



The Lake Beat

Volunteer Lake Monitoring Program

Spring/Summer 2012

Articles:

- A testimonial on why one volunteer joined the program and his experience.
- A spotlight on an Aquatic Invasive Species (AIS), Curly Leaf Pondweed.

Why I Became a Volunteer Lake Monitor

By Joe C. Itzin

The VLMP encouraged me to increase my knowledge and awareness of factors that affect lake quality, development and implementation of lake protection and management plans, support environmental programs and foster cooperation among friends and acquaintances, and provide historical data to the Illinois EPA to help document water quality impacts and lake management decision making.

I learned that there are 3,041 lakes in Illinois and more than 87,000 ponds. In addition to being valuable recreational and ecological resources, these lakes serve as potable, industrial, and agricultural water supplies; as cooling water sources; and as flood control structures.

I found that lakes are important resources that will continue to provide beneficial uses only if certain protective and educational steps are taken. In recognition of this need, I decided to join the Volunteer Lake Monitoring Program coordinated by the Illinois Environmental Protection Agency. The VLMP taught me about lake ecosystems, as well as providing a cost-effective method of gathering fundamental information on Illinois inland lakes for Illinois.

The program is broken down into three tiers, each more extensive than the next. I advanced to each tier as I became experienced in the prerequisite tier. In the Basic Monitoring Program (Tier I), I selected my lake and trained to measure water clarity using a Secchi disk. The disk consists of an eight-inch diameter, weighted metal plate painted black and white in alternate quadrants and attached to a calibrated rope. The disk is lowered into the lake and the depth at which it is no longer visible is recorded. This measurement is called the Secchi disk transparency or Secchi depth. The Secchi depth is used to document changes in the transparency of lake water. I monitored three sites on my lake, two times per month from May through October.

Why I Became a Volunteer Lake Monitor Continued from Page 1

I also record a series of field observations relating to invasive species tracking and other important environmental characteristics of the lake, such as water color, amount of aquatic plants present and site depth.

The following year I requested to enter the second tier and was lucky to land a spot. In addition to monitoring Secchi disk transparency, I collected water samples for nutrient and suspended solid analysis at the representative site which is site-I at my lake. I took these water quality samples once per month in May-August and October, in conjunction with one of my regular Secchi monitoring trips for that month.

Last year I was accepted as a Tier 3 volunteer. I collected water samples at 3 sites on my lake. As in Tier II, samples were analyzed for nutrients and suspended solids. I also collect Chlorophyll samples and Dissolved Oxygen/Temperature profiles at all three sites.

My coordinator told me that data collected in Tier 1 and Tier 2 is for educational purposes and for my own lake management decisions. I used it to make general water quality assessments, help determine trends, and identify potential problems in my lake and watershed. The coordinator said that data collected in Tier 3 is used in the Agency's Integrated Report on the condition of the state's lakes to the federal government.

I am one of many lake enthusiasts from many different backgrounds. The program consists of public water supply and other city personnel, college professors, students, private citizens that may or may not live on the lake they monitor,

forest preserve district employees, state workers, retirees, lake associations and any number of other categories you can imagine. The VLMP currently averages over 300 volunteer monitors on approximately 150 lakes annually. Over time, that has added up to over 2,000 volunteers monitoring over 400 Illinois lakes! Wow!

One of the best things is that this program is absolutely free to its participants! All equipment, training materials, shipping, sample analysis, and paperwork are provided at no cost to me. The only things I have to provide are a boat, an anchor, the necessary safety equipment such as a lifejacket, and enthusiasm!

Do what I did and contact the Volunteer Lake Monitoring Program today at epa.vlmp@illinois.gov. Or visit their web site at <http://www.epa.state.il.us/water/conservation/vlmp/index.html>.



Regional Coordinators:

VLMP Statewide Contacts

Greg Ratliff, IEPA, Springfield, 217-782-3362 & greg.ratliff@illinois.gov

Northern Coordinator

Holly Hudson, CMAP, Chicago, 312-454-0400 & hhudson@cmmap.illinois.gov

Lake County Coordinator

Kelly Deem, LCHD, Libertyville, 847-377-3009 & kdeem@lakecountyil.gov

Southern Coordinator

Travis Taylor, GERPDC, Marion, 618-997-9351 & travistaylor@greateregypt.org

AIS Spotlight: Curly Leaf Pondweed

Patomogeton crispus is native to Eurasia, Africa, and Australia. The leaves are reddish-green, oblong, and about 3 inches long, with distinct wavy edges that are finely toothed. The stem of the plant is flat, reddish-brown and grows from 1 to 3 feet long. It spreads through burr-like winter buds (turions), and new plants form under the ice in winter, making curly leaf pondweed one of the first nuisance aquatic plants to emerge in the spring. They go

dormant by early to mid summer and germinate in the fall when water temperatures cool. Dense colonies of curly leaf pondweed can restrict access to docks and sportfishing areas during spring



and early summer months.

References: <http://el.erdc.usace.army.mil/aqua/apis/PlantInfo/PlantListTotal.aspx>
http://dnr.wi.gov/invasives/fact/curlyleaf_pondweed.htm

Photo: www.threelakescouncil.org/LakesInfo/Invasives/CurlyLeaf/tabid/82/Default.aspx