Spooner Lake CLP pre and post treatment summary

Completed by Steve Schieffer-June 2008

Pre-treatment survey:

The pretreatment survey was conducted on May 13, 2008. At each survey point in each polygon a 1m rake tow was used to collect plants. All native and non-native species (CLP) were recorded with density recorded based upon the Wisconsin DNR rake density rating of 1-3. In addition, the DO was sampled within each plot from surface to bottom. Refer to Table 1 for the data from the pre-treatment survey.

Every sample point in each plot except one had CLP present. All density ratings were "1" except for one rating of "2." This low rating is typical as the plants were very short but these results did verify that the CLP was present in each polygon. Very few natives were sampled, which is typical in early spring as most are not out of dormancy yet.

The dissolved oxygen was high at the surface and at the bottom of each plot (12.1 mg/l to 11.9 mg/l). These are typical readings in spring, cold-water temperatures.

Post-treatment survey:

The post-treatment survey was conducted on June 13, 2008. The same protocol was followed as was with the pretreatment survey (except the Lake District volunteers monitored the DO). Again, CLP was sampled at all points except one. Most points had density ratings of "1" or "2." Usually at this time in the summer the density of the CLP would be reaching its maximum and in these plots more "3" readings would be expected. However, these densities are fairly low. This could indicate success of the treatment. To help evaluate the success of treatment, an area known to have the highest CLP density from previous surveys was observed. In this area the CLP growth/density was much lower than observed in previous years. This could indicate the reason for lower CLP densities in the plots (less growth in the lake as a whole) and not due to treatment success. Future assessments will indicate any changes in coverage and density.

In the future, post treatment surveys can be compared from year to year and statistically analyzed to determine if the treatments have been effective. Due to the fact that this is the first year of treatment, this analysis cannot be conducted but will be in future years. Treatment of CLP takes several years to be successful since the reproductive structures known, as turions can remain viable for 3 years or more. As a result, new growth can occur each year until the turion production is significantly reduced.

Table 1: Pre-treatment survey

May 13, 2008
Water clear and 52 degrees F

Point	Depth(ft)	Lat	Long	CLP	Flatstem pondweed	Northern watermilfoil	Fries' pondweed	Coontail	Fern pondweed	Small pondweed	Dissolved oxygen Surface/Bottom
101	8.4	45.84433822	-91.83015898	1	1	1	0	1	0	0	
102	9.0	45.84424691	-91.8300321	1	1	1	0	0	0	0	12.1/12.1
201	8.5	45.84258977	-91.82729805	1	1	1	0	1	0	0	
202	8.0	45.84222717	-91.82704811	1	2	2	0	2	0	0	12.0/12.1
301	7.0	45.84373221	-91.82635968	1	1	0	0	1	0	0	
302	7.2	45.84345696	-91.82585034	1	2	0	0	1	0	0	11.9/11.9
303	6.5	45.84327434	-91.82559661	1	0	0	0	0	0	0	
304	6.5	45.84282176	-91.82534857	1	0	0	0	0	0	0	
305	6.3	45.84309304	-91.82547165	1	0	0	0	0	0	0	
401	5.0	45.84144759	-91.82388367	1	1	0	0	1	1	0	12.2/12.0
402	4.9	45.84126231	-91.82337246	1	1	1	0	1	0	0	
403	4.8	45.84098837	-91.8229919	2	1	1	0	1	0	0	
404	5.0	45.84080442	-91.82260945	0	1	1	0	0	0	0	
501	6.4	45.84054084	-91.82761153	1	1	0	0	1	1	0	11.9/12.0
502	5.7	45.84040321	-91.82735687	1	0	0	0	1	1	0	

Table 2: Post-treatment survey

June 13, 2008
Water dark/murky and 62 degrees F

Point	Depth(ft)	Lat	Long	CLP	Flatstem pondweed	Northern watermilfoil	Fries' pondweed	Coontail	Fern pondweed	Small pondweed
101	8.4	45.84433822	-91.83015898	1	1	0	0	1	1	0
102	9.0	45.84424691	-91.8300321	1	1	0	0	1	0	0
201	8.5	45.84258977	-91.82729805	2	1	1	0	1	0	0
202	8.0	45.84222717	-91.82704811	2	1	0	0	1	0	0
301	7.0	45.84373221	-91.82635968	1	0	1	0	2	0	0
302	7.2	45.84345696	-91.82585034	1	1	1	0	1	0	0
303	6.5	45.84327434	-91.82559661	0	1	0	1	1	0	0
304	6.5	45.84282176	-91.82534857	1	1	0	0	1	1	0
305	6.3	45.84309304	-91.82547165	1	1	0	0	1	0	0
401	5.0	45.84144759	-91.82388367	2	1	1	0	0	0	1
402	4.9	45.84126231	-91.82337246	2	1	1	1	1	0	0
403	4.8	45.84098837	-91.8229919	1	1	1	1	1	0	0
404	5.0	45.84080442	-91.82260945	3	0	1	0	1	0	0
501	6.4	45.84054084	-91.82761153	1	1	1	1	0	0	0
502	5.7	45.84040321	-91.82735687	2	1	1	0	0	1	0

