#### Welcome!

Welcome to the Fall 2010 edition of the *MiCorps Monitor*! As always, this edition is full of updates and information on the activities and individuals of the Michigan Department of Environmental Quality's Michigan Clean Water Corps (MiCorps).

**Please note:** this PDF is a an archived version of the original, web-based newsletter. As such, some features (photos, captions, navigation) are not available, and links may be broken. We apologize for the inconvenience!

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# Article 1: The Critical Role of Volunteer Data Collection

I think everyone agrees and understands that volunteer data collection is a good thing for conservation of our natural resources; but I firmly believe it's more than good, it's critical.

In the past, volunteer data collection for conservation was thought to be a good thing, with a primary benefit of engaging citizens to become stewards of our natural resources. The thought was that if you could get a citizen to volunteer their time to be working outdoors, involved with conservation, that they would become "hooked" or more deeply engaged in conservation. While this might be a benefit, it's far from the most important benefit of volunteer data collection today. Let me explain why.

Michigan is blessed with a wealth of natural resources, including aquatic resources. For example, we have over 30,000 miles of streams in the state, over 18,000 miles of which are trout streams. With such an abundance of resources, it is difficult to know much about any particular stream, lake, wetland or watershed. Approaches to collecting data on them are left to a statistical random subsampling method, where inferences can be drawn about the total lot of waters, but little may be directly known about any one particular waterbody. This is an acceptable technique for governmental agencies that need to manage all the waters of the state, and must do so with limited staff and funds. But, if a citizen wants to ensure the best management and protection of a particular waterbody, they will often find little information available to them for that specific waterbody.

In the past, we as citizens that care about conservation, have really relied on governmental agencies to do the work of managing our natural resources and collecting the data needed for management. As mentioned previously, the sheer number and diversity of resources we have here in Michigan has always proved challenging for these agencies. They have never been able to collect as much data as they would have desired, due to limited funds and staff. These agencies also have not collected all the different types of data that might be useful. The tightening of natural resources management budgets has only exacerbated this limitation. In Michigan, our state agency is experiencing dramatic decreases in annual operating funds, a phenomenon that restricts the agency's ability to collect data more than ever before. If we conservationists want more information about our natural resources, to help ensure better management and protection, we have to step up to the challenge.

The number of waterbodies we have in the state makes it difficult to know much directly about any particular waterbody, but to complicate things further, its takes lots of different types of information to fully understand the condition of a waterbody. There are two main purposes for collecting data about a waterbody: 1) to make a diagnosis of its current condition so that we can determine its current limiting factors and help guide improvement efforts, and 2) monitor its condition through time to detect changes, so that appropriate

actions can be taken if needed. Within these two basic categories, there are many different types of data that may be needed.

Using streams as a specific example, there are many types of data that are needed to identify conservation and protection needs. At Trout Unlimited, we have developed our own volunteer data collection program, through which numerous types of stream data can be collected, depending on our management objectives. In most cases, we hope to take a watershed and systematically begin collecting the data needed to make a confident diagnosis of what factors might be most limiting to the coldwater fisheries, which will lead us to an action plan to then address the identified limitations. We collect data on water temperatures, base flow levels, aquatic insect community health, physical characteristics and fish habitat features of streams, fish population surveys, angler behavior (including "creel" data and economic impact information), and inventories of existing dams to aid in prioritizing future dam removal targets. This is our current list, but each time a new conservation issue or threat arises, we can create a new fine-tuned type of data collection to meet our needs. If you want to review the information we've assembled about these types of data collection, you can visit www.michigantu.org, and look for the "River Keepers data collection" tab.

Of course, it's not just about streams. The critical role of citizen-collected conservation information extends to all types of natural resources, including lakes, wetlands, watersheds, and wildlife information. Whenever you have an active citizenry that cares about something, they have a responsibility to take charge of ensuring its protection. Conservation volunteers are also particularly well suited to help with the task of data collection. The biggest cost associated with the collection of most of this data is the time and travel involved for people to collect it. Volunteers take this on in a very efficient manner. Through large numbers, the work is split up into smaller individual commitments, and time and travel costs are donated to the cause. Additionally, while many of the components of designing protocols, developing trainings, selection of sites, and handling of the data after collection can require help from people with specific education in that field, the actual collection of most data is something that anyone from any background can usually learn quickly. With hundreds of thousands of conservationists in Michigan, if just a small fraction gave a few days a year to data collection, the impact on our knowledge of Michigan's natural resources and our ability to conserve them, would be profound.

MiCorps as we know it today is only a fraction of the system it will become. Our natural resources need it to evolve into a larger, more encompassing framework to facilitate citizens collecting many different types of data. If we hope for better management and protection of our natural resources than we have today, if we hope to stave off the effects from declining governmental agency budgets, if we hope to continually engage new conservationists, if we take responsibility for conservation – as Michigan citizens always have – this is the tool and the path forward.

