The Lake Beat

Volunteer Lake Monitoring Program

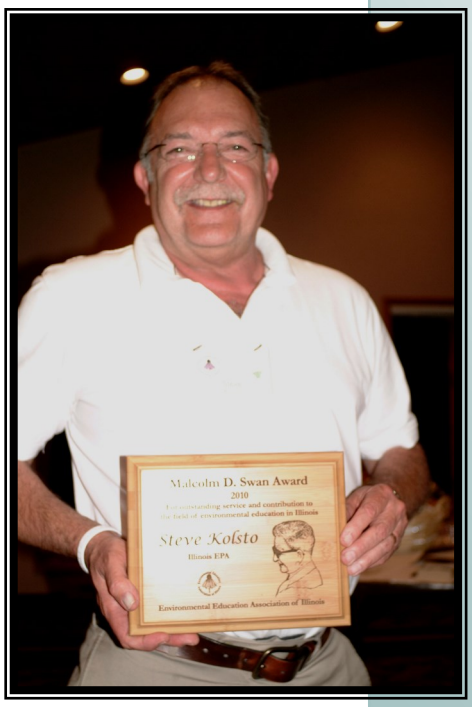
Spring/Summer 2015

Topics:

- Steve Kolsto
- HAB Update
- Stop the Spread

Steve Kolsto

Steve Kolsto has left a legendary mark at the Illinois EPA and in the watershed community as one of the most genuine, dedicated, and passionate educators. He not only was one of the most giving, humble, gracious, and happy person that anyone who was lucky enough to meet him could testify to, he also would be the first one to test any boundary that would dare try and stop him from anything. His sincere willingness and total commitment in lakes education was extraordinary.



In his long tenure at the Illinois EPA, Steve has been the key in driving and expanding education, particularly in water, at the Agency as well as throughout the state. He has contributed and developed many creative activities and informational education materials, supported numerous committees, and presented at several conferences, teacher workshops and educational functions. He has made numerous contributions to the environmental and lakes education fields and has helped many educators and citizens increase their excitement and motivation in environmental awareness and stewardship.

More about Steve Kolsto

One of the many legacies that Steve will always be known for is the creation and implementation of the Lake Education Assistance Program (LEAP). In fact, in 2007 he won the Outstanding Service Award from the Illinois Science Teachers Association for all his hard work with LEAP. In 2010, he also won the prestigious Malcolm D. Swan Award for outstanding service in environmental education. In addition, Steve was presented with the ILMA Lake Guardian Award in 2004. Also, his creation of *Dive In!*, a hands-on, fun educational day that travels throughout the state, arms around 500 students annually with the importance of protecting and conserving Illinois' water.

And then there is Living, Lands & Waters. Steve was a huge supporter and advocate for Chad Pregracke and his crew. He wholeheartedly believed in the mission and all the hard work that LL&W encompassed. Steve had the utmost respect for Chad, Tammy and the crew and it was definitely **reciprocated**. Steve not only assisted with LL&W's teacher and student workshops, cleanups, planting trees and helped create several videos to promote this wonderful organization, but he even talked the Director of the IEPA at the time to attend a LL&W teacher workshop and taught him how to filter for chlorophyll. There was such a mutual respect among Chad and Steve that the very first Stephen D. Kolsto Environmental Education award was presented to Chad and his organization.

Even more about Steve Kolsto

Steve has touched and enriched the lives of so many. When he loved, it was passionate. He would do anything for anybody. He loved the water, loved to fish and loved his family and friends to no end. He will be missed by all but his legacy will continue.

