

2010 Clemons Pond Water Quality
Monitoring Report
5/29/11

I am happy to report that 2010 was another good year for water quality on the pond. We continue to have water clarity numbers that are above the average for lakes and ponds monitored throughout the state. More importantly, there have been no negative trends in water quality parameters that we monitor. We monitor three measures of water quality:

1. Secchi depth - a measure of water clarity.
2. Dissolved oxygen – a sensitive indicator of water quality, and of the ability of the pond to support aquatic life.
3. Total phosphorus Concentration – the nutrient that most influences the growth of algae in a pond.

In 2010 our average water clarity was 6.0 meters over a five month period, slightly above our historical average of 5.6 meters and improved over the previous year's average of 5.8 meters. Dissolved oxygen readings were similar to past seasons with somewhat less late summer depletion of oxygen below 4-5 meters (12-15 feet). Total phosphorus concentration was 5 ppb which is slightly below what we typically average.

The 2010 summer season was preceded by lower than usual winter snowfall amounts and extremely early “ice out” dates throughout the state. Spring run-off in southern Maine was likely less than usual. Spring and summer temperatures were above average. It is unclear how these factors influenced water quality, but may be related to less phosphorus loading that largely occurs in the spring with snowmelt and runoff.

Concerns for this summer as always are activities around the pond that introduce phosphorus into the pond including road runoffs, disturbing the soil and tree cover in the buffer zone immediately adjacent and upslope from the shore of the pond, use of phosphorus containing lawn fertilizers, and poorly maintained septic systems.

We should all continue to be alert for the presence of aquatic plants that seem new to the pond as well as problems with excessive algae. On that subject I am happy to report that our pond association will be cosponsoring a free workshop on Invasive Aquatic Plants on Wednesday August 17th in the cafeteria at the Sacopec Valley Middle School from 2:30 pm to 8:00 pm. The program will be run by the Maine Volunteer Lake Monitoring Program and will review the threat of invasive aquatic plants in Maine, offer hands on plant identification with live plants, and give us the know how to create our own survey team and begin systematically doing aquatic plant screening surveys. I have been in touch with representatives from other local ponds who have expressed an interest in partnering with us in the formation of a regional plant patrol survey team. The August 17th workshop presents a new exciting opportunity for us to protect our pond and I hope many of you will choose to attend. You will all be getting an email with details and there will also be details posted on the pond association website.

Victor Lerish
5/29/2011