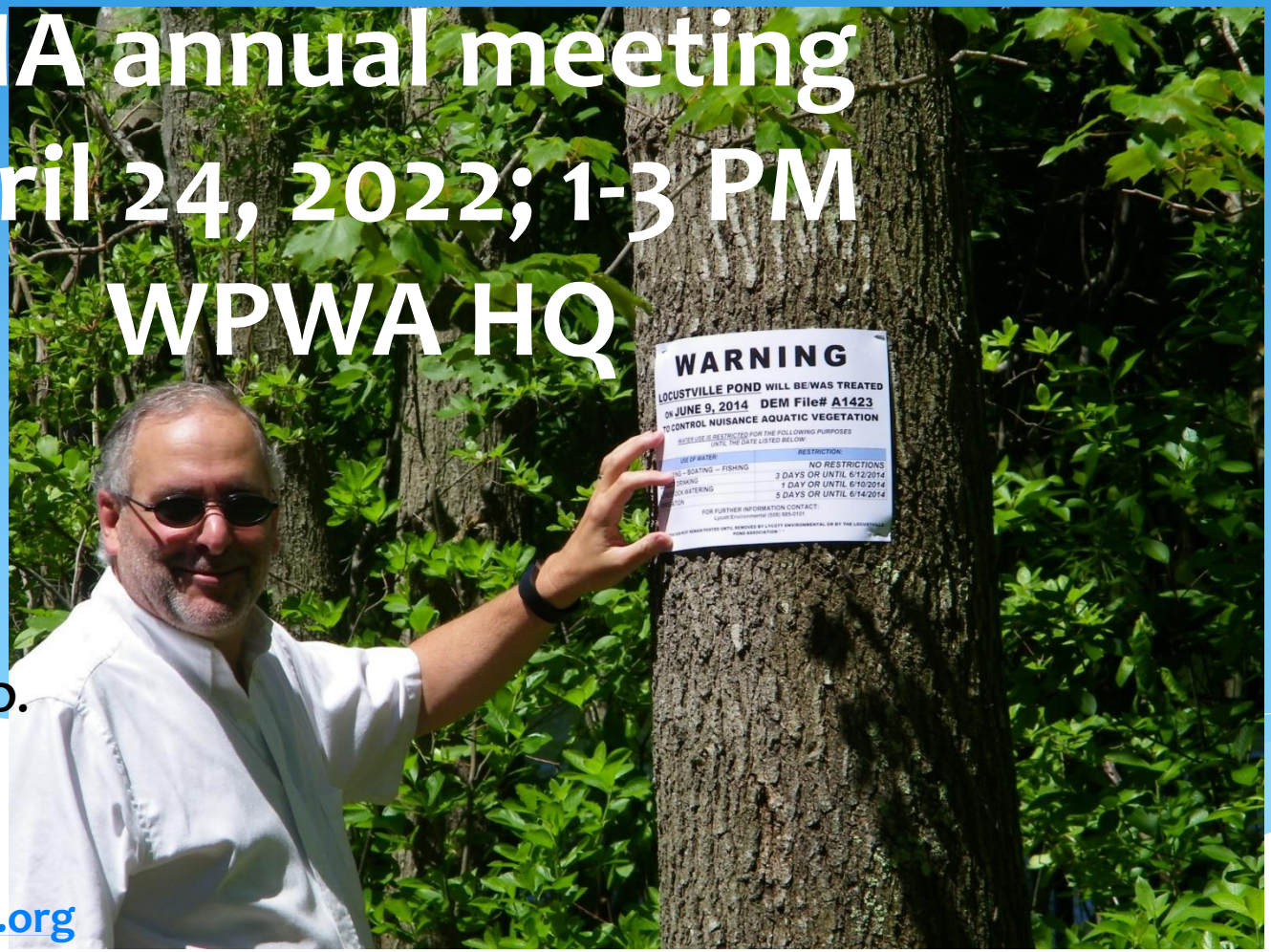
2021 State of Locustville Pond Invasive / Nuisance Weed Summary (and Asian Clam monitoring)

LPIA annual meeting
April 24, 2022; 1-3 PM
WPWA HQ



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Our Pond's Main Invasive Rooted Weed

Variable Milfoil (Myriophyllum heterophyllum)

