

Environmental Board's Purple Loosestrife Program 2010 Annual Report

Activities & Progress in 2010

- Beetles released on July 2. This year's release duplicated last year's program. Beetles were released at two sites, Consolidated Drain project on S. Westnedge and along the west branch of Portage creek.
- Beetles were reared at Avalon Farms of Climax, MI. This is a significant change from previous years. Vicksburg High Schools' greenhouse was not operational in 2010. EB took on rearing the beetles but maintained a relationship with the Kalamazoo Nature Center for advice.
- Previously treated sites, prior to 2008, have shown resurgence of PLS as shown in the attached photographs of Austin Lake channel and Lakeview park.
- Five treated sites are now marked with signs to help identify treatment areas.
- EB applied for \$2000 grant to support the apparent need to increase activities to control PLS.
- Attached density map reflects current spread of PLS in the City of Portage as of 2008.

Planned Activities

- This program as evolved from a pilot project to a mature program. The 2011 program will include rearing beetles at Avalon Farms, increasing the number of treatment sites and forming a working group to support the apparent need to release more beetles at more sites. The working group will be staffed by EB members and headed by the project manager (currently, Martin Sepanik). If the grant request is approved the funds will be applied to replacing rearing equipment and additional beetles.
- Update density map subject to availability of resources – needs to be updated to reflect whether there is a wide spread resurgence of PLS.
- Maintain contact with Michigan State University for updates concerning the rearing of the Galerucella beetle.
- Maintain contact with Kalamazoo Nature Center for information on other PLS control programs.
- Annually report to Council on the program's activities and progress.

Program's History

- Purple Loosestrife "PLS" is an invasive species native to Europe and Asia. It will grow in any moist environment. In the City of Portage, Purple Loosestrife is observed along the shorelines of Austin, Gourdneck and Long lakes, in the channels between the lakes, wetland areas (Mandigo Marsh) and along some of the banks of Portage Creek. There are no domestic enemies for the plant and it will overtake native vegetation. A concern is that removal of native vegetation will impact the wildlife species that depend on them.
- In April 2001, members of the Environmental Board initiated a small project using a USDA-approved biocontrol method to reduce Purple Loosestrife within the City. The biocontrol method uses a European species of Galerucella beetle that feeds specifically on Purple Loosestrife.
- On October 18, 2005, the Council approved the Environmental Board's plan for the measurable reduction (environmental control) of Purple Loosestrife within the City of Portage by 2012.
- In 2006, a Working Group was formed, as required by PLS plan, to manage the program and report to the Environmental Board. Members represent associations from Austin,

Gourdneck, Long lakes along with Kalamazoo Nature Center, Park Department and Environmental Board.

- Annually, starting in 2006, beetles have been purchased from an out-of-state source and shipped to Vicksburg High School. This is the site of a student program to greenhouse the beetles until mid-June when beetles are sold to members of a consortium headed by Kalamazoo Nature Center. City of Portage, as a member of the consortium, purchases \$500 worth of beetles as approved in the PLS plan. A PLS density map provides possible beetle release locations, including Austin/Long Lake channel, Lakeview Park and Consolidated Drain project.
- In 2009 the Vicksburg High School greenhouse was not operational. The EB decided to rear beetles on its own rather than put the program on hold. EB will continue in 2010 with rearing its own beetles
- Typically, release sites are photographed every August to reflect visual changes in PLS density. Photographs are compared and evaluated to determine relative density and represented on a PLS density map of the City. The map is updated depending on whether there have been significant changes. The program's progress is reported via an annual report to the City Council, the EB web page and an EB sign displayed at Lakeview Park.



