73.47064	6/21/2005	6.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	4	20	Greg Bugbee	41.51038	-73.47060	6/21/2005	5.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	5	30	Greg Bugbee	41.51033	-73.47050	6/21/2005	5.1	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	6	40	Greg Bugbee	41.51028	-73.47038	6/21/2005	5.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	7	50	Greg Bugbee	41.51021	-73.47030	6/21/2005	5.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
59	8	60	Greg Bugbee	41.51016	-73.47024	6/21/2005	5.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	1	0	Robert Capers	41.49496	-73.44162	6/23/2005	0.4	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	2	5	Robert Capers	41.49493	-73.44169	6/23/2005	3.0	Sand	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
60	3	10	Robert Capers	41.49491	-73.44172	6/23/2005	3.0	Sand	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
60	4	20	Robert Capers	41.49489	-73.44187	6/23/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	5	30	Robert Capers	41.49484	-73.44197	6/23/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	6	40	Robert Capers	41.49484	-73.44208	6/23/2005	0.0	ND	sunny	North		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	7	50	Robert Capers	41.49477	-73.44219	6/23/2005	0.0	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	1	0	Roslyn Selsky	41.45027	-73.43099	6/23/2005	0.3	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	2	5	Roslyn Selsky	41.45022	-73.43102	6/23/2005	3.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	3	10	Roslyn Selsky	41.45019	-73.43105	6/23/2005	3.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	4	20	Roslyn Selsky	41.45020	-73.43121	6/23/2005	10.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Candlewood transects (7 of 10)

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
61	5	30	Roslyn Selsky	41.45014	-73.43135	6/23/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	6	40	Roslyn Selsky	41.44999	-73.43148	6/23/2005	0.0	ND	sunny		too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	1	0	Greg Bugbee	41.57148	-73.44280	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	2	5	Greg Bugbee	41.57151	-73.44290	6/22/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	3	10	Greg Bugbee	41.57150	-73.44295	6/22/2005	0.0	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
62	4	20	Greg Bugbee	41.57147	-73.44311	6/22/2005	0.0	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
62	5	30	Greg Bugbee	41.57145	-73.44318	6/22/2005	0.0	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
62	6	40	Greg Bugbee	41.57131	-73.44324	6/22/2005	4.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	7	50	Greg Bugbee	41.57134	-73.44341	6/22/2005	4.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	8	60	Greg Bugbee	41.57141	-73.44354	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	9	70	Greg Bugbee	41.57140	-73.44365	6/22/2005	7.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	1	0	Robert Capers	41.48686	-73.43414	6/23/2005	0.3	Gravel	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
63	2	5	Robert Capers	41.48685	-73.43420	6/23/2005	0.5	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	3	10	Robert Capers	41.48679	-73.43424	6/23/2005	1.2	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	4	20	Robert Capers	41.48673	-73.43430	6/23/2005	1.8	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	5	30	Robert Capers	41.48668	-73.43442	6/23/2005	3.0	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
63	6	40	Robert Capers	41.48669	-73.43456	6/23/2005	3.5	Gravel	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
63	7	50	Robert Capers	41.48663	-73.43466	6/23/2005	3.8	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
63	8	60	Robert Capers	41.48659	-73.43480	6/23/2005	0.0	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
63	9	70	Robert Capers	41.48651	-73.43481	6/23/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	10	80	Robert Capers	41.48650	-73.43501	6/23/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	1	0	Roslyn Selsky	41.45343	-73.43225	6/23/2005	0.5	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	2	5	Roslyn Selsky	41.45339	-73.43226	6/23/2005	5.0	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	3	10	Roslyn Selsky	41.45338	-73.43234	6/23/2005	6.0	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	4	20	Roslyn Selsky	41.45333	-73.43244	6/23/2005	0.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	5	30	Roslyn Selsky	41.45328	-73.43259	6/23/2005	0.0	ND	sunny		too deep to sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	1	0	Greg Bugbee	41.57495	-73.44508	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	2	5	Greg Bugbee	41.57493	-73.44499	6/22/2005	0.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	3	10	Greg Bugbee	41.57501	-73.44501	6/22/2005	6.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	4	20	Greg Bugbee	41.57506	-73.44490	6/22/2005	0.0	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
65	5	30	Greg Bugbee	41.57503	-73.44474	6/22/2005	22.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	1	0	Robert Capers	41.47619	-73.43313	6/23/2005	0.6	Gravel	sunny		drainage pipes	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
66	2	5	Robert Capers	41.47624	-73.43317	6/23/2005	2.0	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
66	3	10	Robert Capers	41.47630	-73.43317	6/23/2005	2.5	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
66	4	20	Robert Capers	41.47635	-73.43323	6/23/2005	3.0	Sand	sunny		PotPus and NajMin	1	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0
66	5	30	Robert Capers	41.47647	-73.43322	6/23/2005	3.1	ND	sunny		CerDem collected	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
66	6	40	Robert Capers	41.47653	-73.43335	6/23/2005	3.2	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	7	50	Robert Capers	41.47660	-73.43336	6/23/2005	3.2	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	8	60	Robert Capers	41.47671	-73.43338	6/23/2005	3.0	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	9	70	Robert Capers	41.47679	-73.43347	6/23/2005	2.8	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	10	80	Robert Capers	41.47684	-73.43355	6/23/2005	3.0	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	1	0	Greg Bugbee	41.54893	-73.44770	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	2	5	Greg Bugbee	41.54892	-73.44762	6/22/2005	3.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	3	10	Greg Bugbee	41.84892	-73.44756	6/22/2005	3.3	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
67	4	20	Greg Bugbee	41.54889	-73.44748	6/22/2005	6.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	5	30	Greg Bugbee	41.54881	-73.44740	6/22/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68	1	0	Robert Capers	41.48248	-73.44319	6/23/2005	0.7	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68	2	5	Robert Capers	41.48245	-73.44325	6/23/2005	2.0	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68	3	10	Robert Capers	41.48244	-73.44332	6/23/2005	3.0	Gravel	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
68	4	20	Robert Capers	41.48244	-73.44343	6/23/2005	4.5	Sand	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
68	5	30	Robert Capers	41.48242	-73.44354	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68	6	40	Robert Capers	41.48240	-73.44367	6/23/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
68	7	50	Robert Capers	41.48245	-73.44379	6/23/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	1	0	Greg Bugbee	41.55704	-73.44397	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	2	5	Greg Bugbee	41.55704	-73.44382	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	3	10	Greg Bugbee	41.55706	-73.44376	6/22/2005	2.4	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
69	4	20	Greg Bugbee	41.55697	-73.44369	6/22/2005	5.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
69	5	30	Greg Bugbee	41.55695	-73.44354	6/22/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	1	0	Robert Capers	41.47236	-73.44311	6/23/2005	0.5	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	2	5	Robert Capers	41.47234	-73.44315	6/23/2005	0.7	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	3	10	Robert Capers	41.47228	-73.44317	6/23/2005	2.0	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	4	20	Robert Capers	41.47225	-73.44330	6/23/2005	4.5	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
