

## **JUNE 2009 UPDATE - Success on Bear Lake in the First Year of the Bear Lake Improvement Board Program!**

A recent comprehensive aquatic vegetation analysis of Bear Lake was conducted on June 15, 2009 following an initial reconnaissance survey of the lake at the end of May, which revealed very little aquatic plant growth throughout most areas at that time. During the recent survey, Mark diBenedetto, the Manistee County Drain Commissioner, accompanied Jennifer Jermalowicz-Jones and Luke Britton from Lakeshore Environmental, Inc. to learn more about the local Bear Lake aquatic flora. The June 15 survey consisted of sampling 530 GPS-recorded locations throughout Bear Lake for all aquatic plants species, including the presence of Eurasian Watermilfoil, which is what the Bear Lake Improvement Board has worked so hard to gain control of. Results of the current survey have revealed that the Eurasian Watermilfoil acreage in Bear Lake is down to less than 8 acres, including small areas in the two bays and a larger area at the southwest portion of the lake.

During the spring of 2007, Bear Lake was found to be infested with approximately 330 acres of Eurasian Watermilfoil that was concentrated around the west and south portions of the lake, and in the two smaller bays. However, during the spring and mid-June of 2008, approximately 163 acres of Eurasian Watermilfoil was located and treated with systemic aquatic herbicides in selected areas as permitted by the Michigan Department of Environmental Quality (MDEQ). An additional 60 acres of Eurasian Watermilfoil that germinated later in the season (July) was also treated with systemic herbicides on 16 July, 2008 in order to stop further spread of the plant through the growing season. Approximately 18,000 weevil units were proposed to be stocked during early June of 2008; however, the initial herbicide treatment caused drift of the chemical into weevil stocking areas to deplete viable weevil habitat due to post-treatment storm conditions that occurred throughout the lake and cause further damage to other milfoil beds. A GPS grid survey of Bear Lake aquatic vegetation during September 17, 2008 revealed that the systemic herbicide treatments were highly successful, with approximately 126 acres of semi-viable Eurasian Watermilfoil being located (7.4% of the total 1,800 acres containing EWM).

The recent decline in Eurasian Watermilfoil within Bear Lake is a very welcomed sight and supports the fact that regular, detailed, aquatic plant surveys are critical for the detection of exotic species such as Eurasian Watermilfoil. It should be cautioned that a re-surgence of Eurasian Watermilfoil is always possible at any time of the growing season and thus, there will be numerous surveys of Bear Lake by Lakeshore Environmental, Inc. staff this season. The successes of the current program executed by the Bear Lake Improvement Board and local community are now being realized. Bear Lake is a rich aquatic ecosystem (with over 25 species of aquatic plants) with an abundance of aquatic biodiversity that needs protection from invasive species and it appears that a watchful community may have come to its rescue at the most necessary of times.

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### **How and Why The Lake Improvement Board Was Established**

In the late summer of 2006, Eurasian milfoil-EWM (*Myriophyllum spicatum*) was spotted in Bear Lake. EWM can be extremely harmful to the ecological balance of Bear Lake. It has a fast growth rate, and can exist in a variety of environmental conditions. It reproduces via seed and

fragmentation that roots in the lakebed. Both self-fragmentation and fragmentation from boat traffic caused it to spread into other parts of the lake. EWM has been spotted in many lakes in the United States and specifically Michigan. Bear Lake is but one of many that has begun the effort to control it.

The President of the Bear Lake Property Owners Association established a Community Council to Control Milfoil (CCCM) with representatives from local groups. Information was shared with the community and discussed among the CCCM as well as with the officials of the 3 municipalities.

Each of the 3 municipality boards on their own motion, voted unanimously to approve the creation of a Lake Improvement Board (LIB) under Part 309 of Public Act 451 of 1994. The LIB has legal standing under this act to contract for services to study the lake, treat the lake and also to contract for an attorney to assist the Board. It also has legal authority to assess those who will benefit from the lake improvement. The resolution which created the LIB limited the LIB to dealing with non-native invasive species.

### **Members of The LIB**

Carver Edwards - Village of Bear Lake representative

Bob Yates - Bear Lake Township representative and Treasurer

Jack Sawka - Pleasanton Township representative and Chairperson

Don Brisbin - riparian member at large and Secretary

Allan O'Shea - Manistee County Commissioner

Ken Berensten - Manistee County Drain Commissioner

### **Stay Informed About LIB Actions And Decisions**

The public is invited and encouraged to attend LIB meetings held at the Bear Lake Township Hall. Notice of the meetings is posted at several sites including the Bear Lake Township Hall, Village of Bear Lake Hall, Pleasanton Township Hall and the Bear Lake Library. Meetings are held on an as required basis. They begin at 7:00 P.M. and generally adjourn by 9:00 P.M.

A package of LIB material is maintained in the Bear Lake Library. It includes an update of the progress to date, approved minutes of all LIB meetings, a map of the lake with locations where EWM was found, based on a 2007 study and the feasibility study. Other important information will also be available at the library as the project proceeds.

The Village of Bear Lake has agreed to include a link on their website, [www.bearlakemichigan.org](http://www.bearlakemichigan.org), for our LIB. Visitors to the website can see most of the same material that will be in hard copy at the Bear Lake Library.