Long Lake-Austin Lake Channel 2006



Long Lake-Austin Lake Channel 2008



Long Lake-Austin Lake Channel 2010

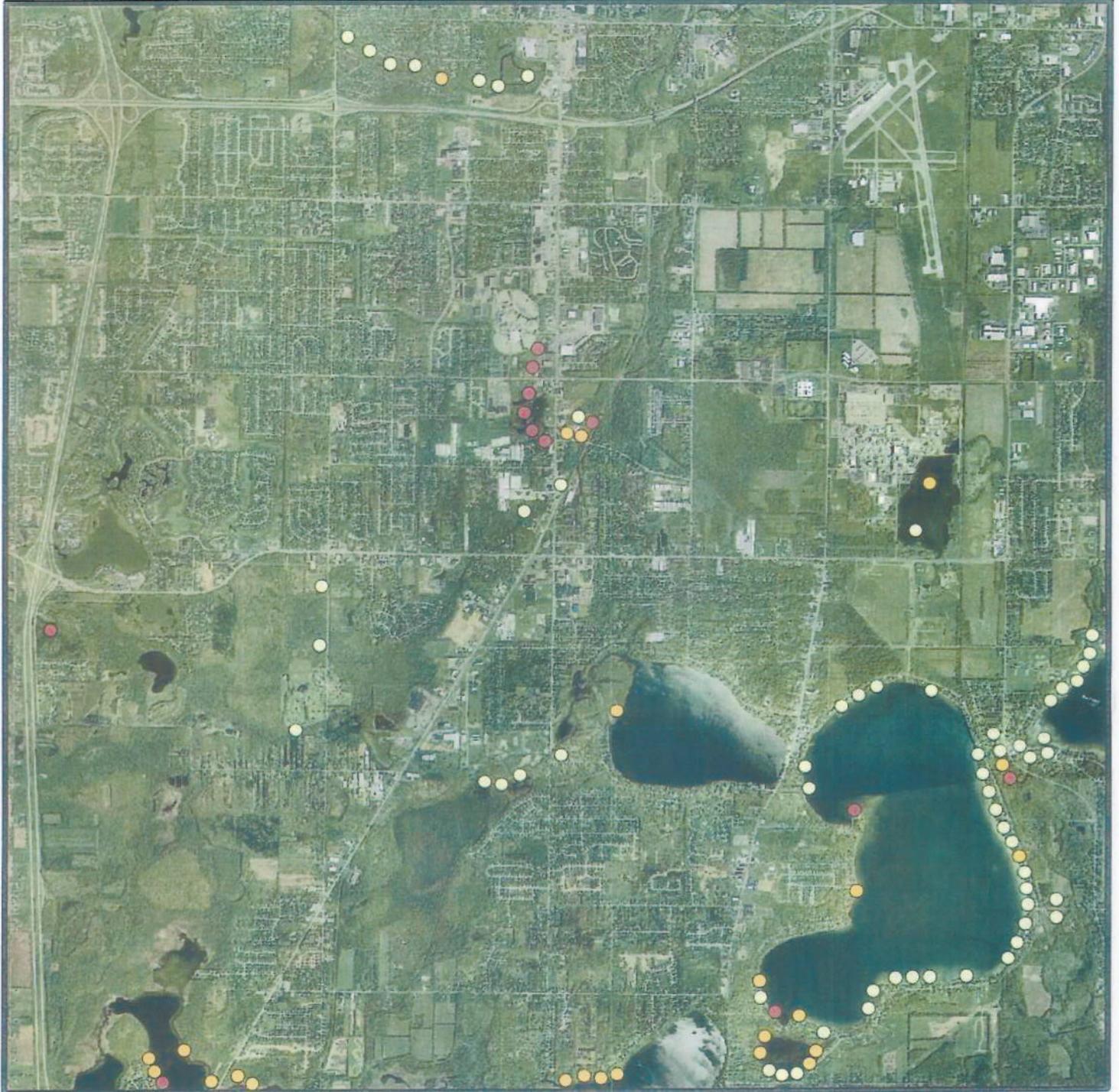


Lakeview Park Area 2006



Lakeview Park Area 2010

LOOSESTRIFE CONCENTRATION AREAS



- DENSE INFESTATION
- MODERATE INFESTATION
- MILD INFESTATION



OCTOBER 2008