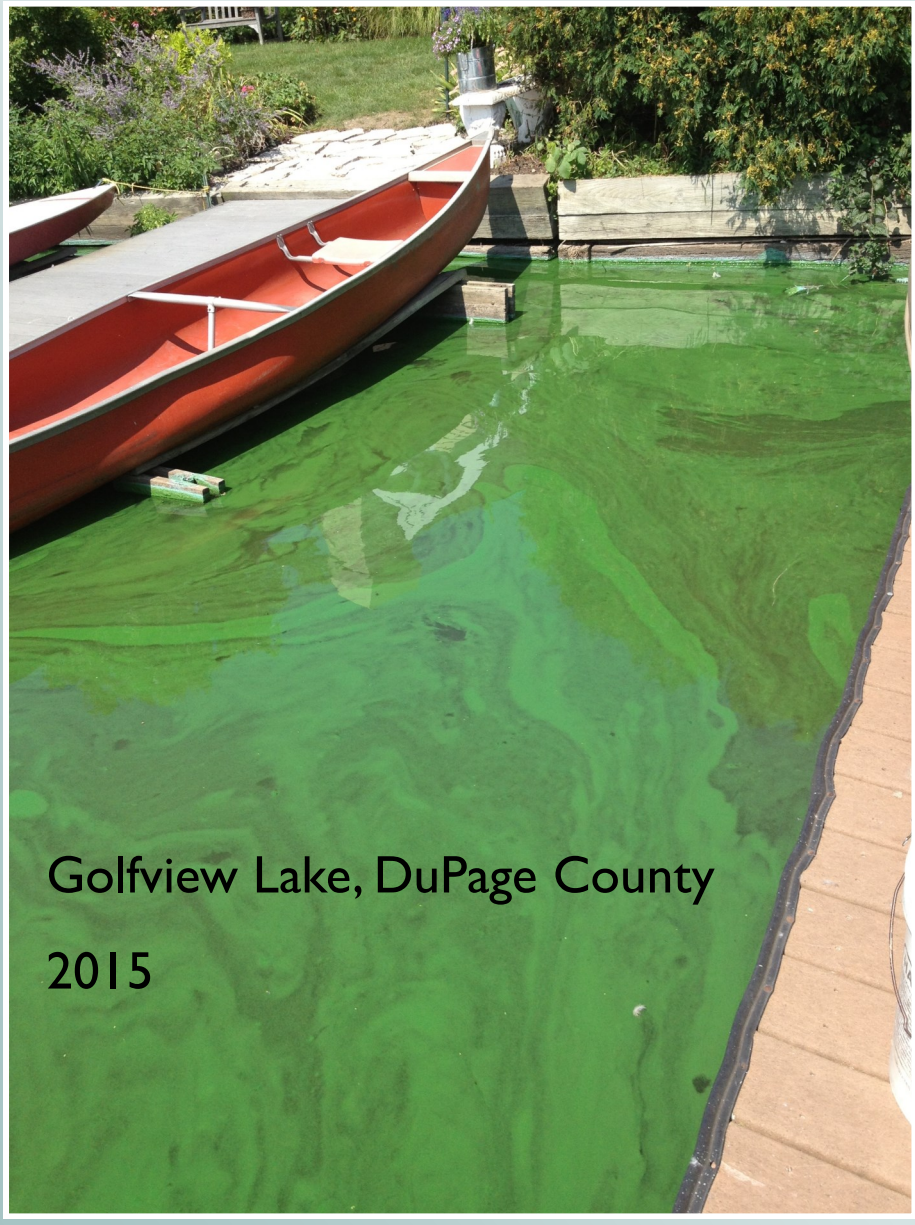
~Kristi Morris

Blue-Green Algae is Still a Concern

HAB Website: www.epa.illinois.gov/topics/water-quality/surface-water/algal-bloom

Blue-green algae are microscopic organisms that occur naturally in Illinois lakes and streams. Despite their name, blue-green algae are actually types of bacteria known as Cyanobacteria. When certain conditions are present, such as high nutrient and light levels, these organisms can reproduce rapidly. This dense growth of algae is called a bloom. While blooms can occur at any time of year, they are primarily a concern during the months of July through September.

Adverse health effects could occur when waters exhibiting a blue-green algal bloom are swallowed, come in contact with skin, or when airborne droplets containing toxins are inhaled while swimming, boating, waterskiing, tubing, bathing or showering. Pets are also at risk when allowed to drink or swim in surface water containing a blue-green algae bloom. Health effects can include asthma-like symptoms, abdominal pain, vomiting, diarrhea, rashes, or severe neurotoxicity depending on the exposure level and type of toxin present in the water.



Golfview Lake, DuPage County

2015

Identifying Harmful Algal Blooms (HABs): When Blue-green algae reproduce quickly and bloom, there are physical signs. The blooms can look like green paint spilled into the water, thick puffy foams on the surface of the water (scums), or swirling colors beneath the surface of the water. A blue-green algal bloom will coat an object when it is dipped into the water. Blue-green algal blooms also have distinct smells. They can smell grassy or septic and in some cases the smell can cause nausea. These algal blooms can accumulate near the shoreline of lakes, and can move based on wind and wave action in the lake.

BLUE-GREEN ALGAE CONTINUES

Mistaken for Blue-Green Algae: Long strands of green algae, duckweed, and filamentous macro-algae are sometimes confused with blue-green algal blooms.

Reporting Harmful Algal Blooms: If you suspect that blue green algae are blooming on your lake or a public lake you've visited; you can report it to Illinois EPA. As soon as possible after seeing the bloom; download a form at the Illinois EPA website and fill out any information you can describing the bloom. If possible take photographs of the algae. One photo should be a close up of the algae scum. Another photo should be taken of the landscape to help identify the location of the bloom/scum on the lake. You may also contact your VLMP coordinator and request that they file the report of the algal bloom on your behalf. If you would like information and updates on the condition of the bloom you reported, make sure your contact information is on the form.