Figure 1: Map of treatment plots

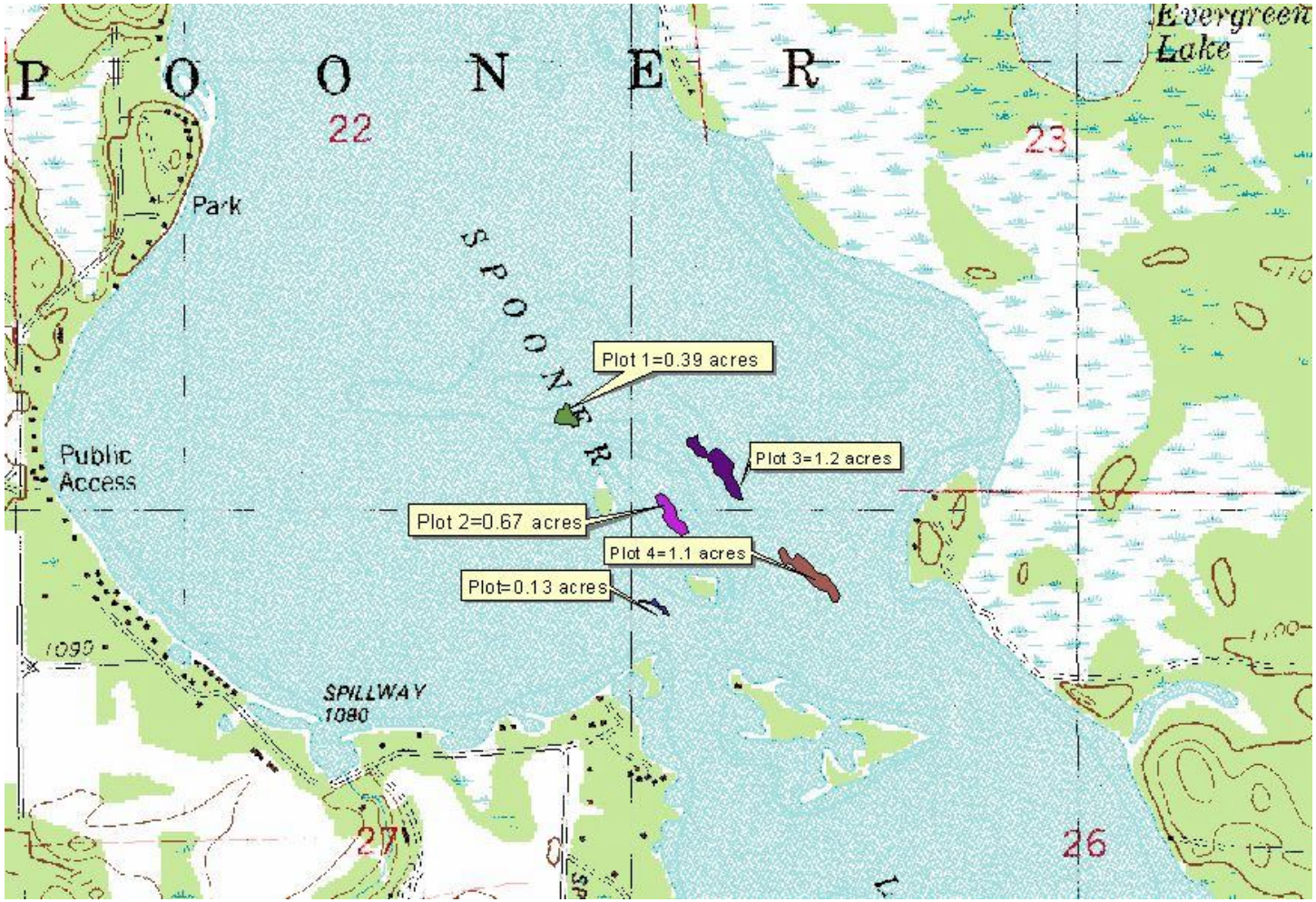

Figure 2: Map of treatment plots closer view