

Notes for BLPA Annual Meeting, July 27 2013

Water Quality and conservation

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Ice out

Ice out day this year was on April 17. It was later than last year, but long term historic trends in the region are supporting earlier ice out over time. (See Lake Sunapee – the average ice out in 2013 was more than 10 days sooner than in 1886 with a significant downward trend). It is not clear what the exact implication of earlier ice out will be Blaisdell Lake water quality will be, but we can expect that earlier ice out, warmer water temperatures, and higher nutrient levels can combine to changing the lake status.

Wildlife

The Loons are back and we enjoy their midnight serenades, but some other (less charismatic) species are missing. Yesterday we were visited by a juvenile Bald Eagle. This last spring we had fewer migrating mergansers than before, there are no more bats in the evenings, and this year we have not seen any Monarch butterflies.

Aquatic Vegetation

Early in the season we observed more algae than in the past, but that has since disappeared and the lake vegetation seems to be back to “normal.” There are 78 New Hampshire lakes with invasive species, some in very close proximity to us (Massasecum, Sunapee). Thanks to Sharon and a vigilant team of weed watchers we do not have any invasive plants in the water yet. Unfortunately, the list of unwanted species keeps on growing with Asian Clams being the latest to be added to the list.

Water Quality

I tested the water once this year (an engine failure and other obligations prevented more tests) There are no immediate apparent problems with the water quality. Blaisdell Lake, thanks to the efforts of the residents around the lake and the watershed, remains a lake with exceptional water quality. Maintaining good buffers along the shore, limiting impervious surface and development, limiting sediment disturbance, and being aware of the implications of our actions all make a contribution.

This year we had a few big flushes from rain events. There has also been one septic failure of a house on the lake shore – which does not appear to have had any immediate impact on the water quality. However, phosphorus levels in the lake in July this year is higher than the average over the last 5 years. The average phosphorous level this July is closer to 8 ug/l, while in previous years it was between 5 and 7 ug/l.

The New Hampshire Department of Environmental Services report describes the pH level (degree of acidity) at the deep spot in Blaisdell Lake as “undesirable.” Historical records show that it was traditionally low in the middle of summer, presumably because we have more decomposition and lake stratification (the layers do not mix as much) that time of the year. Still, it is something we will need to continue to monitor closely.

Last year we included a station in Russell Pond and Billings pond to the water testing. This will give us a better idea of water quality in the whole watershed. Levels of phosphorous and conductivity are very high in Russell Pond (Phosphorous of 14 ug/l and conductivity of 106 uS/cm), but are significantly lower at the inlet of Russell Pond (Phosphorous of 7 ug/l and conductivity of 61 uS/cm). This means that the wetland at the Russell Pond outlet and the stream along the way to Blaisdell Lake are performing well as cleaning agents. It is, however, something we need to monitor closely. The values for Billings Pond are very similar to that of Blaisdell Lake –not surprising given the low development around that water body.

Overall, there are no immediate and pressing concerns. We should all continue our good practices and it may be worth developing long term mitigation and prevention strategies and plans.

Water testing

I am looking forward to having some more volunteers involved in water testing from next season. Why should I have all the fun? Anyone interested should contact Steve Domber.