Download HAB Report Form Here:
http://www.epa.illinois.gov/topics/water-quality/surface-water/algal-bloom/reporting/index

What Happens Next? If the report and photos indicate that a bloom or scum has the potential of producing toxins, a HAB responder may be sent to investigate the bloom. A responder will be sent as time and resources allow and priority will be given to publicly-owned lakes. If a responder is sent, they could be an Illinois EPA employee or a VLMP coordinator. The HAB responder will investigate and collect a sample for microcystin if necessary.

Electronic copies of the photos and form should be submitted to the Illinois EPA at EPA.HAB@illinois.gov and, if you are a volunteer in the VLMP, your regional VLMP coordinator.

Note: Illinois EPA will review all forms submitted; however, the ability to initiate follow up activities will be dependent on time and resources of the Illinois EPA at the time of the submittal. Priority will be given to publicly owned lakes.

- **Alana Bartolai,** Lake County Health Department (Lake County)
- **Holly Hudson,** Chicago Metropolitan Agency for Planning (Cook, DuPage, Kane, Kendall, McHenry, and Will Counties)
- **Tyler Carpenter,** Greater Egypt Regional Planning and Development Commission (Alexander, Franklin, Gallatin, Hamilton, Hardin, Jackson, Jefferson, Johnson, Massac, Perry, Pope, Pulaski, Saline, Union, White, and Williamson Counties)
- **Greg Ratliff,** Illinois Environmental Protection Agency (Any County)

Blue-Green Algae Continues

The Responder will then analyze the microcystin sample using a qualitative Abraxis Microcystin Strip Test for Recreational Waters. This test can usually be done the same day as sample collection and is a good indicator for whether or not microcystins are present in the lake. If the test reveals levels of microcystin above 10 ppb, the remaining sample will be sent for further quantitative analysis. Illinois EPA will notify the management entity of this result. The management entity may post an advisory at the lake warning people of the elevated toxin levels on the lake. The Illinois EPA does not issue lake advisories or closures. It is up to the lake management entity to make those decisions. . Illinois EPA will provide information to the community and will play an advisory role to the management authority.

Harmful Algal Bloom Safety: Extreme caution should be taken in the case of any exposure to a possible Harmful Algal Bloom. People should avoid direct skin contact with the water, inhaling droplets of the water, and ingesting any water. When working near or investigating blooms safety equipment including gloves, carpenter's masks, waders, goggles, and personal flotation devices is recommended. If you come into contact with a HAB wash your skin and any equipment with soap and tap water immediately after exposure. Do not use lake water that looks clear to clean. Even lake water that appears to not have algae in it, can have toxins associated with it. Do not allow pets or children to come into contact with the water, even water surrounding the scum that looks clear, may be contaminated with toxins.

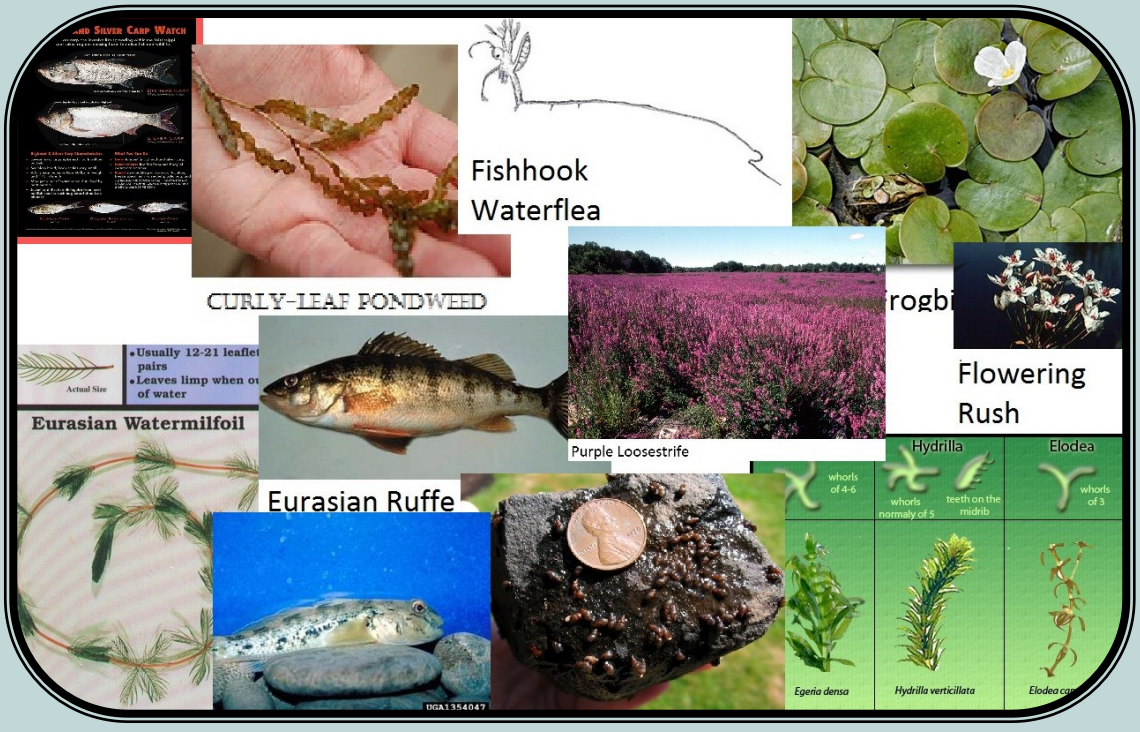
***Reporting Human or Animal Illness*:** The Illinois Department of Public Health (IDPH) conducts surveillance for illnesses that may be related to harmful algal blooms, and encourages the reporting of any suspect illness to the health department. If you know of a human or animal illness that may be related to algal toxins, please coordinate the submission of a report form to IDPH. (**http://www.dph.illinois.gov/search/site/topics%20services%20environmental%20health%20protection%20toxins%20habs**) If you or someone you know have been exposed to a harmful algal bloom and develop symptoms, you can call the Illinois Poison Center 1-800-222-1222 for medical advice. **~Staff**

