

 WATER & WETLAND LAKE, POND & WETLAND MANAGEMENT	ENVIRONMENTAL SCIENTIST: JAMES LACASSE JAMES@WATERANDWETLAND.COM C: (774) 276-6098 CALL/TEXT WITH ANY QUESTIONS!	
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FIELD NOTES SUMMARY

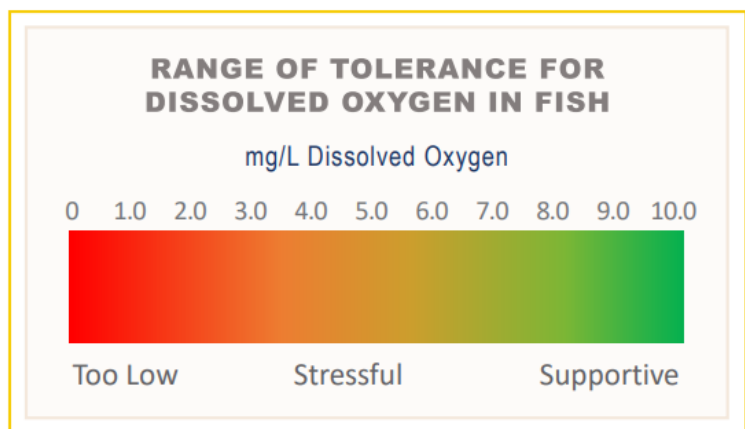
Customer: Town of Winchester - Rec Dept
Pond Name: Wedge Pond
Site Location: Winchester, MA
Date: 7/15/24

On 7/15/24, Senior Environmental Scientist, James Lacasse, and Aquatic Field Assistant, Harley Westgate, made a visit to Wedge 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.

Species Identified	
Common Name	Latin Name
Common Waterweed/Elodea	<i>Elodea canadensis</i>
Coontail	<i>Ceratophyllum demersum</i>
Waterlilies	<i>Nymphaeaceae</i>
Thin-leaf Pondweed	<i>Potamogeton pusillus</i>
Purple Loosestrife*	<i>Lythrum salicaria</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 in the table below:

Temperature & Dissolved Oxygen	
Surface Temp (°C)	Surface DO (mg/L)
29.7	9.43

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

Secchi Disk Clarity	
Secchi Disk Depth (Feet)	
	4'7"

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.

Prior to the treatment(s), the shoreline was posted with neon signage noting the treatment, affiliated water use restrictions, and Water & Wetland contact information. The signs fulfill permit obligations for shoreline posting.

Additional Notes from the Biologist
Upon arrival, a brief survey was conducted to confirm species present throughout Wedge Pond as well as to confirm the treatment area for the algaecide. With the exception of purple loosestrife, all plant species were native, predominantly found in healthy assemblages. Waterlilies were the dominant native species, at times reaching nuisance levels which warrant management. The water had a green tint to it due to microscopic algae, which is what the treatment targeted. Algaecide in liquid form (EarthTec) at dosing consistent with the product label. Prior to the treatment, neon signs were hung around the shoreline. The treatment went well, and excellent coverage was achieved.

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

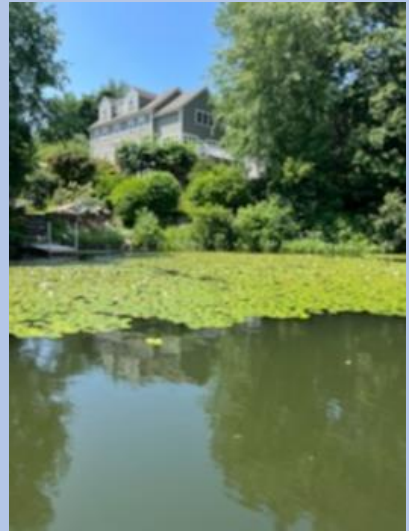


Photo 4



Photo 5



Photo 6