Size of variable milfoil relative to a penny

Bract of variable growing above the water

Fragments of variable milfoil washed ashore

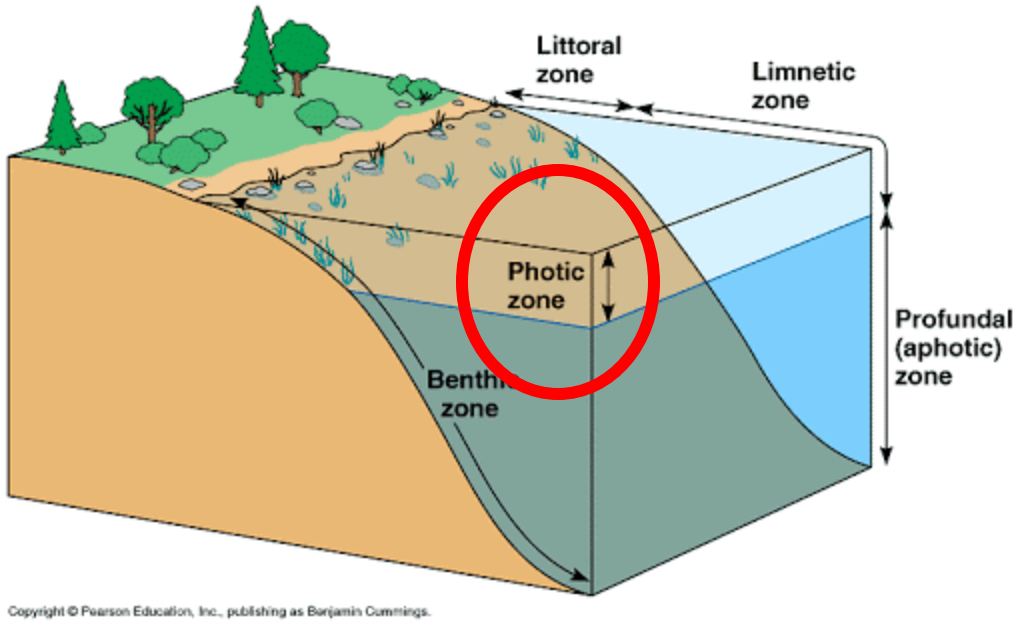
What you can do to minimize Milfoil spread in your pond

Discovered in the pond 2020
By Christopher Finch

What areas in our pond are susceptible to Milfoil infestation?

Susceptible areas in our pond include any area that is less than ~ 3 feet deep

- **along the shoreline**
- **in coves and embayments**
- **where sunlight penetrates to the bottom**



Solitude Lake Management Treatment Chronology

	DATE PERFORMED						
PROJECT TASK	2015	2016	2017	2018	2019	2020	2021
Filed RIDEM permit			04/06/17	03/07/18	04/01/19	02/25/20	01/16/21
Received RIDEM permit to treat	06/08/15	06/22/16	04/11/17	06/04/19	06/05/19	03/06/20	04/29/21
Perform pretreatment inspection			05/11/17	05/25/18	06/28/19	06/05/20	06/03/21
Conduct initial Milfoil treatment	06/19/15	07/14/16	05/30/17	06/08/18	06/28/19	06/05/20	07/29/21
Conduct follow-up Milfoil treatment	08/14/15	08/19/16	08/17/17	08/22/18	09/13/19	07/21/20	NA
Conduct initial Lily treatment	09/01/15	08/19/16	09/28/17	cancelled	cancelled	NA	NA
Conduct follow-up Lily treatment	09/17/15	09/15/16	10/03/17	cancelled	cancelled	NA	NA
Post-treatment inspection			10/20/17	10/02/18	10/05/19	11/05/20	10/18/21
Herbicides used							
Reward or Tribune (diquat dibromide)	x	x	x	x	x		x
Aquapro (glyphosate)	x	x	x				
Clipper (flumioxazin)	x	x					
ProcellaCOR						x	