Author: Dr. Bryan Burroughs Executive Director Michigan Trout Unlimited

## Article 2: Volunteer Stream Monitoring Grants Awarded for 2010

MiCorps is pleased to announce that seven organizations have been selected to receive volunteer water quality monitoring grants in 2010. Now in its sixth year, the Volunteer Stream Monitoring Program (VSMP) continues to provide financial and technical assistance in the form of competitive grants to local units of government and nonprofit entities to initiate or improve local volunteer monitoring programs around the state. Grantees are trained to collect reliable, high-quality benthic invertebrate and stream habitat data that is then used by the Department of Natural Resources and Environment as a screening tool to focus and prioritize future work. Data collected under this program is also shared via the MiCorps Data Exchange (http://www.micorps.net/data/view/search/) for use by other resource professionals and interested parties.

Full grants are awarded to eligible monitoring programs to build upon an existing program over a period of 18-24 months. Smaller, one-year "start-up" grants are awarded to newly forming volunteer monitoring groups to assist them in developing a monitoring strategy for their community and to build capacity for their program so that they might be eligible to apply for a full grant in future years. Successful grant recipients are able to demonstrate a commitment to continuing the monitoring program in years to come.

This year, the VSMP has awarded four full grants and three start-up grants, totaling nearly \$50,000 in funds, to support the recipients' volunteer monitoring work beginning in 2010.

# Full grants:

#### **Michigan Trout Unlimited**

*Project Title:* Monitoring on the Kalamazoo, Rogue, AuSable, and Pilgrim River *Watersheds:* Kalamazoo, Rogue, AuSable, and Pilgrim River Watersheds *Funding Amount:* \$17,562 *Contact:* Kristin Thomas, Ph: 616-460-0477 <u>kthomas@michigantu.org</u>

The overall goal of this project is to monitor the health of coldwater streams in Michigan by establishing baseline data and then monitoring the streams for changes. Monitoring is to involve 14 sites in the Kalamazoo, Rogue, AuSable, and Pilgrim River watersheds and will include habitat and macroinvertebrate assessments. Both negative and positive impacts will be portrayed in the data, reflecting effects of agriculture, CAFOs, development, stream improvement projects, and the implementation of best management practices. In addition, MITU has a developed a coldwater database which will include MiCorps data and data from other MITU monitoring efforts.

#### **Branch County Conservation District**

Project Title: Coldwater River Stream Monitoring Program Watershed: Coldwater River Funding Amount: \$15,403.81 Contact: Kathy Worst, Ph: 517-278-8008 kathy.worst@mi.nacdnet.net

Ten sites are to be monitored within the Hodunk-Messenger Chain of Lakes watershed, a subwatershed of the Coldwater River, to document the extent and locations of possible threats and impairments in the watershed, establish a baseline for quantifying changes, and foster a stewardship ethic among watershed residents. The health of the Coldwater River watershed is a vital concern to all watershed stakeholders and partner organizations. Results from the proposed study will serve to inform the community and leverage further efforts to protect the watershed.

#### Flint River Watershed Coalition

Project Title: Flint River Watershed Coalition 2010 Retraining, Recruitment, Retention, and Assessment Program
Watershed: Flint River
Funding Amount: \$10,111.55
Contact: Rebecca Fedewa, Ph: 810-767-9491 rfedewa@FlintRiver.org

The ultimate goal of the MiCorps Volunteer Stream Monitoring Grant is to expand and strengthen the monitoring program to the point that comprehensive stream habitat data for the Flint River Watershed may be adequately collected. Funding is being provided to strengthen the Coalition's existing program and to coordinate monitoring at more than 30 sites within the Flint River watershed to track the long-term health of the system.

#### Start-up grants:

# Muskegon River Watershed Assembly Project Title: Hersey River Watershed Monitoring Program Watershed: Hersey River Funding Amount: \$3,000 Contact: Terry Stilson, Ph: 231-591-2324, mrwa@ferris.edu

This startup grant is intended to fund the formulation of monitoring plans for the Hersey Watershed, a subwatershed of the Muskegon River. The Hersey River is a high quality trout stream and is one of the main urban centers in the Muskegon River watershed, flowing through Reed City. It provides scenic, recreational, and wildlife/fisheries benefits to the local community, but has also been historically impacted by local industry. A sustained water quality monitoring effort will provide valuable data that can be used by watershed managers to address potential issues within this critical watershed, identify changes in stream ecology, and promote stewardship of this important natural resource.

#### **Gogebic Conservation District**

Project Title: Presque Isle Watershed Volunteer Stream Monitoring Start-Up Program -Black River Watershed: Black River Funding Amount: \$2,000 Contact: Mary Powell, Ph: 906-663-4512 mary.powell@mi.nacdnet.net

This startup grant will fund the formulation of monitoring plans for the Black River, a subwatershed of the Presque Isle watershed on the far western side of the Upper Peninsula. The Black River is a high quality trout stream and very little data has been collected on this stream. However, the healthy connectivity of the tributaries to the Black River is extremely valuable and important, and data collected through this monitoring program would be paramount to future aquatic habitat restoration projects. The Gogebic Conservation District plans on assembling a steering committee, assessing key conservation needs, building a monitoring strategy, and working closely with interested citizens.