70	5	30	Robert Capers	41.47221	-73.44342	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	6	40	Robert Capers	41.47215	-73.44351	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	7	50	Robert Capers	41.47208	-73.44362	6/23/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71	1	0	Greg Bugbee	41.54436	-73.44836	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71	2	5	Greg Bugbee	41.54432	-73.44827	6/22/2005	1.5	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
71	3	10	Greg Bugbee	41.54432	-73.44819	6/22/2005	2.2	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
71	4	20	Greg Bugbee	41.54433	-73.44810	6/22/2005	2.2	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
71	5	30	Greg Bugbee	41.54428	-73.44798	6/22/2005	3.3	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
71	6	40	Greg Bugbee	41.54415	-73.44793	6/22/2005	5.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71	7	50	Greg Bugbee	41.54419	-73.44779	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
71	8	60	Greg Bugbee	41.54417	-73.44763	6/22/2005	7.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	1	0	Robert Capers	41.46813	-73.43918	6/23/2005	0.4	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	2	5	Robert Capers	41.46810	-73.43923	6/23/2005	1.9	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	3	10	Robert Capers	41.46808	-73.43930	6/23/2005	2.5	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	4	20	Robert Capers	41.46803	-73.43939	6/23/2005	3.8	Silt	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
72	5	30	Robert Capers	41.46799	-73.43952	6/23/2005	5.0	ND	sunny			0	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0
72	6	40	Robert Capers	41.46791	-73.43959	6/23/2005	ND	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Candlewood transects (8 of 10).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
72	7	50	Robert Capers	41.46791	-73.43971	6/23/2005	ND	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
72	8	60	Robert Capers	41.46785	-73.43982	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	9	70	Robert Capers	41.46777	-73.43989	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	10	80	Robert Capers	41.46771	-73.44001	6/23/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	1	0	Greg Bugbee	41.53418	-73.44777	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	2	5	Greg Bugbee	41.53416	-73.44773	6/22/2005	3.0	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
73	3	10	Greg Bugbee	41.53413	-73.44768	6/22/2005	3.6	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
73	4	20	Greg Bugbee	41.53412	-73.44753	6/22/2005	8.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	1	0	Robert Capers	41.47021	-73.43525	6/23/2005	0.5	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	2	5	Robert Capers	41.47022	-73.43521	6/23/2005	1.5	Sand	sunny			0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	0
74	3	10	Robert Capers	41.47023	-73.43515	6/23/2005	3.0	Sand	sunny			0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0
74	4	20	Robert Capers	41.47026	-73.43503	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	5	30	Robert Capers	41.47024	-73.43491	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	6	40	Robert Capers	41.47030	-73.43479	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	7	50	Robert Capers	41.47034	-73.43468	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	8	60	Robert Capers	41.47039	-73.43457	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	9	70	Robert Capers	41.47050	-73.43454	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
74	10	80	Robert Capers	41.47052	-73.43440	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	1	0	Greg Bugbee	41.56340	-73.44051	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	2	5	Greg Bugbee	41.56344	-73.44054	6/22/2005	2.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	3	10	Greg Bugbee	41.56345	-73.44062	6/22/2005	3.9	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	4	20	Greg Bugbee	41.56343	-73.44077	6/22/2005	5.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	5	30	Greg Bugbee	41.56338	-73.44086	6/22/2005	5.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	6	40	Greg Bugbee	41.56336	-73.44101	6/22/2005	7.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	7	50	Greg Bugbee	41.56326	-73.44112	6/22/2005	7.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	1	0	Robert Capers	41.46901	-73.42842	6/23/2005	0.5	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	2	5	Robert Capers	41.46897	-73.42846	6/23/2005	2.6	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	3	10	Robert Capers	41.46895	-73.42849	6/23/2005	2.0	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
76	4	20	Robert Capers	41.46888	-73.42859	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	5	30	Robert Capers	41.46882	-73.42865	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	6	40	Robert Capers	41.46874	-73.42875	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	7	50	Robert Capers	41.46865	-73.42879	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	8	60	Robert Capers	41.46856	-73.42884	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
76	9	70	Robert Capers	41.46850	-73.42892	6/23/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	1	0	Greg Bugbee	41.55130	-73.43970	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	2	5	Greg Bugbee	41.55133	-73.43975	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	3	10	Greg Bugbee	41.55128	-73.43982	6/22/2005	3.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	4	20	Greg Bugbee	41.55136	-73.43990	6/22/2005	5.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
77	5	30	Greg Bugbee	41.55141	-73.43003	6/22/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	1	0	Robert Capers	41.46325	-73.42521	6/23/2005	0.5	Sand	sunny			0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
78	2	5	Robert Capers	41.46329	-73.42524	6/23/2005	2.0	Sand	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
78	3	10	Robert Capers	41.46335	-73.42524	6/23/2005	3.0	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	4	20	Robert Capers	41.46343	-73.42523	6/23/2005	3.0	Silt	sunny			1	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
78	5	30	Robert Capers	41.46354	-73.42531	6/23/2005	3.2	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	6	40	Robert Capers	41.46359	-73.42539	6/23/2005	3.5	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	7	50	Robert Capers	41.46367	-73.42543	6/23/2005	3.5	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	8	60	Robert Capers	41.46377	-73.42543	6/23/2005	3.7	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	9	70	Robert Capers	41.46386	-73.42544	6/23/2005	3.7	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	10	80	Robert Capers	41.46396	-73.42546	6/23/2005	3.5	Silt	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	1	0	Greg Bugbee	41.54689	-73.44211	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	2	5	Greg Bugbee	41.54696	-73.44215	6/22/2005	2.4	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	3	10	Greg Bugbee	41.54697	-73.44221	6/22/2005	2.4	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	4	20	Greg Bugbee	41.54704	-73.44231	6/22/2005	3.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	5	30	Greg Bugbee	41.54702	-73.44248	6/22/2005	7.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	1	0	Robert Capers	41.45656	-73.44449	6/23/2005	1.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	2	5	Robert Capers	41.45656	-73.44456	6/23/2005	3.5	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	3	10	Robert Capers	41.45659	-73.44462	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	4	20	Robert Capers	41.45660	-73.44476	6/23/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81	1	0	Greg Bugbee	41.53717	-73.44186	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81	2	5	Greg Bugbee	41.53712	-73.44195	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81	3	10	Greg Bugbee	41.53708	-73.44194	6/22/2005	3.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
