

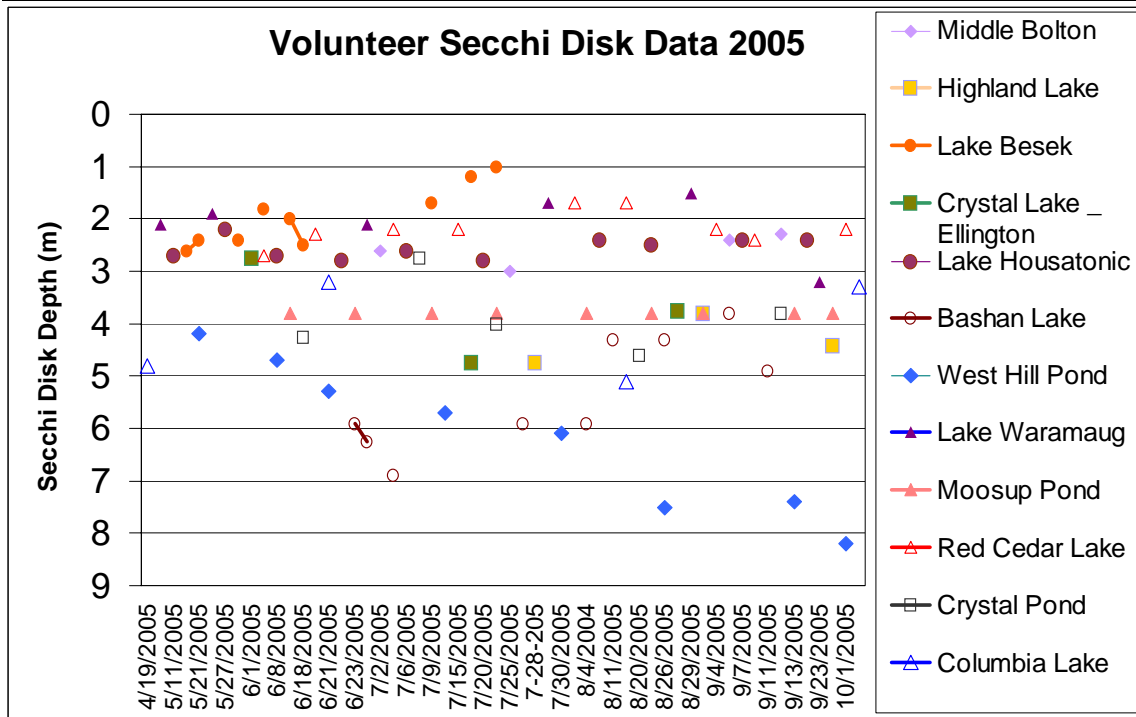
Volunteer Secchi Disk Monitoring Program
2005 Report
Connecticut Federation of Lakes

The Connecticut Federation of Lakes began a Volunteer Secchi Disk Monitoring Program in 2004. Hence, this is the second year of the program. The CFL provides a Secchi disk to lake associations willing to report data back to the CFL at the end of the field season. In both 2004 and 2005, a total of 11 lakes reported Secchi disk data in each year. However, five of these lakes were new to the monitoring program in 2005. Therefore, five lakes from 2004 did not report data in 2005. The CFL would like to thank all those people who helped this program by collecting data and reporting back to the CFL. You are to be commended for your efforts!

