### **Grant AIRR-104-11 Hartlaub Lake Manitowoc**

# **Curlyleaf Pondweed**

## **Executive Summary**

Curly-leaf Pondweed [CLP] was discovered in Hartlaub Lake in 2010. The Hartlaub Lake Association requested and received a 3 year rapid response grant to treat the CLP. The infested area was relatively small with pioneering plants scattered throughout the lake. A successful treatment was made in May 2011. Based on the good results, the DNR suggested hand pulling CLP the following year. Hand pulling continued in subsequent years with acceptable results. The Association believes we can maintain acceptable population levels without additional chemical treatments. The Association is requesting the DNR to close this grant. The Hartlaub Lake Association will not submit any additional compensation requests. A full and final report is detailed below.

#### **Detail**

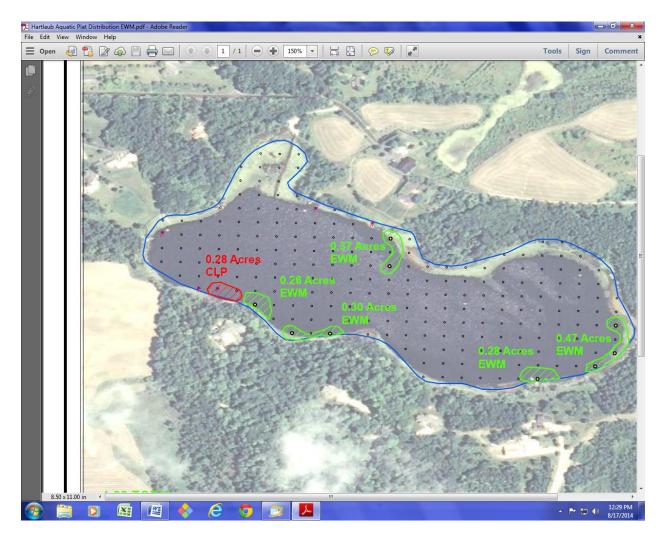
Curlyleaf pondweed was discovered in Hartlaub Lake on May 19, 2010 by a trained AIS volunteer. Below is an excerpt of an e-mail sent to Bonestroo, a treatment contractor.

Last night I attended an Invasive class along with 12 other people from the Hartlaub Lake area. I brought in an "interesting" plant that I had not seen before at Hartlaubs. The naturalist that was teaching the class confirmed it was Curly Leaf.

The Hartlaub Lake Association requested and was given a "Rapid Response" grant for a three year treatment plan from the Wisconsin DNR.

The Hartlaub Lake Association filed all necessary paperwork to receive the grant to include: General Background Letter stating the situation, Grant Application Forms, Association By-laws, Resolution for action, Project cost breakdown to include the number of anticipated volunteer hours, Letter showing that the Association was qualified, Project timeline and details, Board of Directors, EIN number, Bank Account information, List of association members, Location of the public access.

Bonestroo was selected as the treatment contractor. Bonestroo was already working the EWM treatments at Hartlaub Lake, and the Association felt we could save some money by using the same contractor for both infestations. Presence of CLP was verified during a full point-intercept aquatic plant survey in 2010. There was one area [0.28 acres] that held almost all of the CLP, but there were pioneering plants throughout the lake. An estimated 1.25 acres total were used for calculation purposes. The map below shows the areas of greatest concentration [note the red comments]. The map also holds small red dots indicating some of the pioneer locations.



Bonestroo estimated costs for this project. They are listed below.

#### 2011:

Aquathol Super K granular applied at 39.6 lbs/acre (3.0 PPM at 3' av. Depth) @ \$787/acre = \$983.75

Labor 1.25 acre granular application @ \$250/acre = \$312.50 Mobilization if separate from EWM treatment = \$375 Total additional cost for CLP treatment = \$1,671.25

#### 2012:

Aquathol Super K granular applied at 39.6 lbs/acre (3.0 PPM at 3' av. Depth) @ \$811/acre = \$1,013.75
Labor 1.25 acre granular application @ \$260/acre = \$325.00
Mobilization if separate from EWM treatment = \$380
Total cost for CLP treatment in 2012 = \$1,718.75

#### 2013:

Aquathol Super K granular applied at 39.6 lbs/acre (3.0 PPM at 3' av. Depth) @ \$835/acre = \$1,043.75
Labor 1.25 acre granular application @ \$270/acre = \$337.50
Mobilization if separate from EWM treatment = \$390
Total cost for CLP treatment in 2013 = \$1,771.25

There was considerable discussion if both the CLP and EWM could be treated at the same time.

April 2011 Bonestroo thoughts and notes are below in Blue:

NOTE: if we have to perform a separate treatment from the EWM requiring another trip (we believe they can be combined0 an additional mobilization fee of \$375.00 would apply.

Treatment was performed on May 27<sup>th</sup> 2011. It appeared to be effective; however the warmer water temperatures would cause a normal CLP die-off. Fall weather brought cooler temperatures that would allow regrowth, but the CLP was almost totally eliminated.

The Hartlaub Lake Association delayed the <u>HWM</u> treatment for May 2012. At that time the DNR [Brenda Nordin] suggested the Hartlaub Lake Association hand pull any residual <u>CLP</u>. This made great practical sense, since the contractor would be spending much time and money mobilize and treating only the residual CLP. The Association found small amounts of CLP and did perform the manual extraction. The results were reported to Brenda Nordin and she suggested the same course of action for future years.

In years 2013 and 2014 a trained AIS volunteer monitored the CLP area and pulled plants as available. I am happy to report, the CLP population continues to be quite insignificant in Hartlaub Lake.

#### **Current Status**

After years of only a hand-pulling activity, Hartlaub Lake Association has decided to formally end thoughts of a continuing chemical treatment program.

### **Financial Status**

The Hartlaub Lake Association does not have any additional bills and will not submit any additional compensation requests to the DNR.

# Please consider our grant closed.

Thank-you goes to Mary Gansberg for her untiring efforts in trying to resolve the Hartlaub Lake situation. We appreciate all that you have done to help Hartlaub Lake.