

Chenango Lake Weed Review

Process:

Eight weed samples were harvested August 20, 2018, numbered, photographed and taken to the Chenango County Soil & Water Conservation District in Norwich. I supplied three samples (numbers 1-3 at end of report) of water milfoil as this may be of the greatest concern. Ms. Jennifer Kelly in consultation with the Finger Lakes Institute/Finger Lakes Region PRISM, connected to Hobart and William Smith Colleges, identified my samples. A second limited set of samples were communicated to Mr. Scott Prindle, region 7 DEC, for confirmation of the original set.

Additional information was gathered from Mr. Mitch Lee of the Inlet NY Lake Association and the Fulton County Lake Association.

Results:

4. Softstem bulrush –

- Benefits; native, provides food and cover for fish, muskrats, raccoons, and otters. The hard coated fruits are an important and common food source for ducks, shore birds, and marsh birds. This species provide nesting cover for water birds, waterfowl, and wrens.
- Management; Softstem bulrush can survive following periodic draining and flooding of marshes. However, stands can be *reduced* if prolonged draining and flooding continuously occurs.



5. Floating pondweed

- Benefits; native. Not too much is published about this plant so I'm not sure what kind of wildlife value this species might have.
- Management; There are no great control measures that have been studied either. Grass carp have been known to eat floating pondweed but the downside is that floating pondweeds are not a preferred species in terms of palatability.



This plant is very prominent around the north shore. It appears brown underwater and greenish out of water. It would appear to be a concern when swimming.

6. ~~Egeria densa or Brazilian elodea~~ OR Elodea Canadensis **native**.

- Brazilian benefits; none, **invasive**. The dense mats restrict water flow, traps sediments and impede recreational use of waterways.
- Management; Brazilian elodea is sensitive to frost kill. Cutting and hand pulling will fragment plants and spread the infestation, so that option is not recommended. Shading with opaque mats is another option for small infestations.
- Elodea Canadensis **native**. Grows rapidly in favorable conditions and can choke shallow ponds, canals, and the margins of some slow-flowing rivers. It requires summer water temperatures of 10–25 °C and moderate to bright lighting.



7. Wild Celery, Eel Grass, tape grass

- Benefits; native. Primary source of food waterfowl, all portions of the plant are consumed (foliage, tubers, fruit, and rhizomes). Small mammals like muskrat also graze on it. It provides good cover and feeding opportunities for small fish.
- Management; this plant reproduces by sending runners at the bottom. Pulling during the fall would be a good management option.



Wild Celery, Eel Grass, tape grass *Continued*



8. The floating material is most likely a green filamentous algae. This is a really tough to manage in a large pond/lake.

In the water this material appears as a green ball or mass or cloud of fine slime. It is difficult to sample as when it is removed from the water it is just a thin layer of green slime. My sample was suspended on a piece of the Egeria densa or Brazilian elodea so for clarity I am not including a picture.

1. – 3. Eurasian Watermilfoil **invasive**

Description: Eurasian watermilfoil is a non-native (**exotic**) aquatic macrophyte with feather-like leaves normally arranged in whorls of four and having 11 or more pairs of leaflets on each leaf. Its leaves are delicate and fall limp to the stem when removed from the water. The apical stem can appear green or reddish-brown when growing near the water surface. This invasive plant generally flowers between mid-June and August when the plant reaches the surface and canopies. Flowers are small and reddish arranged in whorls around a slender stem that emerges above the water's surface. This canopy formation shades out smaller native plants and an undesirable watermilfoil monoculture is the result.

Habitat: Watermilfoil is an extremely adaptable plant, and it is able to thrive in a wide variety of adverse conditions. It can thrive in still or flowing waters, surviving under ice and tolerate mild salinities. It can grow in depths of 1 to 10 meters. It favors fine-textured, inorganic sediments but can thrive in various types of sediment.





Link with further information. http://adkinvasives.com/species_of_concern/eurasian-watermilfoil/

Summary:

Further discussion by a sub-committee of the Board of the Chenango Lake Property Owners Association should occur to discuss:

- Possible DNA species identification.
- Long range effect to the quality of the lake if no action is taken.
- Discussion with the Norwich Water Board and Water Dept.
- Report to New Berlin as the lake quality may affect tax revenue.
- Contact DEC for further guidance. *Done*
- Contact Finger Lakes Institute/Finger Lakes Region PRISM for further guidance.
- Contact State and County legislators for assistance (grants) if a plan of action is developed.