#### **Cannon Township**

Project Title: Bear Creek Stream Study Start-Up
Watershed: Bear Creek
Funding Amount: \$1,054.25
Contact: Kim Sapkowski, Ph: 616-874-6966 ksapkowski@cannontwp.org

This startup project is intended to fund the efforts of Cannon Township in setting up a monitoring program for Bear Creek in Kent County. Bear Creek is a small watershed (29 square miles) but has seen a large increase of population in the past 20 years. Increased population has introduced more development and higher volumes of runoff into Bear Creek and its tributaries. A stream monitoring group was started 6 months ago and has been taking basic stream measurements (pH, temperature, water clarity). The group is interested in expanding their knowledge and monitoring efforts with macroinvertebrate monitoring to better understand the health of the system so that the Township might use this information to make better planning decisions and prioritize stream projects.

#### **Midland Conservation District**

Project Title: Midland County Adopt-a-Stream Watershed: Sturgeon Creek Funding Amount: \$866.37 Contact: Ronald Johnson, Ph: 989-687-9760 rwjohnson@hotmail.com

This startup grant will fund the formulation of monitoring plans for the Sturgeon Creek in Midland County. The Sturgeon is a tributary of the Tittabawasee River. The Sturgeon Creek watershed has not been highly affected by agriculture, unlike much of mid-Michigan, and possesses a high amount of state land. Midland County is largely industrialized with a large chemical industry presence. Thus, the grantee believes that educating the residents is important for long-term stream health. The primary goals of the project are to establish baseline data that can be used by environmental governing bodies and to introduce the general public to watershed quality. Individuals will learn about their local watershed quality, how it compares with other watersheds, and how civilization impacts watershed quality.

#### Volunteer River, Stream and Creek Cleanup Program

While not specifically funded under the MiCorps umbrella of programs, the DNRE also offers an additional grant program, the Volunteer River, Stream and Creek Cleanup Program (VRSCCP), that may be of interest to local units of government and other partnering entities looking to engage volunteers and promote stewardship through watershed activities. If you've never applied for a grant before or are interested in gauging the interest of potential volunteers in your area, this program might be a good "stepping stone" opportunity to consider before applying for a MiCorps Volunteer Stream Monitoring grant or to supplement existing volunteer programs already underway.

Since 1998, the VRSCCP program has provided small grants (\$5,000 or less per award) to support volunteer river cleanup efforts on rivers, streams and creeks throughout the state to improve the waters in Michigan. Funds for this program are generated by fees collected from the sale of the State's Water Quality Protection license plates (Public Act 74 of 2000). Awards under the program are intended to pay for trash removal and the clean-up of other anthropogenic debris, and can support equipment purchases for things like waders and other supplies and volunteer appreciation items to be used for the sponsored cleanup event and future cleanup activities.

The VRSCCP is managed by the DNRE and administered under contract by the Great Lakes Commission. To find out more about the program, the funding process, or to read about volunteer events in your area, please visit the program website at <u>www.glc.org/streamclean</u>.

# **2011 Grant Application Packages**

Grant Application Packages (GAPs) for the 2011 grant cycle for all three grant programs described above will be available soon. Please visit <u>www.micorps.net/streamgrants</u> and <u>www.glc.org/streamclean</u> for additional information and application instructions.

Author: Laura Kaminski MiCorps Staff Great Lakes Commission www.micorps.net

## Article 3: Focus on the CLMP

# What is the CLMP?

MiCorps is made of two main components- the Volunteer Stream Monitoring Program and the Cooperative Lakes Monitoring Program (CLMP). The CLMP is the second oldest volunteer lakes monitoring program in the country and has been an important component of Michigan's inland lakes monitoring program for over 35 years. The primary purpose of the CLMP is to help citizen volunteers monitor the water quality of their lakes and document changes in lake quality over time. CLMP participants collect data on a variety of different parameters including: Secchi disk transparency, total phosphorus, chlorophyll a, dissolved oxygen, temperature, aquatic plant identification and mapping, and monitoring for exotic plants.

### 2010 Annual Training Event

Over 75 people gathered in the Radisson Hotel in Lansing this past April to learn about the CLMP and how to properly take lake water quality measurements. Held in conjunction with the Michigan Lake and Stream Associations (MLSA) annual conference, this training is a very important time for new lake monitors to become oriented to the program and also is a great social time to reconnect with Michiganders who love our lake resources.

The 2011 dates and location for the annual MLSA conference and CLMP training have been selected and planning is underway. Please visit <a href="https://www.mlswa.org/Conference/2011%20Conference/50thAnnualConference.htm">www.mlswa.org/Conference/2011%20Conference/50thAnnualConference.htm</a> for more details.

# Volunteer Mentor Program

The annual training is a really great way to get to know the CLMP program. Unfortunately, it is not always possible for interested volunteers to attend the training given busy schedules and long distances to travel. As a result, new volunteers may be discouraged from joining the program, and experienced volunteers may be unable to expand into more advanced parameters for which training is required. Also, MiCorps staff lacks the resources to conduct one-on-one training for those volunteers who cannot attend the annual training. To address this problem, MiCorps staff have started a new initiative: the Volunteer Mentor Program.