81	4	20	Greg Bugbee	41.53704	-73.44209	6/22/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	1	0	Robert Capers	41.44780	-73.44714	6/23/2005	0.5	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	2	5	Robert Capers	41.44781	-73.44721	6/23/2005	1.5	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	3	10	Robert Capers	41.44781	-73.44725	6/23/2005	2.6	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	4	20	Robert Capers	41.44784	-73.44737	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	5	30	Robert Capers	41.44783	-73.44751	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	6	40	Robert Capers	41.44783	-73.44761	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	7	50	Robert Capers	41.44784	-73.44774	6/23/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83	1	0	Greg Bugbee	41.52774	-73.43702	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83	2	5	Greg Bugbee	41.52771	-73.43707	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83	3	10	Greg Bugbee	41.52768	-73.43710	6/22/2005	2.4	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83	4	20	Greg Bugbee	41.52756	-73.43705	6/22/2005	6.1	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83	5	30	Greg Bugbee	41.52747	-73.43715	6/22/2005	7.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	1	0	Robert Capers	41.43639	-73.45434	6/23/2005	0.3	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	2	5	Robert Capers	41.43636	-73.45441	6/23/2005	0.7	Gravel	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	3	10	Robert Capers	41.43632	-73.45448	6/23/2005	1.5	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	4	20	Robert Capers	41.43632	-73.45454	6/23/2005	2.2	Sand	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	5	30	Robert Capers	41.43630	-73.45470	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Candlewood transects (9 of 10).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
84	6	40	Robert Capers	41.43631	-73.45484	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	7	50	Robert Capers	41.43633	-73.45495	6/23/2005	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	1	0	Greg Bugbee	41.51895	-73.43571	6/22/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	2	5	Greg Bugbee	41.51898	-73.43576	6/22/2005	0.9	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	3	10	Greg Bugbee	41.51902	-73.43578	6/22/2005	1.2	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
85	4	20	Greg Bugbee	41.51911	-73.43581	6/22/2005	1.2	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
85	5	30	Greg Bugbee	41.51919	-73.43588	6/22/2005	3.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	6	40	Greg Bugbee	41.51933	-73.43590	6/22/2005	4.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	7	50	Greg Bugbee	41.51939	-73.43593	6/22/2005	6.1	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	8	60	Greg Bugbee	41.51946	-73.43597	6/22/2005	6.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	9	70	Greg Bugbee	41.51953	-73.43610	6/22/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	1	0	Robert Capers	41.42667	-73.44934	6/23/2005	1.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	2	5	Robert Capers	41.42670	-73.44940	6/23/2005	3.0	Rock	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	3	0	Robert Capers	41.42669	-73.44947	6/23/2005	5.0	ND	sunny			0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0
86	4	20	Robert Capers	41.42673	-73.44959	6/23/2005	ND	ND	sunny			0	0	5	0	4	4	0	0	0	0	0	0	0	0	0	0
86	5	30	Robert Capers	41.42678	-73.44970	6/23/2005	ND	ND	sunny			0	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0
86	6	40	Robert Capers	41.42679	-73.44982	6/23/2005	ND	ND	sunny			0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
86	7	50	Robert Capers	41.42683	-73.44991	6/23/2005	ND	ND	sunny			0	0	0	0	5	2	0	0	0	0	0	0	0	0	0	0
86	8	60	Robert Capers	41.42685	-73.45004	6/23/2005	ND	ND	sunny			0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0
86	9	70	Robert Capers	41.42680	-73.45017	6/23/2005	ND	ND	sunny			2	0	0	0	5	3	0	0	0	0	0	0	0	0	0	0
86	10	80	Robert Capers	41.42690	-73.45027	6/23/2005	ND	ND	sunny			0	0	0	0	4	3	0	0	0	0	0	0	0	0	0	0
87	1	0	Greg Bugbee	41.49632	-73.46357	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
87	2	5	Greg Bugbee	41.49627	-73.46352	6/23/2005	0.9	ND	sunny			0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
87	3	10	Greg Bugbee	41.49624	-73.46349	6/23/2005	1.2	ND	sunny			0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0
87	4	20	Greg Bugbee	41.49617	-73.46339	6/23/2005	1.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
87	5	30	Greg Bugbee	41.49608	-73.46332	6/23/2005	2.4	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
87	6	40	Greg Bugbee	41.49601	-73.46330	6/23/2005	ND	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
87	7	50	Greg Bugbee	41.49599	-73.46313	6/23/2005	ND	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
87	8	60	Greg Bugbee	41.49589	-73.46311	6/23/2005	3.6	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
87	9	70	Greg Bugbee	41.49580	-73.46305	6/23/2005	4.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
87	10	80	Greg Bugbee	41.49574	-73.46297	6/23/2005	5.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	1	0	Greg Bugbee	41.49622	-73.46035	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	2	5	Greg Bugbee	41.49623	-73.46031	6/23/2005	0.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	3	10	Greg Bugbee	41.49625	-73.46024	6/23/2005	0.9	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	4	20	Greg Bugbee	41.49631	-73.46012	6/23/2005	1.2	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
88	5	30	Greg Bugbee	41.48629	-73.45998	6/23/2005	1.5	ND	sunny			0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
88	6	40	Greg Bugbee	41.48634	-73.45992	6/23/2005	1.5	ND	sunny			0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0
88	7	50	Greg Bugbee	41.48634	-73.45979	6/23/2005	1.8	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
88	8	60	Greg Bugbee	41.48626	-73.45964	6/23/2005	ND	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
88	9	70	Greg Bugbee	41.48625	-73.45950	6/23/2005	ND	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
88	10	80	Greg Bugbee	41.48625	-73.45938	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	1	0	Greg Bugbee	41.49107	-73.45407	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	2	5	Greg Bugbee	41.49107	-73.45399	6/23/2005	ND	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
89	3	10	Greg Bugbee	41.49110	-73.45394	6/23/2005	ND	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
89	4	20	Greg Bugbee	41.49119	-73.45389	6/23/2005	6.1	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	5	30	Greg Bugbee	41.49122	-73.45377	6/23/2005	7.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	6	40	Greg Bugbee	41.49122	-73.45367	6/23/2005	6.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	7	50	Greg Bugbee	41.49123	-73.45351	6/23/2005	6.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	1	0	Greg Bugbee	41.48119	-73.45300	6/23/2005	0.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	2	5	Greg Bugbee	41.48120	-73.45300	6/23/2005	9.1	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	3	10	Greg Bugbee	41.41220	-73.45287	6/23/2005	11.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	1	0	Greg Bugbee	41.47175	-73.45037	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	2	5	Greg Bugbee	41.47173	-73.45033	6/23/2005	3.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	3	10	Greg Bugbee	41.47169	-73.45027	6/23/2005	3.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	4	20	Greg Bugbee	41.47179	-73.45016	6/23/2005	5.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	1	0	Greg Bugbee	41.47208	-73.44672	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	2	5	Greg Bugbee	41.47210	-73.44679	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	3	10	Greg Bugbee	41.47201	-73.44683	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	4	20	Greg Bugbee	41.47198	-73.44695	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	5	30	Greg Bugbee	41.47197	-73.44708	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	6	40	Greg Bugbee	41.47194	-73.44719	6/23/2005	3.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	7	50	Greg Bugbee	41.47197	-73.44731	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	8	60	Greg Bugbee	41.47194	-73.44746	6/23/2005	5.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	9	70	Greg Bugbee	41.47193	-73.44759	6/23/2005	6.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	10	80	Greg Bugbee	41.47195	-73.44771	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	1	0	Greg Bugbee	41.46211	-73.44546	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	2	5	Greg Bugbee	41.46210	-73.44539	6/23/2005	1.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	3	10	Greg Bugbee	41.46206	-73.44534	6/23/2005	2.1	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
