

FIELD NOTES SUMMARY

Customer: Town of Walpole

Pond Name: Clarks Pond

Site Location: Walpole, MA

Date: 6/7/23

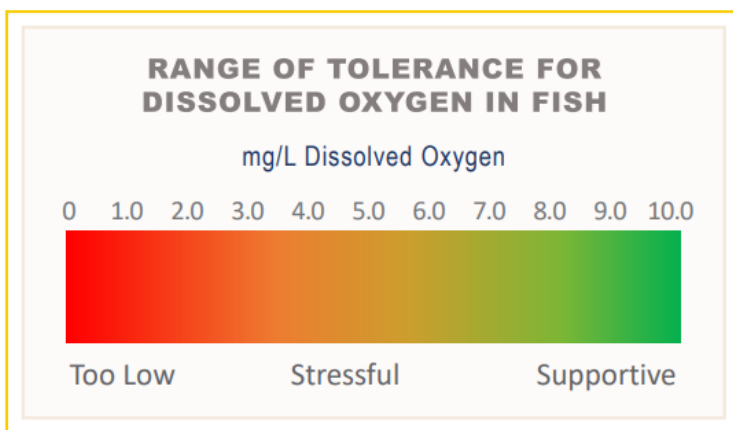
On 6/7/23, Senior Environmental Scientist, James Lacasse made a visit to Clarks Pond. The following services were completed during the visit:

Upon arrival to the site, a survey was conducted using visual observation paired with a standard throw-rake and handheld GPS/ArcGIS Field Maps, as applicable. Plants documented during the survey are documented in the table below. (*) denotes an invasive species. Invasive species are non-native to the ecosystem and are likely to cause economic harm, environmental harm, or harm to human health.

Common Name	Latin Name
Variable Milfoil*	<i>Myriophyllum heterophyllum</i>
Water Chestnut*	<i>Trapa natans</i>
Waterlilies	<i>Nymphaeaceae</i>
Duckweed	<i>Lemna</i>

While on-site, dissolved oxygen (DO) and temperature readings were collected using a calibrated YSI meter with optical sensor. Dissolved oxygen is the amount of oxygen in water that is available to aquatic organisms. DO is necessary to support fish spawning, growth, and activity. Tolerance varies by species, but the figure below provides a general range of fish tolerance (Source: epa.gov). Dissolved oxygen can be affected by

many outside factors, such as: temperature, time of day, and pollution. Dissolved oxygen levels are typically lowest early in the morning. Healthy water should generally have concentrations of about 6.5-8+ mg/L.



Results from the visit are included below:

Surface Temp (°C)	Surface DO (mg/L)
17.4	8.81

A Secchi disk is a disk with alternating black and white quadrants. It is lowered into the water of a lake until it can no longer be seen by the observer.

Secchi Disk Clarity	
Secchi Disk Depth (Feet)	To the bottom

This depth of disappearance, called the Secchi depth, is a measure of the transparency of the water.

A treatment was conducted for the control of algae. The liquid contact algaecide was applied using a treatment boat equipped with a calibrated sub-surface injection system. This application methodology allows for even coverage within the treatment areas. The treatment was completed without issue.

Notes from the Biologist
Among the waterlilies, and in scattered patches within the pond, there were mats of benthic filamentous algae. In addition to this, there were trace densities of both variable milfoil and water chestnut observed, which is a significant improvement compared to last season. There was also a layer of pollen on the surface of the water. Based on the conditions documented during the survey, a treatment was conducted for the control of algae as the milfoil was treated during the previous visit and any remaining milfoil appeared unhealthy/dying. Water chestnut will be addressed during the July and August visits.

As always, we will notify you prior to any upcoming visits, as applicable. Please feel free to reach out to us directly with any questions.

Photo 1

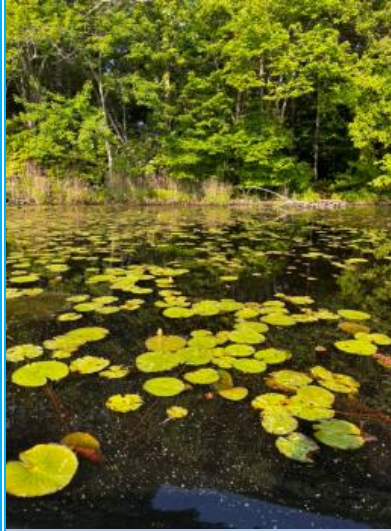


Photo 2



Photo 3



Photo 4



Photo 5

