

Clarklake Eurasian Milfoil Solutions Research

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Clark Lake has documented infestations of Eurasian Milfoil. It is a hardy weed that grows in mats across the surface of the water. **All** the research clearly shows the need for treatment before it 1) takes over the lake, 2) chokes out native plants adversely affecting fish, wildlife, fishing, boating, recreation, irrigation and drainage, and, 3) impacts all recreational use with growth so thick it chokes motors of boats preventing them from navigating the lake. A single piece of fragmented Eurasian Milfoil can multiply into 250-million new plants in one year.

Below are the options that are available to the Clark Lake community. Costs cannot be accurately calculated until the area to be treated is measured.

- A) **Weevils (Company - EnviroScience Inc.)** www.EnviroScienceInc.com 800-940-4025
1. Only supplier found in U.S.
 2. Bluegills feed on them so, to be effective, bluegill population in lake should be significantly reduced
 3. At this time next year, they will not be providing weevils anymore
 4. Expected **control** (not eradication) using weevil typically takes between 2 and 3 years
 5. Lake Cadillac stocked lake 2006-2009 “apparently with little result.” (*MI DNR Fishery Resource Report 2012* www.michigan.gov/dnr invasive species)
 6. Manistee Lake used weevils in 1999-2001, again in 2007 – 2011; control of milfoil but not eradication (same as above www.michigan.gov/dnr)
- B) **Lake Mats** – would have to be moved regularly to cover all areas; once moved, treated area susceptible to growth; mats need to be kept clean of any buildup of sediment and debris. Mats can increase mosquito habitat and decrease water oxygen levels.
1. **LakeMat Pro** www.lakemat.com 616-293-9101
 - a. Rigid weighted frame
 - b. 12 ½ ‘ x 24’
 - c. 48 lbs. (with weights)
 - d. \$359 each + \$45 shipping (each mat) = \$404/mat
 2. **Lake Bottom Blanket** www.lakebottomblanket.com 973-839-6383
 - a. Weighted tubes
 - b. Sizes 10’ x 40’ up to 10’ x 50’ (\$140 - \$330 each + \$19 each shipping)
- C) **Chemical Control Options**
1. **Aquacide Pellets** www.killlakeweeds.com/Milfoil 800-328-9350
 - a. Spot treatment effective
 - b. Treatments most effective in Spring when weeds are starting growth stage
 - c. Wide range of other vegetation affected
 - d. Do-it-yourself
 - e. No restrictions other than 21 days irrigating gardens
 - f. Works in shallow and deep water as pellets settle to bottom
 - g. No harm to fish, ducks, etc.

2. **Lake Restoration Inc.** www.lakerestoration.com 877-428-8898

a. **Navigate**

- 1) Kills at root
- 2) 100-200 lb/acre; spot treatment most effective with higher concentration application
- 3) 24 hour restriction on swimming, fishing; 21 days for drinking and irrigating gardens; immediate watering of lawn
- 4) No licensing required
- 5) Do-it-yourself application
- 6) Selective kill (milfoil, lily pads and coontail)
- 7) Early Spring application best
- 8) Effective in deep water

b. **RestoreAccess Ultra** – not recommended; licensing required in MI

3. **Renovate OTF (Company - SePro)** www.sepro.com 800-419-7779

- 1) Selective - Created specifically for milfoil and spot treatments
- 2) Does not create sterile environment (doesn't kill all vegetation)
- 3) Effective in water up to 20 ft. deep using greater concentration of product
- 4) Suggest using a certified person/applicator

4. **Reward (Company - Syngenta)** www.greencastonline.com 866-796-4368

- 1) Best applied when water above 60 degrees
- 2) Non-selective (other vegetation killed)
- 3) Breaks down in water
- 4) Best used at depths of 4 ft. or less
- 5) Spot treatment effective
- 6) Applied with sprayer wand
- 7) Single application effective first year then follow-up treatment next year

SUMMARY: Eurasian Milfoil has invaded Clark Lake. That is a fact. Some people are not open to the option of chemicals to treat this threat to our lake. When I started this research, I honestly had no preference. At one point I believed that lake mats were a good option. And another point, I thought that weevils were the best option. Texas A & M AgriLife Extension www.aquaplant.tamu.edu/management-options/eurasion-watermilfoil provided unbiased and valuable information. Researching the topic was an education; making phone calls to companies was enlightening.

I have come to the conclusion that chemicals are not only the best option but also a safe option. Given 1) the size of affected area of the lake needing treatment, 2) given the fact that the weevils are not always effective and are no longer a viable option (supplier not going to have them in future), and 3) given the fact that lake mats are an on-going and labor-intensive option, the best choice is the chemical application. Because **Reward (Company Syngenta)** is most effective in shallow water, that is not the best option for lake areas over 4 feet deep. **Renovate OTF (Company SePro)**, while selective in what it kills, needs a certified person for application and that will likely drive the cost up.

Aquacide Pellets or **Navigate** seem to lend themselves to our lake needs and are do-it-ourselves applications. Both work in shallow and deep water. The **Aquacide Pellets** will settle to the bottom quickly and there are no restrictions other than irrigating gardens (21 days). If applied in very early Spring, gardens should be fine. **Aquacide Pellets** were developed for spot application. Other vegetation will not be affected with **Navigate**. There are some restrictions with **Navigate** application but, again, early Spring application will minimize these restrictions.