The CLMP has many experienced volunteers who have faithfully monitored their lakes for a great number of years. Such volunteers are invited to attend the Volunteer Mentor Academy during the annual training and become certified Volunteer Mentors. When new volunteers cannot attend the annual training, or need a hand in getting started with their measurements, the Volunteer Mentors provide guidance and support. Having every volunteer attend some

type of training, either at the annual training or with a Volunteer Mentor, is very important in upholding the data quality of the program.

If you are a new participant in the CLMP and want additional assistance, or if you are not registered in the CLMP but are considering joining in the future, consider talking to and working with a Volunteer Mentor. Contact program manager Paul Steen (<u>psteen@hrwc.org</u>) if interested and he will pair you up with a Mentor in your area.

# New to CLMP!

In 2010, 224 lakes enrolled to participate in the volunteer water quality sampling with the CLMP – a slight increase over last year's enrollment. We would like to welcome the following new lakes to the CLMP for 2010:

- Bear Alcona County
- Maynard Alcona County
- Loon Iosco County
- Shinangaug Genesee County
- Sand Lenawee County
- Maston Kent County
- Muskellunge Kent County
- Sand Lenawee County
- Brevoort Mackinac County
- Independence Marquette County
- Crystal Montcalm County
- Clear Ogemaw County
- Opal Otsego County
- Portage St. Joseph

# CLMP data is available!

All the data collected through the CLMP program are available online on the searchable Michigan Data Exchange (www.micorps.net).

Reports for specific years, including the Spring 2010 Total Phosphorus data, are available at <u>www.micorps.net/lakereports</u>. The complete 2010 data for the program is currently being compiled and will be published in the program's annual report later this winter.

# **Enrollment for 2011 Sampling Season**

Enrollment for the 2011 season of the CLMP began on October 1, 2010. Both online and paper enrollment are available again this year. Individuals who subscribe to the <u>MiCorps-news listserv</u> will be informed via email of program announcements. Contact Jean Roth, Michigan Lake and Stream Associations Program Administrator at 989-257-3715 or email jroth@mlswa.org for more information. Online enrollment is available at <u>www.micorps.net</u>.

Author:

Dr. Paul Steen MiCorps Staff Huron River Watershed Council

## Article 4: Stream Monitoring with MiCorps Grantee, Branch Conservation District

## **Coldwater River Volunteer Stream Monitoring**

Branch Conservation's experience with MiCorps began a little over a year and a half ago, when our watershed technician, Ben Wickerham, applied for a startup stream monitoring grant in the Coldwater River Watershed. He believed the program presented a means to assess and monitor key watershed areas providing us a better picture of our region. As a simple trial program, this was also a good way to test our potential for sustainable funding and committed team members.

While receiving the grant was truly exciting, for me it was also a bit scary. Our staff and funding had dropped, Ben was moving on, and I found myself in charge of a grant I was not certain I had time to complete. However, my board, partners, and I decided to dive in anyway.

Initially, three volunteers and staff members attended the spring MiCorps stream training in Owosso. Spring training encompassed the meat of the program. It began with an overall program description and included a discussion of the financials required for the program. The second portion discussed in-stream sampling techniques, site description methods, and aquatic insect identification. We finished the training with actual river sampling and lab time for benthic invertebrate identification. It was a lot to cover in one day. However, it was a wonderful introduction to the program.

The opportunities offered to us throughout the year added to our comfort level. We were able to attend the annual fall MiCorps Conference as well as volunteer team trainings, stream sampling days, and bug ID nights offered by experienced MiCorps members in some of our nearby counties. All of these events provided us with additional education as well as the chance to train a core group of volunteer team leaders for our future program. Additionally, we were able to meet a wide variety of volunteers from other stream monitoring programs, while discovering a little bit more about the people who choose to become involved.

As our year progressed we also discovered the benefit of the partnerships we had been developing. Our local Intermediate School District (BACC), the North Chain of Lakes Association, ASTI FTCH, and MiCorps itself all made the process much easier by offering very thoughtful input and support.

Within the final months of our startup grant we were able to use our partners and MiCorps members to assist us with writing a proposal for an implementation (full) grant from the MiCorps Volunteer Stream Monitoring Program. The comments they provided were key to authoring a high quality proposal, with a good prospect for success. We were also able

during this time to use some of our remaining grant funds for the creation of advertising and promotional materials as well as purchasing our first D- shaped sampling net and a set of waders. All of this made us feel we were really getting somewhere.

As for any problems or concerns with this program, future funding, along with maintenance of a viable volunteer force are probably at the top of the list. Early on, some of our trained individuals decided this was not their thing and resigned. However, since then we have gained a better instinct for the types of individuals who might be willing to stay. Our hopes of obtaining a solid base through implementation have definitely improved. We see our core area partners from the Lake Association and the BACC as a very good start. These groups can also assist us with some of our future program costs. They definitely have a vested interest in maintaining the program as residents of our watershed and county. Additionally, we believe we've gained very good partnerships with MiCorps, who provide us with some expert assistance and oversight.

I am very happy to say we are now in the process of fully implementing our program, which was funded through a 2010 full volunteer stream monitoring grant from MiCorps. We are currently awaiting approval of our quality plan; preparing for our side-by-side; setting up our first training, sampling and aquatic insect ID dates; working on additional advertising; recruiting volunteers; and have finished training some of our new team leaders. I am also pleased to add that these new team leaders are highly skilled, very involved Branch Conservation District Board members and staff.