93	4	20	Greg Bugbee	41.46194	-73.44527	6/23/2005	2.7	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
93	5	30	Greg Bugbee	41.46193	-73.44518	6/23/2005	4.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	6	40	Greg Bugbee	41.46184	-73.44508	6/23/2005	6.1	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	7	50	Greg Bugbee	41.46183	-73.44493	6/23/2005	7.9	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	1	0	Greg Bugbee	41.46383	-73.44720	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	2	5	Greg Bugbee	41.46385	-73.44727	6/23/2005	1.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	3	10	Greg Bugbee	41.46384	-73.44734	6/23/2005	1.8	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
94	4	20	Greg Bugbee	41.46389	-73.44745	6/23/2005	3.6	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
94	5	30	Greg Bugbee	41.46386	-73.44759	6/23/2005	ND	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
94	6	40	Greg Bugbee	41.46397	-73.44742	6/23/2005	4.5	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
94	7	50	Greg Bugbee	41.46391	-73.44793	6/23/2005	2.4	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Candlewood transects (10 of 10).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	PotFol	EloNut	CerDem	NajFle	PotCri	MyrSpi	ValAme	NajMin	PotGra	PotPer	ZanPal	CalSp	NymOdo	LemMin	SpiPol	StuPec
94	8	60	Greg Bugbee	41.46394	-73.44808	6/23/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	1	0	Greg Bugbee	41.47107	-73.45113	6/23/2005	0.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	2	5	Greg Bugbee	41.47105	-73.45118	6/23/2005	1.5	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
95	3	10	Greg Bugbee	41.47105	-73.45124	6/23/2005	1.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	4	20	Greg Bugbee	41.47104	-73.45136	6/23/2005	2.1	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
95	5	30	Greg Bugbee	41.47100	-73.45147	6/23/2005	2.4	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
95	6	40	Greg Bugbee	41.47095	-73.45161	6/23/2005	3.3	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
95	7	50	Greg Bugbee	41.47100	-73.45176	6/23/2005	5.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	8	60	Greg Bugbee	41.47100	-73.45185	6/23/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	1	0	Greg Bugbee	41.48422	-73.45879	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	2	5	Greg Bugbee	41.48420	-73.45882	6/23/2005	1.5	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
96	3	10	Greg Bugbee	41.48416	-73.45884	6/23/2005	1.8	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
96	4	20	Greg Bugbee	41.48407	-73.45882	6/23/2005	3.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	5	30	Greg Bugbee	41.48397	-73.45884	6/23/2005	3.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	6	40	Greg Bugbee	41.48389	-73.45885	6/23/2005	4.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	7	50	Greg Bugbee	41.48378	-73.45884	6/23/2005	4.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	8	60	Greg Bugbee	41.48369	-73.45885	6/23/2005	5.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	9	70	Greg Bugbee	41.48359	-73.45886	6/23/2005	5.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	10	80	Greg Bugbee	41.48351	-73.45885	6/23/2005	7.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	1	0	Greg Bugbee	41.47427	-73.46029	6/23/2005	0.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	2	5	Greg Bugbee	41.47426	-73.46024	6/23/2005	3.9	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	3	10	Greg Bugbee	41.47430	-73.46018	6/23/2005	6.4	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	1	0	Greg Bugbee	41.46855	-73.45870	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	2	5	Greg Bugbee	41.46860	-73.45869	6/23/2005	1.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	3	10	Greg Bugbee	41.46864	-73.45872	6/23/2005	1.8	ND	sunny			0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
98	4	20	Greg Bugbee	41.46874	-73.45869	6/23/2005	3.0	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	5	30	Greg Bugbee	41.46881	-73.45866	6/23/2005	4.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	6	40	Greg Bugbee	41.46890	-73.45864	6/23/2005	4.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	7	50	Greg Bugbee	41.46898	-73.45863	6/23/2005	5.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	8	60	Greg Bugbee	41.46904	-73.45847	6/23/2005	5.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	9	70	Greg Bugbee	41.46913	-73.45840	6/23/2005	5.5	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
98	10	80	Greg Bugbee	41.46923	-73.45842	6/23/2005	5.8	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	1	0	Greg Bugbee	41.46436	-73.46048	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	2	5	Greg Bugbee	41.46441	-73.46051	6/23/2005	1.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	3	10	Greg Bugbee	41.46444	-73.46050	6/23/2005	2.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	4	20	Greg Bugbee	41.46447	-73.46064	6/23/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	1	0	Greg Bugbee	41.46597	-73.45540	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	2	5	Greg Bugbee	41.46594	-73.45537	6/23/2005	ND	ND	sunny			0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
100	3	10	Greg Bugbee	41.46589	-73.45541	6/23/2005	2.4	ND	sunny			0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
100	4	20	Greg Bugbee	41.46582	-73.45554	6/23/2005	3.3	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	5	30	Greg Bugbee	41.46571	-73.45542	6/23/2005	4.5	ND	sunny			0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0
100	6	40	Greg Bugbee	41.46561	-73.45534	6/23/2005	ND	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
100	7	50	Greg Bugbee	41.46547	-73.45536	6/23/2005	ND	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
100	8	60	Greg Bugbee	41.46542	-73.45548	6/23/2005	ND	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
100	9	70	Greg Bugbee	41.46536	-73.45543	6/23/2005	ND	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
100	10	80	Greg Bugbee	41.46523	-73.45535	6/23/2005	ND	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
101	1	0	Greg Bugbee	41.45669	-73.45123	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	2	5	Greg Bugbee	41.45676	-73.45119	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	3	10	Greg Bugbee	41.45678	-73.45119	6/23/2005	ND	ND	sunny			0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0
101	4	20	Greg Bugbee	41.45683	-73.45105	6/23/2005	3.9	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	5	30	Greg Bugbee	41.45689	-73.45098	6/23/2005	5.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	1	0	Greg Bugbee	41.44748	-73.45383	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	1	0	Greg Bugbee	41.43869	-73.45906	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	2	5	Greg Bugbee	41.43869	-73.45901	6/23/2005	0.9	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	3	10	Greg Bugbee	41.43866	-73.45890	6/23/2005	1.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	4	20	Greg Bugbee	41.43863	-73.45879	6/23/2005	3.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	5	30	Greg Bugbee	41.43858	-73.45865	6/23/2005	7.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	1	0	Greg Bugbee	41.42820	-73.45926	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	2	5	Greg Bugbee	41.42820	-73.45918	6/23/2005	3.6	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	3	10	Greg Bugbee	41.42815	-73.45910	6/23/2005	2.7	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	4	20	Greg Bugbee	41.42819	-73.45898	6/23/2005	4.2	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	1	0	Greg Bugbee	41.42388	-73.45254	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