New Herbicide ProcellaCOR

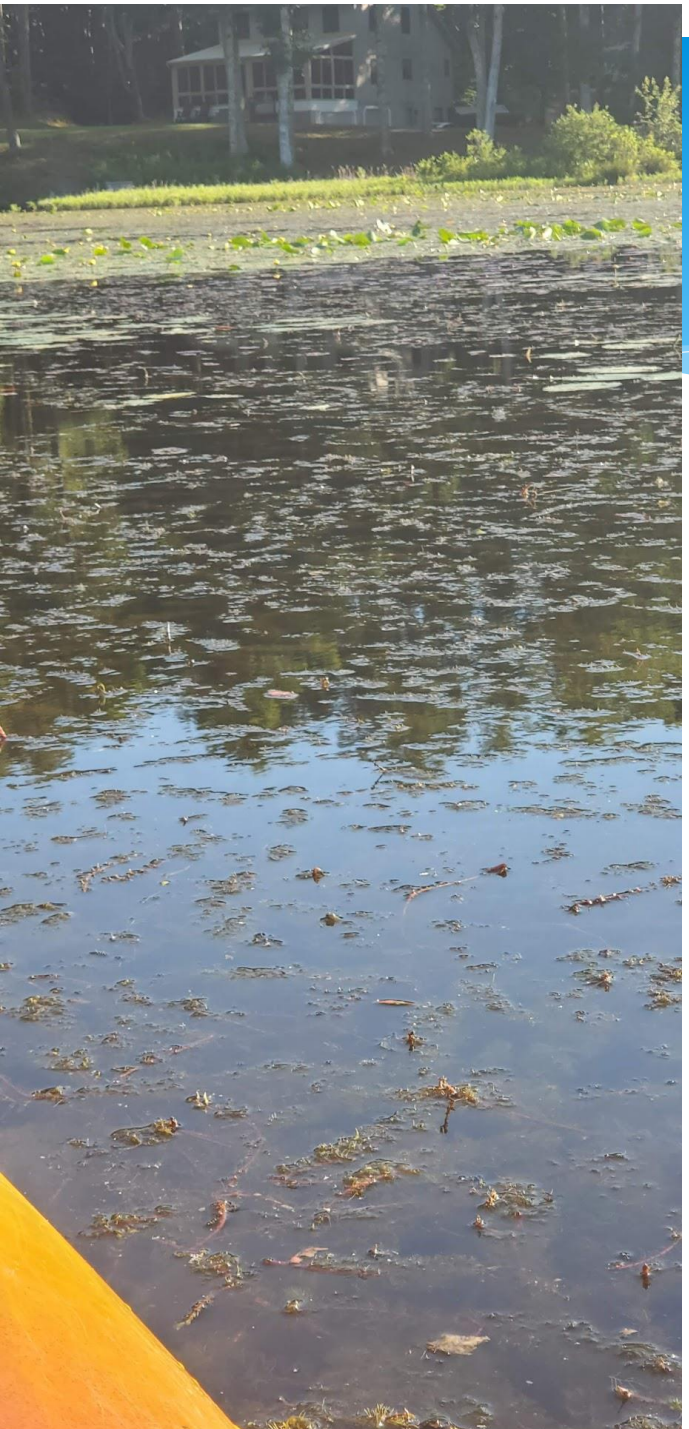
Benefits

- New selective and systemic herbicide technology for milfoil
- Systemic activity allowing for extended control unlike any spot, partial treatment technologies available today.
- Rapid uptake & impact to target weeds
- Reduce Risk Classification (see definition below)
- No drinking water, swimming, or fishing restrictions