While in some ways the MiCorps program initially appeared very unnerving, we have found a great deal of support from MiCorps, a number of MiCorps volunteer teams, and all of our other Partners. Each of them has helped Branch Conservation through the learning process as well as any difficulties we've encountered. We've been left feeling as though MiCorps truly wishes for our success.

Author: Kathy Worst Administrator Branch Conservation District

## Article 5: Volunteer Monitoring Program Spotlights: University of Rhode Island Watershed Watch

#### **Coldwater River Volunteer Stream Monitoring**

In this issue, we are again putting the spotlight on a program that has goals that are similar to MiCorps, but which takes a slightly different approach. MiCorps staff thought it would be instructive to periodically examine volunteer monitoring programs in other states to give us a basis of comparison and possibly learn about what has worked (and what has not) elsewhere. This article presents a snapshot of the University of Rhode Island (URI) Watershed Watch as it compares to MiCorps.

The University of Rhode Island Watershed Watch program is one of the original water monitoring programs in the United States that uses volunteers to collect data. Like MiCorps, URI Watershed Watch is statewide, and boasts involved partners from a variety of organizations such as community organizations, lake and watershed associations, environmental organizations, municipal conservation commissions, as well as government agencies. Their volunteers are out on the water monitoring in 29 of Rhode Island's 39 cities and towns, as well as several in nearby Connecticut.

This program has many similarities with MiCorps' Cooperative Lakes Monitoring Program (CLMP). Like the CLMP, the URI Watershed Watch is a centralized program, with volunteers making all measurements, but with a small team coordinating the monitoring activities, receiving and processing monitoring samples, and collating the results. Like MiCorps, collecting data on the state's natural resources is only one goal of the program. Reaching out and educating residents and volunteers, for the purpose of working toward long term changes in environmental attitudes, is also a major goal. The program is intended to encourage communities and shoreline residents to understand the need to cooperatively manage and improve the water quality of all the water bodies within a watershed. In this way the program works to ensure that Rhode Island's bays, estuaries, and freshwater resources remain one of the state's great assets, just as we want to protect and care for Michigan's freshwater assets in MiCorps.

Unlike MiCorps Corps, the URI Watershed Watch is not involved in macroinvertebrate collection or stream habitat monitoring. MiCorps provide grants, training, and a standard operating procedure to environmental and governmental groups interested in developing their own volunteer stream monitoring projects. URI Watershed Watch monitors streams, though this monitoring is wrapped up with the lake and wetland monitoring and does not involve these parameters. However, URI Watershed Watch offers a larger variety of nutrient testing than does MiCorp's CLMP program. Nitrogen testing, for example, is important in Rhode Island since nitrogen is the limiting nutrient in saltwater areas. Also, Michigan does

not have a problem with water acidification because the state's geology is full of buffering carbonates; Rhode Island keeps a close watch on water pH since the water is naturally more susceptible to acidification. See the table below for a comparison of parameters.

#### **MiCorps Monitoring Parameters:**

#### **URI Watershed Watch:**

	Streams (wrapped up in the lake program)
1. Macroinvertebrate	
monitoring	1. No Macroinvertebrate monitoring
2. Habitat monitoring	2. No habitat monitoring

# Lakes

#### Lakes, Streams, Wetlands, Marine Coastal Areas

- 1. Secchi Disk Transparency
- 2. Nutrients (total Phosphorus)
- 3. Algal Density (Chlorophyll-a)
- 4. Dissolved Oxygen
- 5. Temperature
- 6. No alkalinity and pH monitoring
- 7. No bacteria monitoring
- 8. Exotic Plant Watch
- 9. Aquatic Plant Mapping

- 1. Secchi Disk Transparency
- 2. Nutrients (ammonia, dissolved and total phosphorus, total and nitrate-nitrogen)
- 3. Algal Density (Chlorophyll-a)
- 4. Dissolved Oxygen
- 5. Temperature
- 6. Alkalinity and pH
- 7. Bacteria (Fecal Coliform and E. Coli)
- 8. No exotic plant watch
- 9. No aquatic plant mapping

Edited with permission from <u>www.uri.edu/ce/wq/ww/index.htm</u> by Paul Steen

### Article 6: Volunteer Corner: An Interview with Lynn Hoepfinger

Wanting to learn from and recognize the volunteers who give of their time and energy to monitor the health and quality of our lakes and streams, the MiCorps team created a new section of the MiCorps Monitor dedicated to these individuals. For the Fall 2010 installment of the Volunteer Corner, the MiCorps team caught up with lake monitor Lynn Hoepfinger, a veteran volunteer with the Hamlin Lake Preservation Society (Mason County) in Ludington, to learn about his experiences as a Cooperative Lakes Monitoring Program (CLMP) volunteer thus far.

**MiCorps Monitor:** First of all, it appears that there is a lower and upper Hamlin Lake being sampled for the CLMP. Are there really two lakes (lower and upper)? And how would you describe the lake setting?