105	2	5	Greg Bugbee	41.42390	-73.45262	6/23/2005	ND	ND	sunny			0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2
105	3	10	Greg Bugbee	41.42396	-73.45264	6/23/2005	ND	ND	sunny			0	0	1	1	0	1	0	0	0	0	1	0	0	0	0	0
105	4	20	Greg Bugbee	41.42402	-73.45272	6/23/2005	ND	ND	sunny			0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
105	5	30	Greg Bugbee	41.42414	-73.45269	6/23/2005	ND	ND	sunny			0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	1
105	6	40	Greg Bugbee	41.42420	-73.45218	6/23/2005	ND	ND	sunny			0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
105	7	50	Greg Bugbee	41.42430	-73.45282	6/23/2005	ND	ND	sunny			0	3	0	0	1	1	0	0	0	0	1	0	0	0	0	1
105	8	60	Greg Bugbee	41.42439	-73.45284	6/23/2005	ND	ND	sunny			0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0
105	9	70	Greg Bugbee	41.42446	-73.45290	6/23/2005	ND	ND	sunny			0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	1
105	10	80	Greg Bugbee	41.42455	-73.45293	6/23/2005	ND	ND	sunny			0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0

Appendix. Lake Lillinonah transects (1 of 3).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	CalSp	EleSp	LemMin	MyrSpi	NajMin	PotCri	PotIll	ZanPal	ZosDub
1	1	0	Roslyn Selsky	41.46157	-73.32372	7/10/2007	0.25	Gravel	sunny			0	0	0	0	2	0	0	0	0
1	2	5	Roslyn Selsky	41.46155	-73.32367	7/10/2007	0.4	Silt	sunny			0	0	0	0	4	0	0	0	0
1	3	10	Roslyn Selsky	41.46154	-73.32362	7/10/2007	0.75	Sand	sunny			0	0	0	0	5	0	0	0	0
1	4	20	Roslyn Selsky	41.46149	-73.32351	7/10/2007	1.5	Silt	sunny			0	0	0	0	0	0	0	0	0
1	5	30	Roslyn Selsky	41.46147	-73.32337	7/10/2007	4	Silt	sunny			0	0	0	0	0	0	0	0	0
1	6	40	Roslyn Selsky	41.46143	-73.32327	7/10/2007	3.25	Gravel	sunny			0	0	0	0	0	0	0	0	0
1	7	50	Roslyn Selsky	41.46139	-73.32319	7/10/2007	2	Sand	sunny			0	0	0	0	0	0	0	0	0
2	1	0	Roslyn Selsky	41.46652	-73.31517	7/10/2007	0.5	Gravel	sunny			0	0	0	0	0	0	0	0	0
2	2	5	Roslyn Selsky	41.46655	-73.31515	7/10/2007	2.5	Gravel	sunny			0	0	0	0	0	0	0	0	0
2	3	10	Roslyn Selsky	41.46659	-73.31512	7/10/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
2	4	20	Roslyn Selsky	41.46668	-73.31503	7/10/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
2	5	30	Roslyn Selsky	41.46676	-73.31501	7/10/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
2	6	40	Roslyn Selsky	41.46689	-73.31508	7/10/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
2	7	50	Roslyn Selsky	41.46697	-73.31513	7/10/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
2	8	60	Roslyn Selsky	41.46707	-73.31502	7/10/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
2	9	70	Roslyn Selsky	41.46713	-73.31491	7/10/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
2	10	80	Roslyn Selsky	41.46720	-73.31479	7/10/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
3	1	0	Roslyn Selsky	41.53866	-73.40571	7/19/2007	0.6	Rock	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
3	2	5	Roslyn Selsky	41.53863	-73.40567	7/19/2007	2	Sand	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
3	3	10	Roslyn Selsky	41.53860	-73.40561	7/19/2007	2	Silt				0	0	0	1	0	0	0	0	0
3	4	20	Roslyn Selsky	41.53862	-73.40551	7/19/2007	1.75	Silt	Cloudy	Southeast		0	0	0	3	0	0	0	0	0
3	5	30	Roslyn Selsky	41.53858	-73.40537	7/19/2007	1	Silt	Cloudy	Southeast		0	0	0	3	0	0	0	0	0
3	6	40	Roslyn Selsky	41.53850	-73.40529	7/19/2007	1	Sand	Cloudy	Southeast		0	0	0	3	0	0	0	0	0
3	7	50	Roslyn Selsky	41.53852	-73.40519	7/19/2007	1	Sand	Cloudy	Southeast		0	0	0	3	0	0	0	0	1
3	8	60	Roslyn Selsky	41.53845	-73.40502	7/19/2007	1	Sand	Cloudy	Southeast		0	0	0	2	0	2	0	0	2
3	9	0	Roslyn Selsky	41.53841	-73.40491	7/19/2007	1	Sand				0	0	0	0	0	3	2	4	3
3	10	80	Roslyn Selsky	41.53835	-73.40477	7/19/2007	1.25	Sand	Cloudy	Southeast		0	0	0	0	0	2	3	0	1
4	1	0	Roslyn Selsky	41.52354	-73.39908	7/19/2007	0.1	Gravel	Light rain	Southeast		0	0	0	0	0	0	0	0	0
4	2	5	Roslyn Selsky	41.52347	-73.39914	7/19/2007	0.5	Gravel	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
4	3	10	Roslyn Selsky	41.52349	-73.39918	7/19/2007	1.5	Gravel	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
4	4	20	Roslyn Selsky	41.52344	-73.39933	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
4	5	30	Roslyn Selsky	41.52338	-73.39939	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
4	6	40	Roslyn Selsky	41.52334	-73.39956	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
4	7	50	Roslyn Selsky	41.52326	-73.39963	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
4	8	60	Roslyn Selsky	41.52320	-73.39967	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
4	9	70	Roslyn Selsky	41.52321	-73.39985	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
4	10	8	Roslyn Selsky	41.52320	-73.39996	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	1	0	Roslyn Selsky	41.51135	-73.38773	7/19/2007	0.25	Sand	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	2	10	Roslyn Selsky	41.51132	-73.38771	7/19/2007	0.5	Sand	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	3	10	Roslyn Selsky	41.51129	-73.38771	7/19/2007	1	Sand	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	4	20	Roslyn Selsky	41.51118	-73.38772	7/19/2007	3	Sand	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	5	30	Roslyn Selsky	41.51107	-73.38769	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	6	40	Roslyn Selsky	41.51100	-73.38771	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	7	50	Roslyn Selsky	41.51091	-73.38767	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	8	60	Roslyn Selsky	41.51082	-73.38773	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	9	70	Roslyn Selsky	41.51075	-73.38787	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
5	10	80	Roslyn Selsky	41.51065	-73.38788	7/19/2007	ND	ND	Cloudy	Southeast		0	0	0	0	0	0	0	0	0
6	1	0	Roslyn Selsky	41.49938	-73.37369	7/26/2007	0.25	Sand	sunny			0	0	0	0	0	0	0	0	0
6	2	5	Roslyn Selsky	41.49940	-73.37374	7/26/2007	0.5	Sand	sunny			0	0	0	0	0	0	0	0	0
6	3	10	Roslyn Selsky	41.49941	-73.37380	7/26/2007	0.6	Sand	sunny			0	0	0	2	1	0	0	0	0
6	4	20	Roslyn Selsky	41.49944	-73.37391	7/26/2007	1	Silt	sunny			0	0	0	5	0	0	0	0	0
6	5	30	Roslyn Selsky	41.49951	-73.37401	7/26/2007	1.5	Silt	sunny			0	0	0	5	0	0	0	0	0
6	6	40	Roslyn Selsky	41.49952	-73.37413	7/26/2007	2.25	Silt	sunny			0	0	0	5	0	0	0	0	0
6	7	50	Roslyn Selsky	41.49954	-73.37428	7/26/2007	2.5	Silt	sunny			0	0	0	5	0	0	0	0	0
6	8	60	Roslyn Selsky	41.49956	-73.37436	7/26/2007	3.5	Silt	sunny			0	0	0	3	0	0	0	0	0
6	9	70	Roslyn Selsky	41.49956	-73.37451	7/26/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
6	10	80	Roslyn Selsky	41.49958	-73.37461	7/26/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
7	1	0	Roslyn Selsky	41.48143	-73.35945	7/26/2007	1.5	Rock	sunny			0	0	0	0	0	0	0	0	0
7	2	5	Roslyn Selsky	41.48147	-73.35942	7/26/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
7	3	10	Roslyn Selsky	41.48156	-73.35935	7/26/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
7	4	20	Roslyn Selsky	41.48161	-73.35929	7/26/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
7	5	30	Roslyn Selsky	41.48170	-73.35926	7/26/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
7	6	40	Roslyn Selsky	41.48177	-73.35920	7/26/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
7	7	50	Roslyn Selsky	41.48185	-73.35915	7/26/2007	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0

Appendix. Lake Lillinonah transects (2 of 3)

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	CalSp	EleSp	LemMin	MyrSpi	NajMin	PotCri	PotIll	ZanPal	ZosDub
8	1	0	Roslyn Selsky	41.46966	-73.32940	7/26/2007	0.1	Gravel	sunny			0	0	0	0	0	0	0	0	0
8	2	5	Roslyn Selsky	41.46970	-73.32938	7/26/2007	0.6	Gravel	artially sun			0	0	0	0	0	0	0	0	0
8	3	10	Roslyn Selsky	41.46975	-73.32935	7/26/2007	2	Gravel	artially sun			0	0	0	0	0	0	0	0	0
8	4	20	Roslyn Selsky	41.46982	-73.32935	7/26/2007	ND	ND	artially sun			0	0	0	0	0	0	0	0	0
8	5	30	Roslyn Selsky	41.46990	-73.32927	7/26/2007	ND	ND	artially sun			0	0	0	0	0	0	0	0	0
8	6	40	Roslyn Selsky	41.46998	-73.32922	7/26/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
8	7	50	Roslyn Selsky	41.47006	-73.32918	7/26/2007	ND	ND	artially sun			0	0	0	0	0	0	0	0	0
8	8	60	Roslyn Selsky	41.47016	-73.32910	7/26/2007	ND	ND	artially sun		too deep	0	0	0	0	0	0	0	0	0