Respectfully,

David Forster

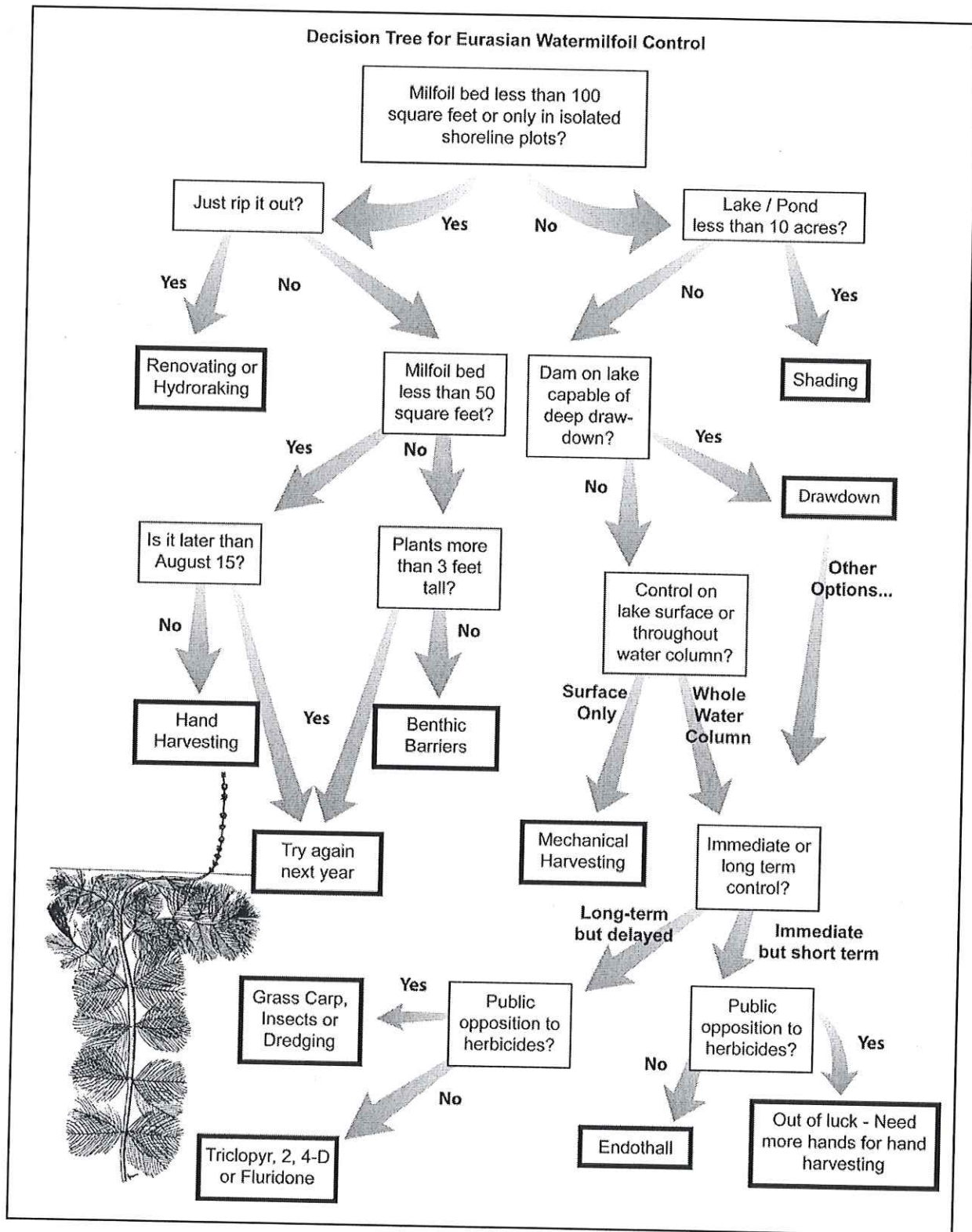


Fig. 6-12. Decision tree for controlling Eurasian watermilfoil (*Myriophyllum spicatum*).