**Hoepfinger:** Hamlin Lake is actually a single lake with an impoundment and dam that separates it into an upper and lower section. The dam was created by the logging industry roughly 100 years ago and was really more of a glorified beaver dam to start but was replaced with a more permanent concrete dam in 1912. Additional renovations were recently completed by the state. The dam impounds a lake of about 5,000 acres and separates an upper and lower section by a narrow stretch. For the CLMP program, we conduct our testing at two places, one in the upper and one in the lower.

The upper portion of the lake is shallow and has more rooted plant growth and higher algae blooms. It is surrounded by cottages and resorts and homes. Roughly one quarter of the shoreline of the lower portion is the Ludington State Park. The lower portion is deeper with its deepest area around 40 feet. There aren't many homes on this portion of the lake and it sees more day use and public recreational use from the park.

*MiCorps Monitor:* How long have you been a volunteer with the Cooperative Lakes Monitoring Program (CLMP) for Hamlin Lake?

**Hoepfinger:** I moved up to the lake in 2001, joined the Preservation Society board, and then in 2002 I decided to volunteer to help with a study they were conducting. I ended up taking over much of the water quality testing after that. It's been a good experience.

#### MiCorps Monitor: What is your role as a lake monitor?

**Hoepfinger:** I conduct the sampling and oversee the water quality programs that we are involved with, including two projects that we do in partnership with other organizations and a few that we do on our own.

First, there's the CLMP. We do chlorophyll, phosphorus, secchi disk clarity, dissolved

oxygen (DO), and temperature measurements – but no weed studies, yet. We also participated in a special study back a few years ago where we did chlorophyll sampling all around the perimeter of the lake to show the impacts of zebra mussels in the lake. We were one of a number of lakes in the study.

We work with West Shore Community College to coordinate monthly testing by their students. They're looking at pH levels, ammonia, nitrates, DO, temperature, secchi disk clarity, conductivity, chlorophyll, and phosphorus readings. They do this sampling monthly, May through September, and then look at trends in the observations.

The Hamlin Preservation Society does *E. coli* testing on their own – using a beach monitoring protocol – as part of a study of septic system contamination. Most of the homes on the lake are on septic systems, with only a small area on city water and sewer.

A few years back, I started an unscientific zebra mussel survey. We have eight or ten people suspend a brick off the end of their dock in the spring and bring them up in fall to count the number of mussels each year. We've actually seen slight decreases over time.

# MiCorps Monitor: Describe your team of volunteer monitors.

**Hoepfinger:** For the most part, we have about seven or eight volunteers that help with our weekly or monthly sampling efforts. All of them are residents on the lake. Plus, we have the West Shore Community College student volunteers who have their own boat and work on their own studies.

# MiCorps Monitor: What is your favorite part about the lake?

**Hoepfinger:** I like to take the grandkids skiing on the lake and we have picnics on the sand dunes. I really like to watch the wildlife. In fact, we have a couple of bald eagles that fish in the lake and migrating ducks in the spring. I'm a fisherman, so I like to fish on the lake, of course. And since I live on the lake year-round (except for part of the winter), I really enjoy hearing the different sounds of the lake. Like, for instance, in the winter you can hear the sound of the ice groaning.

# *MiCorps Monitor:* Why did you decide to become a volunteer with this monitoring program? And what keeps you involved year after year?

**Hoepfinger:** Well, I'm trained in the sciences and was a chemist. I don't have any experience in limnology (the study of lakes), but it piqued my curiosity that the lake association was involved in water quality studies. So I volunteered and then took on more responsibility for the programs over time. I enjoy doing it and want to stick with it long enough to see some trends to tell if the lake is getting better or worse. I believe the lake is stable now, but we're getting slightly better numbers over time.

# **MiCorps Monitor:** What words of wisdom do you have for others who might be interested in volunteering as a lake or stream monitor, or starting a volunteer monitoring program?

Hoepfinger: Respond to your association's requests for help. Get involved. I've made

changes to my property and how I use phosphorus, as a result. I know more about buffers and am much more aware of what gets into the lake and how to prevent that. We share our work and information with other Preservation Society members through their newsletter. So I hope that others have learned and made changes as well.

**MiCorps Monitor:** In your years of volunteer monitoring, what has been your most interesting find on the lake? Our stream monitors often find really unusual things that you wouldn't expect to find in a stream. But what about from a lake perspective? Have you found anything unusual?

**Hoepfinger:** I found a colony of bryozoans. They look like a big jelly ball and grow from plants at the bottom of the lake. I published photos in the newsletter with "What is this?" to see how many other people knew what they were. A few people trained in biology got it right. Apparently, they have been in the lake forever and filter the water. They generally indicate fairly good water quality.

*MiCorps Monitor:* Describe your most memorable moment or your favorite activity as a lake monitor.

**Hoepfinger:** We were doing our last set of sampling for the year in early October and it started to snow! Also, I've really enjoyed establishing the unscientific zebra mussel study and seeing what we get each year in the way of mussel populations.

**MiCorps Monitor:** Well, again, thank you for taking time out of your busy summer to talk with us. And thank you for all that you do! It's always neat to hear what our volunteers are doing and finding in their regular sampling and to hear how they choose to share and use their data. I'm so pleased that you're sharing your information via your association's newsletter. Keep up the good work!

