



Houghton Lake 2011 Plant Control Program

As in previous years, Eurasian milfoil will be the only plant targeted for control in Houghton Lake. As its name implies, Eurasian milfoil is not native to Michigan. It was first introduced into the United States from Europe and Asia in the 1940's. Eurasian milfoil can spread very rapidly by a process called vegetative propagation in which small pieces of the plant break off, take root and grow. Eurasian milfoil is especially problematic in that it tends to become established early in the growing season and can grow at greater depths than most plants. Eurasian milfoil often forms a thick canopy at the lake surface that can degrade fish habitat and seriously hinder recreational activity. Prior to the onset of the plant control program in 2002, Eurasian milfoil infested nearly 11,000 acres of Houghton Lake.

Plant control activities in Houghton Lake are coordinated under the direction of biologists from Progressive AE, the lake board's environmental consultant. In early June, a whole-lake vegetation survey will be conducted to identify Eurasian milfoil locations.

During this survey, a point-intercept method will be used in which plant sampling locations are established at grid-points with a global positioning system (GPS). The grid points are spaced at 500-foot intervals throughout portions of the lake shallow enough to support plant growth. In total, there are over 2,800 grid points. At each point, a double-sided thatch rake attached to a line



will be dragged across the bottom and the presence or absence of Eurasian milfoil documented. This approach allows for precise mapping of the location of all Eurasian milfoil beds in Houghton Lake. The GPS data is then provided to PLM Lake and Land Management Corp, the lake board's herbicide applicator, with directions to treat the milfoil beds. After the herbicide application is completed, Progressive's biologists will perform a follow-up survey to evaluate treatment effectiveness.

It should be noted that all herbicide treatments of Houghton Lake are conducted under a permit from the Michigan Department of Natural Resources and Environment (DNRE). The permit lists herbicides that are approved for use in the lake, respective dose rates, use restrictions, and shows specific areas in the lake where treatments are allowed. With the herbicides used in Houghton Lake, there are no fishing restrictions, a 24-hour swimming restriction, and some irrigation restrictions. These restrictions only apply to the portions of the lake that are treated, which equates to about 10% of the lake. With the exception of the canal areas, the majority of treatments are done in the main body of the lake far from shore. Thus, there are no restrictions for most of the shoreline areas of the lake. At the time of treatment, signs will be posted along the shoreline within 100 feet of treatment areas that indicate what herbicides were used and specific use restrictions that apply.

