The state of Hood Pond - summer 2020

Dear Friends,

As many of you know, Hood Pond was treated for Variable Milfoil on June 23rd. Given that the Fanwort was caught early and appears to be under control, along with the successful management of Water Chestnut through hand pulling, Solitude Lake Management was able to use a treatment which specifically targets the Variable Milfoil. The treatment, Procella COR EC, was administered when the milfoil (in far fewer numbers than last year) was in its early stage of growth. According to the written information, the treatment "is systemic and is incredibly selective for control of milfoil species and is ideal for spot-treatment management efforts." It only requires one application per season for control. We have not seen any milfoil when we have been out on the pond. However, if you have, please let us know using the email mailbox@friendsofhoodpond.org We are so grateful that Hood Pond, parts of which (at least) would have been choked out by now, is available to those seeking a respite from the pandemic.

We still need to be vigilant about hand pulling any Water Chestnut that we see. It is still out there, although not in great numbers. We have also seen a lot of water chestnut seeds in the pond. They remain viable for 12 years, so its control will be necessary for the foreseeable future.

Phragmite treatment will take place this fall. As you may recall, it was treated last fall as well so there is much less of it than there was last year.

There are still a number of those floating mats, looking like islands around the pond. They have been in the pond over the years, but not to the degree that we see now. As time goes on, we will need to turn our attention to eliminating them. There should naturally be fewer of them in the future because there will be less decomposing plant matter. Currently, they are not part of the 5 year management plan, so their elimination is not part of our budget. Also, depending upon what method we choose, we might need to apply for new permits and/or more Conservation Commission meetings (both Topsfield and Ipswich). Treatments include the following:

Hydro-raking: the most expensive. Involves applying for new permits.

Application of bacteria pellets: speeds up the natural bacteria breakdown process. Needs to be approved by the Conservation Commissions of both towns.

Manually breaking them up: No need for permits or approval. Doesn't cost anything. However, it does involve dispersing them by getting out there in a canoe or kayak with a rake, shovel, or pole and chopping them up.

As I'm sure you've read, ponds and lakes all over Massachusetts, including Chebacco Lake in Essex, have been experiencing an increase in algae blooms. Every summer, for as long as I can remember, we have had scattered algae blooms in Hood Pond. Usually they appear in August and go away after a few weeks. There is reason, however, that we should be extra vigilant this summer. There are two kinds here. One is Filamentous Green Algae. The other is cyanobacteria. Excess nutrients in the form of phosphorus and nitrogen, along with warm water temperatures create the breeding grounds. As we all know, we had a "non winter" this year. It's actually the only winter in our 43 years here that I was not able to go skating because of a lack of ice. Now we are experiencing high temperatures and extremely warm water. The Green Algae, which looks like the more sinister one, is actually not harmful. It's that lime green, cloudlike substance, floating just beneath the surface, which sometimes bubbles on the top on hot days. Cyanobacteria, which are those blue-green blobs, can be harmful at elevated levels. We want to make sure that our pond remains a safe and healthy place for swimming, boating and fishing. So we have alerted DCR that we have seen evidence of both. Because of our management plan, an environmental company monitors the pond throughout the summer. We will remain in contact with all of the agencies so that we can stay on top of this. There are ways to mitigate the blooms, however they require the cooperation of homeowners; not just those who surround the pond, but also those who live near the watershed that enters the pond. We need to minimize or eliminate the use of lawn fertilizers, and properly maintain household septic systems and any other waste that could enter the pond, such as pet waste. A positive feature of Hood Pond, as opposed to other ponds, is the amount of vegetation along the shore. We have very few homes directly on the shoreline, and many of those who are have a "rain garden" between their lawn and the water. This helps to filter the incoming water.

We can all feel a sense of satisfaction about all that we have been able to accomplish over the last few years. Friends of Hood Pond will continue to work toward our goal of maintaining a clean, healthy environment for pond life and for recreational use. It is our understanding, from information received from experts, that Hood Pond can remain healthy for the foreseeable future as long as a three pronged approach is maintained.

- 1. Manage the invasive aquatic plants. That's our job.
- 2. Establish an alewife (herring) population. Alewife can help to mitigate the excess nutrients by consuming them and then taking them to the ocean when they migrate. Ipswich River Watershed Assoc, Division of Marine Fisheries, Trout Unlimited, Sea Run Brook Trout Coalition, along with TEC engineering and JTC Geotechnical are working collaboratively to reintroduce alewife to Hood Pond.
- 3. Control the excess phosphorus and nitrogen through the methods described in the previous paragraph. Friends of Hood Pond is currently doing research to determine

phosphorus/nitrogen levels in the pond, along with possible sources of the excess nutrients.

We are greatly in need of funding for our various projects. We thank all who have become members of Friends of Hood Pond for your support in this effort. If you have not, please join through our website friendsofhoodpond.org.

Together, we can ensure that Hood pond remains healthy for generations to come.

With gratitude,

Robi Tobin and Friends of Hood Pond