# For more information on the Hamlin Lake Preservation Society, visit: <u>hamlinlakepreservation.org</u>.

Do you know an extraordinary volunteer lake or stream monitor? Please send your nominations for future installments of the Volunteer Corner to Laura Kaminski, MiCorps Program Administrator, at <u>laurak@glc.org</u>.

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# Article 7: Two New Partnerships for Lakes Make Progress

Two new lake partnerships have formed across Michigan recently to coordinate efforts on several important lake management issues. The Michigan Inland Lakes Partnership (MILP) and the Michigan Natural Shoreline Partnership (MNSP) are both looking for help to continue moving forward.

# Inland Lakes Partnership Forms

Michigan is blessed with literally thousands of inland lakes, ranging from shallow ponds bordered with water lilies and the calls of frogs and toads, to deep, cold waters patrolled by lake trout. Just as diverse as Michigan's lakes are the organizations dedicated to their protection. Associations of lakefront property owners, nonprofit environmental groups, professional societies, and local, state, and tribal agencies all dedicate time and resources to keeping our lakes healthy and welcoming, and each has its own strengths.

To make the most of the individual strengths of each of these organizations, a new collaboration has formed – the Michigan Inland Lakes Partnership. More than twenty organizations statewide have joined this Partnership thus far, which is entirely new to Michigan and promises to accomplish far more for Michigan's lakes than any single organization could on its own. Partners with connections to MiCorps include the Department of Natural Resources and Environment, the Huron River Watershed Council, Michigan Lake and Stream Associations, and Michigan State University Extension.

The Partnership has identified four key areas in which to focus its efforts during its first three years of existence: invasive species, ecosystem-based monitoring and management, education of citizens and local decision-makers, and controlling nonpoint source pollution such as phosphorus and sediment. Citizen involvement in these efforts is crucial for their success. For example, volunteer monitoring through MiCorps' Cooperative Lakes Monitoring Program (CLMP) is specifically identified in the Partnership's Strategic Plan as a program that must be sustained, and Partners are dedicated to supporting and expanding the CLMP statewide. Other citizen-based initiatives supported by the Partnership include: the Clean Boats, Clean Waters program, which enlists local citizens to educate boaters on the importance of cleaning watercraft of plant material and other potential contaminants before launching to prevent the spread of invasive species; and the Lake and Stream Leaders Institute, an educational program that trains people to be effective stewards of their local waters.

The Partnership has also launched a website that aims to be your one-stop source for information on Michigan's lakes and Partner programs. Developed in close collaboration with Michigan State University Extension and the Department of Natural Resources and

Environment, the website includes links to lake-related publications from those organizations as well as many additional resources, a lake events calendar, and more. To learn more about the Partnership, see what organizations have joined, and learn something new about Michigan's lakes, visit the Partnership at <u>http://michiganlakes.msue.msu.edu</u> or contact Dr. Jo Latimore at MSU at <u>latimor1@msu.edu</u> or 517-432-1491.

#### Natural Shoreline Partnership Goes Pro

Environmentally friendly landscaping for waterfront properties has long been a challenge for Michigan property owners. Many of the traditional approaches, such using as rock rip-rap or installing vertical seawalls, are hard on lake ecosystems. But a new organization -the Michigan Natural Shoreline Partnership -- is working to make green options available to homeowners.

The Michigan Natural Shoreline Partnership, which is made up of Department of Natural Resources and Environment staff, Michigan State University Extension staff, industry representatives, trade associations, academic institutions and non-profit organizations, has created a course for contractors on ecologically friendly landscaping methods for inland lake shorelines: the Certified Natural Shoreline Professional (CNSP). MNSP will also be providing workshops for homeowners, and shoreline product research and development.

"MNSP is a good example of the DNRE working hand-in-hand with industry and stakeholders to address important resource issues, while working to expand green business opportunities in Michigan's marketplace," said John Skubinna, a DNRE compliance assistance specialist and MNSP facilitator.

MNSP certifies that contractors have successfully completed a four-day training course -three days in the classroom and one day of field training -- and have passed a certification exam. A total of 56 participants from across the state attended the classroom component offered in Kalamazoo and Pontiac this year. MNSP experts taught a course packed with information on green landscaping and erosion-control methods, shoreline environments, lake health and shoreline permits. The field training involved hands-on construction of a bioengineered natural shoreline project on a lakeshore.

Scott Brown, Executive Director of the Michigan Lake and Stream Associations, took the Pontiac course out of a personal interest in natural shorelines. "The Certified Natural Shoreline Professional training course was outstanding," Brown said. "Those [participants] whom I spoke to seemed really enthused about the class and the untapped potential for serving the needs of riparians looking to give back to their lakes."