9	1	0	Roslyn Selsky	41.49655	-73.32830	7/27/2007	0.1	Sand	sunny	Southwest		0	0	0	0	0	0	0	0	0
9	2	5	Roslyn Selsky	41.49652	-73.32826	7/27/2007	0.25	Sand	sunny			0	0	0	0	3	0	0	0	0
9	3	10	Roslyn Selsky	41.49649	-73.32820	7/27/2007	0.5	Sand	sunny			0	0	0	0	4	0	0	0	0
9	4	20	Roslyn Selsky	41.49644	-73.32809	7/27/2007	0.9	Silt	sunny			0	0	0	0	3	0	0	0	0
9	5	30	Roslyn Selsky	41.49635	-73.32805	7/27/2007	1	Sand	sunny			0	0	0	0	2	0	0	0	0
9	6	40	Roslyn Selsky	41.49627	-73.32797	7/27/2007	1.25	Sand	sunny			0	0	0	0	3	0	0	0	0
9	7	50	Roslyn Selsky	41.49625	-73.32787	7/27/2007	1.9	Gravel	sunny			0	0	0	0	0	0	0	0	0
9	8	60	Roslyn Selsky	41.49616	-73.32777	7/27/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
9	9	70	Roslyn Selsky	41.49612	-73.32765	7/27/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
9	10	80	Roslyn Selsky	41.49605	-73.32759	7/27/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
10	1	0	Roslyn Selsky	41.48384	-73.32348	8/6/2007	1.5	Silt	Cloudy	Southwest		0	0	0	0	0	0	0	0	0
10	2	5	Roslyn Selsky	41.48384	-73.32354	8/6/2007	2.25	Silt	Light rain	Southwest		0	0	0	0	0	0	0	0	0
10	3	10	Roslyn Selsky	41.48378	-73.32361	8/6/2007	ND	ND	Light rain	Southwest		0	0	0	0	0	0	0	0	0
10	4	20	Roslyn Selsky	41.48373	-73.32369	8/6/2007	ND	ND	Light rain	Southwest		0	0	0	0	0	0	0	0	0
10	5	30	Roslyn Selsky	41.48368	-73.32382	8/6/2007	ND	ND	Light rain	Southwest		0	0	0	0	0	0	0	0	0
10	6	40	Roslyn Selsky	41.48368	-73.32396	8/6/2007	ND	ND	Light rain	Southwest		0	0	0	0	0	0	0	0	0
10	7	50	Roslyn Selsky	41.48357	-73.32401	8/6/2007	ND	ND	Light rain	Southwest		0	0	0	0	0	0	0	0	0
10	8	60	Roslyn Selsky	41.48354	-73.32410	8/6/2007	ND	ND	Light rain	Southwest		0	0	0	0	0	0	0	0	0
10	9	70	Roslyn Selsky	41.48354	-73.32426	8/6/2007	ND	ND	Light rain	Southwest		0	0	0	0	0	0	0	0	0
10	10	80	Roslyn Selsky	41.48358	-73.32442	8/6/2007	ND	ND	Light rain	Southwest		0	0	0	0	0	0	0	0	0
11	1	0	Roslyn Selsky	41.47275	-73.31208	8/7/2007	0.1	Sand	sunny			0	0	0	0	1	0	0	0	0
11	2	5	Roslyn Selsky	41.47270	-73.31207	8/7/2007	0.25	Sand	sunny			0	0	0	0	2	0	0	0	0
11	3	10	Roslyn Selsky	41.47266	-73.31205	8/7/2007	0.5	Sand	sunny			0	0	0	0	5	0	0	0	0
11	4	20	Roslyn Selsky	41.47255	-73.31204	8/7/2007	1	Sand	sunny			0	0	0	0	5	0	0	0	0
11	5	30	Roslyn Selsky	41.47246	-73.31205	8/7/2007	2	Silt	sunny			0	0	0	3	3	0	0	0	0
11	6	40	Roslyn Selsky	41.47240	-73.31199	8/7/2007	2.25	Sand	sunny			0	0	0	4	0	0	0	0	0
11	7	50	Roslyn Selsky	41.47232	-73.31193	8/7/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
11	8	60	Roslyn Selsky	41.47223	-73.31187	8/7/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
11	9	70	Roslyn Selsky	41.47211	-73.31179	8/7/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
11	10	80	Roslyn Selsky	41.47206	-73.31177	8/7/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
12	1	0	Roslyn Selsky	41.46128	-73.29601	8/7/2007	0.5	Sand	sunny		logs	0	0	3	0	0	0	0	0	0
12	2	5	Roslyn Selsky	41.46132	-73.29603	8/7/2007	1	Sand	sunny			0	0	0	0	0	0	0	0	0
12	3	10	Roslyn Selsky	41.46134	-73.29610	8/7/2007	1.5	Sand	sunny			0	0	0	0	0	0	0	0	0
12	4	20	Roslyn Selsky	41.46135	-73.29625	8/7/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
12	5	30	Roslyn Selsky	41.46134	-73.29638	8/7/2007	ND	ND	sunny			0	0	0	0	0	0	0	0	0
12	6	0	Roslyn Selsky	41.46136	-73.29648	8/7/2007	ND	ND	sunny		too deep	0	0	0	0	0	0	0	0	0
12	7	40	Roslyn Selsky	41.46130	-73.29644	8/7/2007	ND	ND				0	0	0	0	0	0	0	0	0
13	1	0	Roslyn Selsky	41.44798	-73.30505	8/9/2007	0.1	Sand	sunny	Southeast		0	0	0	0	0	0	0	0	0
13	2	5	Roslyn Selsky	41.44793	-73.30499	8/9/2007	1	Rock	sunny	Southeast		0	0	0	0	0	0	0	0	0
13	3	10	Roslyn Selsky	41.44795	-73.30495	8/9/2007	2	Rock	sunny	Southeast		0	0	0	0	0	0	0	0	0
13	4	20	Roslyn Selsky	41.44794	-73.30482	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
13	5	30	Roslyn Selsky	41.44788	-73.30474	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
13	6	40	Roslyn Selsky	41.44781	-73.30463	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
13	7	50	Roslyn Selsky	41.44778	-73.30454	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
13	8	60	Roslyn Selsky	41.44774	-73.30440	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
13	9	70	Roslyn Selsky	41.44767	-73.30435	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
13	10	80	Roslyn Selsky	41.44770	-73.30421	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	1	0	Roslyn Selsky	41.45209	-73.30377	8/9/2007	0.5	Rock	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	2	5	Roslyn Selsky	41.45208	-73.30374	8/9/2007	1.5	Rock	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	3	10	Roslyn Selsky	41.45206	-73.30371	8/9/2007	2.5	Gravel	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	4	20	Roslyn Selsky	41.45198	-73.30361	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	5	30	Roslyn Selsky	41.45191	-73.30356	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	6	40	Roslyn Selsky	41.45186	-73.30342	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	7	50	Roslyn Selsky	41.45176	-73.30337	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	8	60	Roslyn Selsky	41.45176	-73.30322	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	9	70	Roslyn Selsky	41.45164	-73.30318	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
14	10	80	Roslyn Selsky	41.45157	-73.30316	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0

Appendix. Lake Lillinonah transects (3 of 3).

Transect	Point	DFS(m)	Surveyor	Lattitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	CalSp	EleSp	LemMin	MyrSpi	NajMin	PotCri	PotIll	ZanPal	ZosDub
15	1	0	Roslyn Selsky	41.46791	-73.30248	8/9/2007	0.1	Gravel	sunny			0	0	0	0	0	0	0	0	0
15	2	5	Roslyn Selsky	41.46794	-73.30242	8/9/2007	2	Gravel	sunny	Southeast		0	0	0	0	0	0	0	0	0
15	3	10	Roslyn Selsky	41.46795	-73.30238	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
15	4	20	Roslyn Selsky	41.46802	-73.30225	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
15	5	30	Roslyn Selsky	41.46809	-73.30219	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
15	6	40	Roslyn Selsky	41.46809	-73.30208	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
15	7	50	Roslyn Selsky	41.46819	-73.30200	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
15	8	60	Roslyn Selsky	41.46820	-73.30187	8/9/2007	ND	ND	sunny	Southeast	too deep	0	0	0	0	0	0	0	0	0
16	1	0	Roslyn Selsky	41.51024	-73.31989	8/9/2007	0.1	Gravel	ırtially sun			0	0	0	0	0	0	0	0	0
16	2	5	Roslyn Selsky	41.51016	-73.31982	8/9/2007	0.25	Sand	sunny	Southeast		0	0	0	0	5	0	0	0	0
16	3	10	Roslyn Selsky	41.51012	-73.31981	8/9/2007	0.4	Sand	sunny	Southeast		0	0	0	0	5	0	0	0	0
16	4	20	Roslyn Selsky	41.51003	-73.31980	8/9/2007	0.6	Sand	sunny	Southeast		0	0	0	0	5	0	0	0	0
16	5	30	Roslyn Selsky	41.50994	-73.31972	8/9/2007	1.9	Sand	sunny	Southeast		0	0	0	0	0	0	0	0	0
16	6	40	Roslyn Selsky	41.50986	-73.31971	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
16	7	50	Roslyn Selsky	41.50978	-73.31968	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
16	8	60	Roslyn Selsky	41.50968	-73.31967	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
16	9	70	Roslyn Selsky	41.50960	-73.31967	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
16	10	80	Roslyn Selsky	41.50950	-73.31969	8/9/2007	ND	ND	sunny	Southeast		0	0	0	0	0	0	0	0	0
17	1	0	Roslyn Selsky	41.49063	-73.38215	8/10/2007	0.1	Sand	Light rain	Southeast		3	4	0	0	0	0	0	0	0
17	2	5	Roslyn Selsky	41.49066	-73.38216	8/10/2007	0.25	Gravel	Light rain	Southeast		0	1	0	0	0	0	0	0	0
17	3	10	Roslyn Selsky	41.49070	-73.38219	8/10/2007	0.5	Gravel	Light rain	Southeast		0	0	0	0	0	0	0	0	0
17	4	20	Roslyn Selsky	41.49080	-73.38220	8/10/2007	1	Rock	Light rain	Southeast		0	0	0	0	0	0	0	0	0
17	5	30	Roslyn Selsky	41.49088	-73.38223	8/10/2007	1.5	Sand	Light rain	Southeast		0	0	0	0	0	0	0	0	0
17	6	40	Roslyn Selsky	41.49097	-73.38228	8/10/2007	2	Sand	Light rain	Southeast		0	0	0	0	0	0	0	0	0
17	7	50	Roslyn Selsky	41.49105	-73.38236	8/10/2007	2.25	Sand	Light rain	Southeast		0	0	0	1	0	0	0	0	0
17	8	60	Roslyn Selsky	41.49111	-73.38238	8/10/2007	2.5	Sand	Light rain	Southeast		0	0	0	3	0	0	0	0	0
17	9	70	Roslyn Selsky	41.49124	-73.38235	8/10/2007	ND	ND	Light rain	Southeast		0	0	0	0	0	0	0	0	0
17	10	80	Roslyn Selsky	41.49130	-73.38244	8/10/2007	ND	ND	Light rain	Southeast		0	0	0	0	0	0	0	0	0

.

