



SILVER LAKE IMPROVEMENT ASSOCIATION

Novel Approach to Eurasian Milfoil Control

August 2023, Ken Kaufman

Discussion Outline

- Background on EWM / Control in Silver Lake
- Approach Used by Duck Lake in the Western UP
- SLIA Membership's Input on Moving Forward

Eurasian Milfoil Control

EWM in Silver Lake

- We chemically treat about 5 acres per year in Silver Lake (in 2023 we treated about 15 acres)
- The work is done through a contract with Restorative Lake Services (RLS)
- Primary treatment is before the 4th of July weekend, but we sometimes do a 2nd treatment in late summer depending on growth

Eurasian Milfoil Control

EWM in Duck Lake

- Duck Lake manually removes about 5 acres per year of EWM
- The work is done by volunteers:
 - Spotting and marking EWM
 - Diving and pulling
 - Collecting and composting
- Duck Lake has avoided chemically treating from 2019 - 2022
- In 2023, some chemical treatment was needed due to higher growth than typical

Eurasian Milfoil Control

Total Volunteer Hours in 2022 = 410

Duck Lake Milfoil Removal - 2022 Hours by Activity		
Activity	# of volunteers	hours
Help on Milfoiler	7	119
Diving (17 total dives)	3	40
Looking & Marking Mifoil	24	134
Documenting	2	20
Planning, Calculating Acreage	6	30
Meetings, maintenance, other	15	67
Total	57	410
Note: some of the volunteer do multiple activities,		
total people is less that 57		

Duck Lake to Silver Lake Comparison

	Duck	Silver
Lake Size Acres	612	609
Millfoil Acres	4 to 5	5
Max Depth Ft	25	95

Chemical Treatment vs Manual Removal

- Advantages of Hand Pulling Milfoil
 - No notice required
 - No 24 hour wait period
 - No herbicides
 - Probably an overall cost savings
- Disadvantages for Silver Lake
 - Our lake is probably busier so we would need to pick quiet times
 - We would probably need to hire a diver, they use a volunteer in his 70's who took diving just for this
 - We would need to get volunteers to help the diver collect, bag, and dispose EWM

Proposal for Membership Consideration

- Conditions for turning this into a Project for Silver Lake
 - Find a volunteer to coordinate or 2 co-coordinators
 - Advertise hiring out 40 hours of diving and the cost
 - Obtain at least 30 volunteers willing to do the various spotting and diver support activities
 - Obtain the use of at least 2 volunteer pontoon boats for collection
 - Continue chemical treatment until we have a successful and sustainable project up and running
- Next Steps
 - Q & A
 - Communicate this proposal to the SLIA membership and to both Townships and seek feedback
 - Get a project coordinator and solicit for a diver & the cost of diving
 - Understand SLIA liability if we hire out diving
 - Obtain a confirmed sign up list of 30 volunteers
 - Report go/no go direction back to membership by Spring 2024



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Photos from Duck Lake EWM Removal

Thanks to Kathy and Jim Floriano

Duck Lake EWM Removal Process

Initial Start

- A regular fishing boat was used
- The diver was dragged site to site or he had to climb in and out of the boat



Duck Lake EWM Removal Process

Upgraded to the “Milfoiler”

- An old pontoon donated by a property owner
- Retrofitted as a dive boat with diving ladder



Duck Lake EWM Removal Process

Aerial View

- Diver going toward the yellow buoy indicating an EWM site
- Others waiting onboard the Milfoiler with long-handled nets to get the milfoil from the diver and watch for fragments



Duck Lake EWM Removal Process

EWM Collection

- The diver wears a bag clipped to his vest if there are several milfoil plants at the site
- If removing a single plant, he usually brings it up to be netted



Duck Lake EWM Removal Process

The Chair Lift

- A chairlift for the diver has made the process much easier and faster
- No more removing gear to climb up the dive ladder
- Just motor to next site, lower the diver and repeat the process
- The chair is raised and lowered by a remote controlled winch



Duck Lake EWM Removal Process

The Harvest

- The EWM is now ready for the compost pile
- Photos and process provided by Kathy and Jim Floriano of Duck Lake