2005 Data

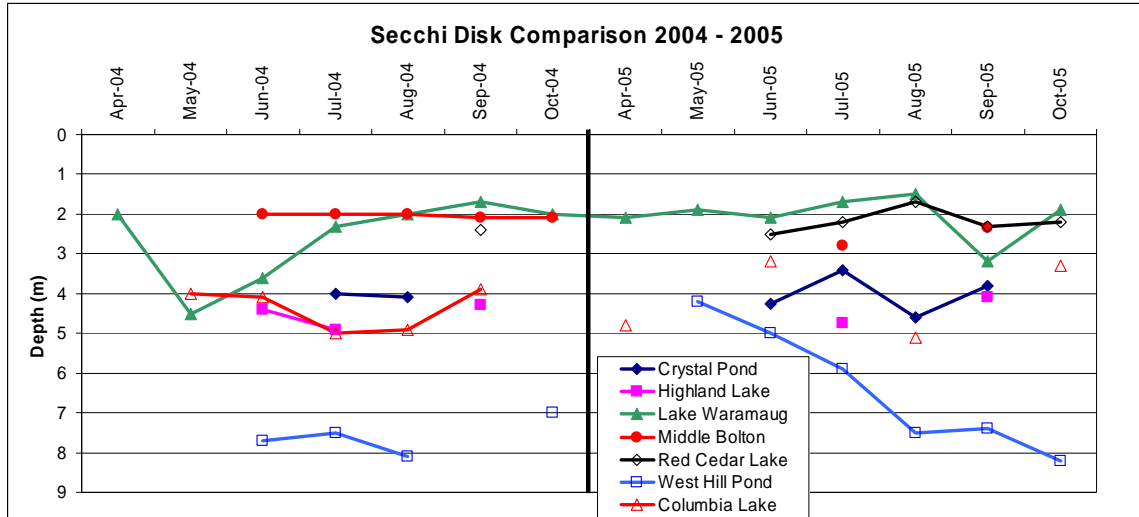
Most of the lakes recorded Secchi disk depths between 1 and 4 meters. Three lakes had Secchi disk depths greater than 5 meters. The greatest Secchi disk depth (8.2 m) was recorded by West Hill Pond on October 1st. Lake Besek recorded the least Secchi disk depth on July 24th.

	April	May	June	July	August	September	October
Middle Bolton				2.8		2.35	
Highland Lake				4.75		4.1	
Lake Besek		2.47	2.1	1.3			
Crystal Lake _ Ellington			2.75	4.75	3.75		
Lake Housatonic		2.45	2.75	2.7	2.45	2.4	
Bashan Lake			6.08	6.4	4.8	4.4	
West Hill Pond		4.2	5	5.9	7.5	7.4	8.2
Lake Waramaug	2.1	1.9	2.1	1.7	1.5	3.2	
Moosup Pond			3.8	3.8	3.8	3.8	
Red Cedar Lake			2.5	2.2	1.7	2.3	2.2
Crystal Pond			4.26	3.4	4.6	3.8	
Columbia Lake	4.8		3.2		5.1		3.3



2004 – 2005 Comparison

	Apr-04	May-04	Jun-04	Jul-04	Aug-04	Sep-04	Oct-04	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05
Crystal Pond				4	4.1						4.26	3.4	4.6	3.8
Highland Lake			4.4	4.9		4.3					4.75		4.1	
Lake Waramaug	2	4.5	3.6	2.3	2	1.7	2	2.1	1.9	2.1	1.7	1.5	3.2	1.9
Middle Bolton			2	2	2	2.1	2.1				2.8		2.35	
Red Cedar Lake						2.4				2.5	2.2	1.7	2.3	2.2
West Hill Pond			7.7	7.5	8.1		7		4.2	5	5.9	7.5	7.4	8.2
Columbia Lake		4	4.1	5	4.9	3.9		4.8		3.2		5.1		3.3



There were seven lakes that reported data in both 2004 and 2005. Most of these lakes had similar Secchi disk depths in both 2004 and 2005. The Secchi depths recorded at West Hill Pond started lower in 2005 but gradually increased throughout the summer to reach depths that were similar to 2004.

I have been asked an interesting question in regard to Secchi disk measurements. Are Secchi disk depths affected by July 4th celebrations and their associated firework displays? Secchi disk depths can be affected by a variety of factors, but we normally correlate Secchi disk depths to turbidity caused by algae or sediment suspended in the water column. This question addresses factors that are more likely to cause increased turbidity like more boat activity / traffic that may re-suspend lake sediments or the fallout of the fireworks themselves that may become suspended in the water column. It would be interesting to know how many lakes that have firework displays occur on the lake / lake shore experience reduced Secchi disk depths around July 4th. It would be an easy test to set up. If we could take Secchi disk readings of our lakes the week prior to a celebration event, the week of the event, and the week after the event we could tell if these celebrations had any affect on lake transparency. We could also note whether there seemed to be more boat traffic or litter in the water than usual. If this data can be collected from several lakes near the July 4th celebrations, maybe we can have some answers to this question.

If there are any questions regarding Secchi disk measurements or other concerns, please let me know. If there are other lake associations that would like to participate in taking Secchi disk readings on their lake, please let me know and I will forward them a disk and all the information they will need to get started. Again, thank you to all who volunteered and I hope we can build this program to include more lakes in 2006.

Chris Mayne