Stop the Spread!

Follow this checklist against aquatic exotics:

If you are a water recreationist, boater, angler, water skier, sailor, or canoeist, there are some important things you can do to help prevent the spread of aquatic exotic species.

- Don't transport water, animals, or plants from one lake or river to another.
- Never dump live fish from one body of water to another.
- Remove plants and animals from your boat, trailer, and accessory equipment (anchors, centerboards, trailer hitch, wheels, rollers, cables, and axles) before leaving the water access area.
- Drain live-wells, bilge water, and transom wells before leaving the water access area.
- Empty bait buckets on land, not in the water. Never dip your bait buckets in one lake if it has water in it from another.
- Wash boats, tackle, downriggers, and trailers with hot water as soon as possible. Flush water through motor's cooling system and any other parts that may have been exposed to lake or river water. If possible, let everything dry for three days (hot water and drying will kill zebra mussel larvae).
- Learn what these organisms look like. Don't purchase exotic species as bait or for ornamental plantings. If you suspect a new infestation of an exotic plant or animal, report it to Illinois EPA's Lakes Unit (217/782-3362), Illinois DNR's Division of Natural Heritage (217/785-8774), Illinois DNR's Natural History Survey at the Havana Field Station (309/543-6000) or the Lake Michigan Biological Station (847/872-6877).
- Consult with the Illinois EPA's Lakes Unit or your local Illinois DNR district fishery biologist for guidance before you try to control or eradicate an exotic "pest." Remember, exotic species thrive on disturbance. Do-it-yourself control treatments often make matters worse and can harm native species!



If you see or suspect a Harmful Algal Bloom (HAB), contact EPA.HAB@illinois.gov and your regional VLMP coordinator

Remember
If you find Hydrilla or any new exotic species in your lake, contact your regional VLMP coordinator.

Regional Coordinators:

VLMP Statewide Contacts

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

Northeastern Coordinator

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

Lake County Coordinator

Alana Bartolai, LCHD, Libertyville, 847-377-8009 & ABartolai2@lakecountyil.gov

Southern Coordinator

Tyler Carpenter, GERPDC, Marion, 618-997-9351 & tylercarpenter@greateregypt.org

www.epa.state.il.us/water/conservation/vlmp

Illinois Lake Management Association

The Illinois Lake Management Association (ILMA) is a great resource for lake managers, lake owners and lake homeowner associations, just to name a few. ILMA's mission is to promote understanding and comprehensive management of lake and watershed ecosystems. Check out the web site at www.ilma-lakes.org to see what they can offer you or your homeowner association.

ILMA is putting on a workshop in Upland Plant ID for Beginners. So take a stroll with ILMA's botanical experts at Moraine Hills State Park for an introduction into upland plants (woodland, prairie, associated invasive species) and their identification. Available dates are September 19th & 26th. Sign up with Brian Valleskey at bvalleskey@manhard.com. (It costs $15 for ILMA members and $20 for non-members.) A great bargain.

~Greg Ratliff