Appendix. Lake Zoar transects (1 of 2).

Transect	Point	DFS(m)	Surveyor	Latitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	CerDem	EloNut	MyrSpi	NajFle	NajMin	PotCri	PotFol	StuPec	ValAme	ZosDub
1	1	0	Roslyn Selsky	41.42838	-73.23945	9/14/2007	0.1	Rock	windy	Southwest		0	0	0	0	0	0	0	0	0	0
1	2	0	Roslyn Selsky	41.38172	-73.17474	9/20/2007	0.5	ND				0	0	1	0	0	0	2	4	1	0
1	2	5	Roslyn Selsky	41.42833	-73.23949	9/14/2007	0.3	Sand	windy	Southwest		0	0	0	0	0	0	0	0	0	0
1	3	10	Roslyn Selsky	41.42831	-73.23953	9/14/2007	0.5	Sand	windy	Southwest		0	0	0	0	2	0	0	0	2	0
1	4	20	Roslyn Selsky	41.42826	-73.23966	9/14/2007	1.5	Sand	windy			3	0	1	0	2	0	0	0	4	0
1	5	30	Roslyn Selsky	41.42815	-73.23979	9/14/2007	2.5	Sand	windy	Southwest		0	0	0	0	0	0	0	0	0	0
1	6	40	Roslyn Selsky	41.42804	-73.23974	9/14/2007	3.0	Sand	windy	Southwest		0	0	0	0	0	0	0	0	0	0
1	7	50	Roslyn Selsky	41.42799	-73.23990	9/14/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
1	8	60	Roslyn Selsky	41.42799	-73.23999	9/14/2007	ND	ND	windy	Southwest		0	0	0	0	0	0	0	0	0	0
1	9	70	Roslyn Selsky	41.42792	-73.24003	9/14/2007	ND	ND	windy	Southwest		0	0	0	0	0	0	0	0	0	0
1	10	0	Roslyn Selsky	41.42782	-73.24010	9/14/2007	ND	ND	windy	Southwest		0	0	0	0	0	0	0	0	0	0
2	1	0	Roslyn Selsky	41.43699	-73.24917	9/19/2007	0.1	Sand	sunny			0	0	0	0	0	0	0	0	0	0
2	2	5	Roslyn Selsky	41.43702	-73.24917	9/19/2007	0.8	Sand				0	0	0	0	0	0	0	0	0	0
2	3	10	Roslyn Selsky	41.43710	-73.24918	9/19/2007	1.3	Sand				0	0	0	0	0	0	0	0	0	0
2	4	20	Roslyn Selsky	41.43712	-73.24917	9/19/2007	3.0	Sand				0	0	0	0	0	0	0	0	0	0
2	5	30	Roslyn Selsky	41.43723	-73.24929	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
2	6	40	Roslyn Selsky	41.43734	-73.24920	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
2	7	50	Roslyn Selsky	41.43743	-73.24923	9/19/2007	1.8	Sand				0	0	3	0	0	0	0	0	0	0
2	8	60	Roslyn Selsky	41.43753	-73.24926	9/19/2007	1.5	Sand				0	0	4	0	0	0	0	0	0	0
2	9	70	Roslyn Selsky	41.43761	-73.24927	9/19/2007	1.5	Sand				0	0	3	0	0	0	0	0	0	0
2	10	80	Roslyn Selsky	41.43773	-73.24928	9/19/2007	1.5	Sand				0	0	3	0	0	1	0	0	0	0
3	1	0	Roslyn Selsky	41.43732	-73.26654	9/19/2007	0.1	Gravel	sunny			0	0	0	0	0	0	0	0	0	0
3	2	5	Roslyn Selsky	41.43738	-73.26649	9/19/2007	0.5	Sand				0	3	1	0	2	0	0	0	4	0
3	3	0	Roslyn Selsky	41.43740	-73.26645	9/19/2007	0.5	Sand				0	3	2	0	2	0	0	0	3	0
3	4	0	Roslyn Selsky	41.43748	-73.26639	9/19/2007	0.5	Sand				0	4	2	0	3	3	0	0	1	0
3	5	0	Roslyn Selsky	41.43756	-73.26631	9/19/2007	0.5	Sand				0	3	2	0	3	3	0	0	0	0
3	6	40	Roslyn Selsky	41.43764	-73.26625	9/19/2007	1.3	Sand				0	2	0	1	3	4	0	0	0	0
3	7	50	Roslyn Selsky	41.43769	-73.26613	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
3	8	60	Roslyn Selsky	41.43774	-73.26607	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
3	9	70	Roslyn Selsky	41.43780	-73.26596	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
3	10	80	Roslyn Selsky	41.43788	-73.26592	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
4	1	0	Roslyn Selsky	41.45308	-73.28177	9/19/2007	0.4	Sand	sunny			0	0	2	0	2	0	0	0	1	0
4	2	5	Roslyn Selsky	41.45305	-73.28174	9/19/2007	1.5	ND				0	0	3	0	3	0	0	0	0	3
4	3	10	Roslyn Selsky	41.45302	-73.28170	9/19/2007	1.8	Sand				0	2	2	2	3	0	0	0	3	0
4	4	20	Roslyn Selsky	41.45294	-73.28168	9/19/2007	2.5	Sand				0	0	0	0	0	0	0	0	0	0
4	5	30	Roslyn Selsky	41.45283	-73.28162	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
4	6	40	Roslyn Selsky	41.45273	-73.28156	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
4	7	50	Roslyn Selsky	41.45269	-73.28146	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
4	8	60	Roslyn Selsky	41.45264	-73.28136	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
4	9	70	Roslyn Selsky	41.45265	-73.28138	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
4	10	80	Roslyn Selsky	41.45239	-73.28139	9/19/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
5	1	0	Roslyn Selsky	41.43197	-73.22740	9/20/2007	0.3	Sand	sunny			0	0	0	0	0	0	0	0	0	0
5	2	5	Roslyn Selsky	41.43193	-73.22740	9/20/2007	0.3	Sand				0	0	0	0	1	0	0	0	0	0
5	3	10	Roslyn Selsky	41.43186	-73.22742	9/20/2007	0.3	Sand				0	0	0	0	1	0	0	0	0	0
5	4	20	Roslyn Selsky	41.43178	-73.22742	9/20/2007	0.5	Sand				0	0	0	0	2	2	0	0	0	0
5	5	30	Roslyn Selsky	41.43169	-73.22743	9/20/2007	0.8	Sand				1	0	3	0	0	0	0	0	0	0
5	6	30	Roslyn Selsky	41.43160	-73.22747	9/20/2007	1.0	Sand				0	0	3	0	0	0	0	0	0	0
5	7	0	Roslyn Selsky	41.43149	-73.22751	9/20/2007	1.0	Sand				0	0	1	0	3	0	0	0	0	0
5	8	0	Roslyn Selsky	41.43141	-73.22745	9/20/2007	1.5	Sand				0	0	2	0	2	0	0	0	0	0