BUT THE COST IS ~40% MORE THAN TRADITIONAL HERBICIDE

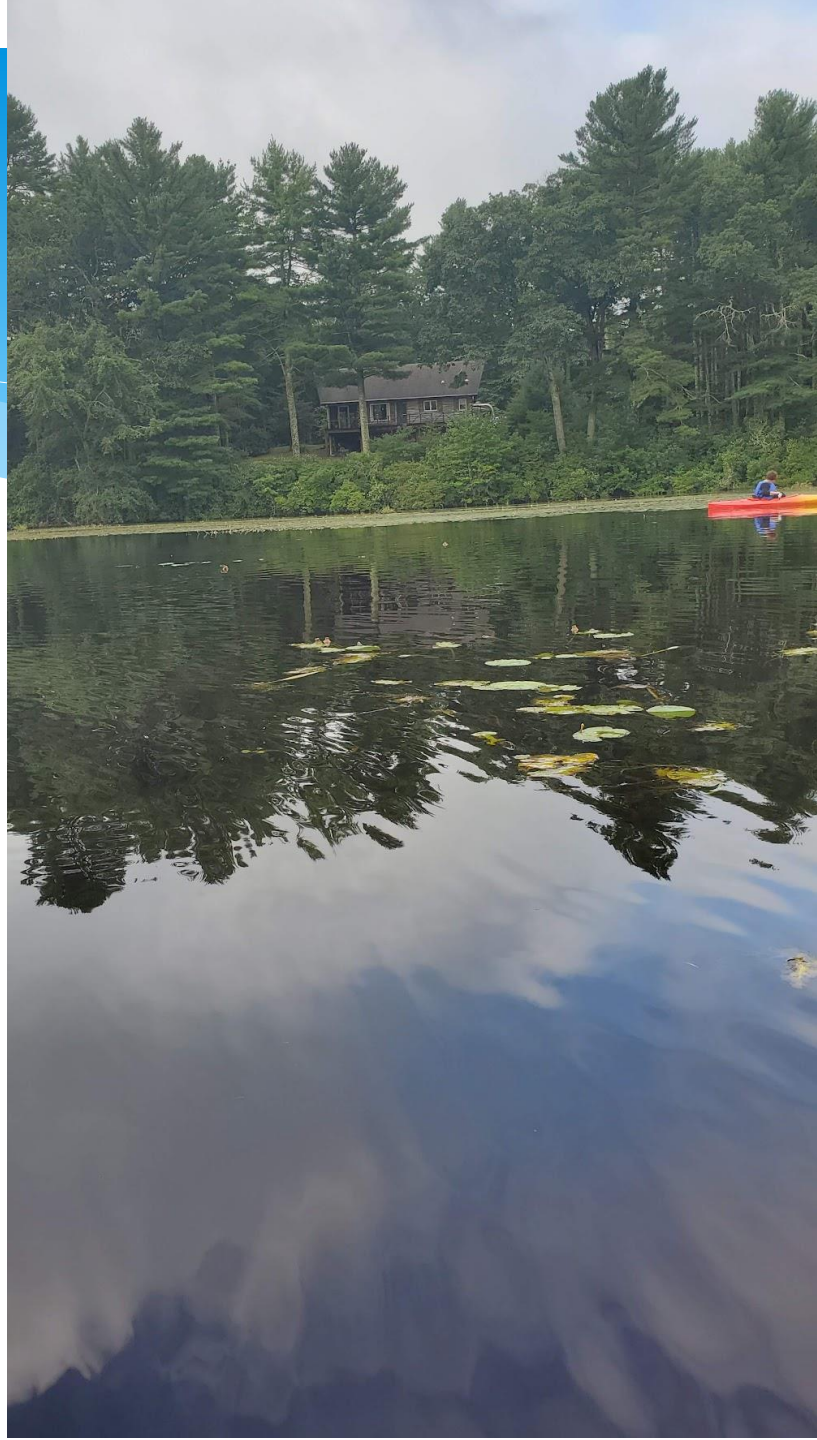
Reduce Risk Classification - Poses less risk to human health and the environment than existing older alternatives (USEPA)

- Lower use rates (ounces vs gallons/pounds)
- Lower impact on human health
- Lower toxicity to nontarget organisms (e.g., birds, fish, plants)
- Lower potential for groundwater contamination
- Lower pest resistance potential
- Compatible with Best Management Practices



Before and After

ProcellaCOR



2021 Treatment Summary

- Because of the effectiveness of Procellacor in 2020
- Only a single treatment with a contact herbicide (Diquat dibromide) was needed for variable watermilfoil
- Minimal cost (see budget report)

2022 Actions

- Small stands of milfoil were treated in 2021 - so spot treatment may be needed in 2022 to prevent the plant from re-establishing stands.

- Our RIDEM permit allows flexibility in treatment options, depending upon the degree of infestation.

What about the Asian clam (Corbicula fluminea)?

We would like to initiate a preliminary monitoring plan.

Using the following procedure:

1. Go to your shoreline (sometime in June)
2. Collect 1 cup of sediment, 3 times, 10 feet apart
3. Count the number of clams in each cup
4. Report to me (via email, phone, text, or post)
   - the total number of clams in **each** cup
   - include name, date, time, and location (your pond address)

More sophisticated monitoring may be initiated depending upon the results of this initial plan.

Possible treatment will involve fixing a barrier over clam beds to suffocate the animal

Summary
What's in store for 2022?

- Spot treat Milfoil Treatment as needed
- Continue monitoring for Chla, TN, TP, T, Secchi depth
- Initiate preliminary Asian clam monitoring
- Enjoying the pond all year round

If you have any concerns or questions contact me at
401-486-9749 or spesjsl@gmail.com
www.locustvillepond.org
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