5	9	70	Roslyn Selsky	41.43131	-73.22746	9/20/2007	2.5	Sand				0	0	0	0	0	0	0	0	0	0
5	10	80	Roslyn Selsky	41.43123	-73.22745	9/20/2007	2.8	Sand				0	0	0	0	0	0	0	0	0	0
6	1	0	Roslyn Selsky	41.42412	-73.20741	9/20/2007	0.1	Sand	sunny			0	0	0	0	0	0	0	0	0	0
6	2	5	Roslyn Selsky	41.42407	-73.20737	9/20/2007	0.4	Sand				0	0	0	0	0	0	0	0	0	0
6	3	10	Roslyn Selsky	41.42400	-73.20729	9/20/2007	1.0	Sand				0	0	0	0	0	0	0	0	0	0
6	4	20	Roslyn Selsky	41.42395	-73.20722	9/20/2007	1.5	Sand				0	0	0	0	0	0	0	0	0	0
6	5	30	Roslyn Selsky	41.42386	-73.20719	9/20/2007	1.5	Sand				0	0	2	0	0	1	0	0	0	0
6	6	0	Roslyn Selsky	41.42378	-73.20709	9/20/2007	1.5	Sand				2	0	2	0	0	0	0	0	0	0
6	7	50	Roslyn Selsky	41.42371	-73.20705	9/20/2007	2.0	Sand				0	0	2	0	0	0	0	0	0	0
6	8	60	Roslyn Selsky	41.42366	-73.20698	9/20/2007	2.3	Sand				0	0	2	0	0	0	0	0	0	0
6	9	70	Roslyn Selsky	41.42359	-73.20690	9/20/2007	2.5	Sand				0	0	0	0	0	0	0	0	0	0
6	10	80	Roslyn Selsky	41.42353	-73.20680	9/20/2007	2.8	Sand				0	0	0	0	0	0	0	0	0	0

Appendix. Lake Zoar transects (2 of 2).

Transect	Point	DFS(m)	Surveyor	Latitude	Longitude	Date	Depth(m)	Substrate	Weather	Wind	Notes	CerDem	EloNut	MyrSpi	NajFle	NajMin	PotCri	PotFol	StuPec	ValAme	ZosDub
7	1	0	Roslyn Selsky	41.41261	-73.20177	9/20/2007	0.1	Sand	sunny			0	0	0	0	0	0	0	0	0	0
7	2	5	Roslyn Selsky	41.41260	-73.20167	9/20/2007	0.5	Sand				0	0	1	0	0	0	0	0	0	0
7	3	10	Roslyn Selsky	41.41262	-73.20160	9/20/2007	1.0	Sand				0	0	1	0	0	0	0	0	0	0
7	4	20	Roslyn Selsky	41.41265	-73.20151	9/20/2007	1.3	Sand				0	0	2	0	0	0	0	0	0	0
7	5	30	Roslyn Selsky	41.41271	-73.20138	9/20/2007	1.5	Sand				0	0	4	0	1	0	0	0	0	0
7	6	40	Roslyn Selsky	41.41276	-73.20131	9/20/2007	1.5	Sand				0	0	4	0	2	0	0	0	0	0
7	7	50	Roslyn Selsky	41.41283	-73.20120	9/20/2007	1.5	Sand				0	0	4	0	2	0	0	0	0	0
7	8	60	Roslyn Selsky	41.41290	-73.20108	9/20/2007	2.0	Sand				0	0	3	0	0	0	0	0	0	0
7	9	70	Roslyn Selsky	41.41292	-73.20098	9/20/2007	2.3	Sand				0	0	3	0	0	0	0	0	0	0
7	10	80	Roslyn Selsky	41.41293	-73.20087	9/20/2007	3.0	Sand				0	0	0	0	0	0	0	0	0	0
8	1	0	Roslyn Selsky	41.39853	-73.19077	9/20/2007	0.1	Sand	sunny			0	0	0	0	0	0	0	0	0	0
8	2	5	Roslyn Selsky	41.39853	-73.19070	9/20/2007	0.8	Sand				0	0	0	0	0	0	0	0	0	0
8	3	10	Roslyn Selsky	41.39852	-73.19064	9/20/2007	0.9	Sand				0	0	0	0	0	0	0	0	0	0
8	4	20	Roslyn Selsky	41.39851	-73.19055	9/20/2007	1.0	Sand				0	0	0	0	0	0	0	0	0	0
8	5	30	Roslyn Selsky	41.39853	-73.19042	9/20/2007	1.0	Sand				0	0	0	0	0	0	0	0	0	0
8	6	40	Roslyn Selsky	41.39851	-73.19031	9/20/2007	2.3	Sand				0	0	0	0	0	0	0	0	0	0
8	7	50	Roslyn Selsky	41.39846	-73.19020	9/20/2007	3.3	Sand				0	0	0	0	0	0	0	0	0	0
8	8	60	Roslyn Selsky	41.39845	-73.19007	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
8	9	70	Roslyn Selsky	41.39848	-73.18998	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
8	10	80	Roslyn Selsky	41.39839	-73.18989	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
9	1	0	Roslyn Selsky	41.39186	-73.17435	9/20/2007	0.1	Sand	sunny	Northeast		0	0	0	0	0	0	0	0	0	0
9	2	5	Roslyn Selsky	41.39182	-73.17443	9/20/2007	0.8	Sand				0	0	0	0	0	0	0	0	0	0
9	3	10	Roslyn Selsky	41.39178	-73.17443	9/20/2007	0.8	Sand				0	0	2	0	0	0	0	0	0	0
9	4	20	Roslyn Selsky	41.39168	-73.17445	9/20/2007	0.8	ND				0	0	0	0	0	0	0	0	0	0
9	5	20	Roslyn Selsky	41.39161	-73.17455	9/20/2007	1.0	Sand				0	0	2	0	0	0	0	0	0	0
9	6	40	Roslyn Selsky	41.39151	-73.17454	9/20/2007	3.3	Sand				0	0	0	0	0	0	0	0	0	0
9	7	50	Roslyn Selsky	41.39146	-73.17463	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
9	8	60	Roslyn Selsky	41.39141	-73.17470	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
9	9	70	Roslyn Selsky	41.39132	-73.17479	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
9	10	80	Roslyn Selsky	41.39124	-73.17487	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
10	1	0	Roslyn Selsky	41.38167	-73.17472	9/20/2007	0.3	Sand	sunny			0	0	0	0	0	0	0	4	0	0
10	3	10	Roslyn Selsky	41.38177	-73.17478	9/20/2007	0.8	Sand				0	0	2	0	0	0	2	3	0	0
10	4	20	Roslyn Selsky	41.38185	-73.17489	9/20/2007	1.5	Sand				0	0	3	0	0	0	0	0	0	0
10	5	30	Roslyn Selsky	41.38192	-73.17491	9/20/2007	2.5	Sand				0	0	3	0	0	0	0	0	0	0
10	6	40	Roslyn Selsky	41.38202	-73.17499	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
10	7	50	Roslyn Selsky	41.38209	-73.17500	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
10	8	60	Roslyn Selsky	41.38214	-73.17508	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
10	9	70	Roslyn Selsky	41.38226	-73.17511	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0
10	10	80	Roslyn Selsky	41.38235	-73.17519	9/20/2007	ND	ND				0	0	0	0	0	0	0	0	0	0