The Pontiac group recently completed the course during a final construction day on Ford Lake, building a bio-engineering demonstration project at a park on the lake. The project was sponsored by the Charter Township of Ypsilanti, JF New Inc., Eastern Michigan University, Huron River Watershed Council (HRWC), and the Middle Huron Stormwater Advisory Group (MHSAG). Ric Lawson, with HRWC, MHSAG, and MiCorps, assisted in the development of the project. "The Ford Lake Demonstration Project not only served to train contractors from the CNSP courses, but will be used by its collaborators to educate the local communities on the benefits of natural landscaping methods and their impact on Ford Lake health and water quality," Lawson said. "Development of lakefront properties has impacted the shoreline of Ford Lake, as it has on lakes across the state, by removing the deep-rooted plant material that hold the shore in place, and prevent lawn fertilizers and pesticides from running into the water. This training in natural protection techniques, as an alternative to traditional construction methods, is sorely needed."

The Kalamazoo group finished in early June, taking their exam and participating in a construction day on Gull Lake sponsored by Wildtype Nursery, Gull Lake Quality Organization and the Kalamazoo Community Foundation. The construction day provided participants with experience installing a natural shoreline including native plants, erosion control blankets and coir fiber logs -- biodegradable logs made from coconut husk fiber -- that protect plantings from wave and ice action until they can get established.

Ed Schmitt, a marine contractor who owns Trident Dock & Dredge, Inc. in Watervliet, is a member of MNSP who sees bioengineering as a viable alternative to rock rip-rap and vertical sea walls on low- to moderate-energy shorelines. Both Ed and his son, Matt, attended the Kalamazoo course and said it provided a balanced and technically sound approach to bioengineered shoreline erosion control. Schmitt said he regards "soft" shoreline erosion control techniques as a service he can offer to his customers to respond to the demand for green landscaping options.

MNSP has also assisted the DNRE in developing a new Bioengineering Minor Permit for low-energy sites on inland lakes. The DNRE plans to issue the new permit category in the next few months to enable property owners to obtain permits more quickly for soft shoreline projects.

The partnership plans to offer CNSP in 2011. Locations have yet to be determined. Shoreline property owners looking for more information about MNSP can go to the partnership's website at <u>www.MichiganNaturalShorelinePartnership</u>. Those looking to hire a Certified Natural Shoreline Professional should watch for the list on this same site.

For more information about the Michigan Natural Shoreline Partnership and its activities, contact Jane Herbert at <u>jherbert@msu.edu</u> or John Skubinna at <u>skubinnaj@michigan.gov</u>.

## Authors: <u>Ric Lawson</u> MiCorps Staff Huron River Watershed Council

#### Dr. Jo Latimore

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# Article 8: MiCorps Updates

# 2010 MiCorps Stream Training Event

Twenty-one participants attended the annual MiCorps Stream "Train the Trainer" Day on June 20, 2010 at the DeVries Nature Conservancy in Owosso, Michigan. At this training day, MiCorps staff give important information on how to start and run a stream monitoring program through the MiCorps program. Topics covered include MiCorps methods of macroinvertebrate collection and habitat analysis, insect identification, recruiting volunteers, holding monitoring events, and data quality assurance plans. The attendees also spent plenty of time in the pleasant Shiawassee River, trying their hand at collecting and identifying insects and crustaceans.

Participants came from a variety of organizations:

- Branch County Conservation District
- Cannon Township
- Flint River Watershed Coalition
- Friends of the Rouge
- Gogebic County Conservation District
- Lapeer County Conservation District
- Michigan Department of Natural Resources and Environment
- Michigan Trout Unlimited
- Midland County Conservation District
- Muskegon Watershed Assembly
- Southwest MI Planning Commission

# 2010 Annual MiCorps Conference and Training

The MiCorps conference and training is an annual event featuring afternoon training sessions (free of charge) for interested volunteer coordinators on Day 1, and presentations and dialogue on lake and stream monitoring activities in Michigan on Day 2. This year's event took place on October 18-19, 2010, at the R.A. MacMullan Conference Center at Higgins Lake (Roscommon, MI). Volunteer monitoring program leaders, citizen volunteers (both new and experienced), water resource professionals, and others interested in the health and protection of Michigan's rivers, lakes and streams were in attendance.

This year's conferencere featured presentations from regional experts and provided training on macroinvertebrate field and laboratory identification geared toward both beginning and advanced monitoring programs. In addition, volunteers from across the state of Michigan shared their experiences and lessons learned in volunteer monitoring. Dr. Alan D. Steinman, Director of the Robert B. Annis Water Resources Institute at Grand Valley State University, was this year's keynote speaker. Dr. Steinman spoke about phosphorus in Michigan waters, including an overview of phosphorus sources and eutrophication. Several case studies (Muskegon, Spring, and Mona lakes) were presented, detailing researchers' attempts to monitor and remediate phosphorus in various lake environments. His presentation was very well received and sparked a very valuable discussion among the attendees at the conference.

The MiCorps staff and partners wish to thank all of the presenters and participants at this year's conference and training sessions, and look forward to planning next year's event. To view the conference program and presentations, please visit the conference website at <u>www.micorps.net/conference</u>.

Author: Dr. Paul Steen MiCorps Staff Huron River Watershed Council

Laura Kaminski MiCorps Staff Great Lakes Commission

# Article 9: In Memoriam

# **Donald E. Winne, Lifelong Educator and Advocate for Michigan's Water Resources Passes Away at 92**

Don Winne knew he was a lucky man. He had inherited a keen interest in science, politics and people from his mom and dad and had developed a passion for Michigan's great outdoors while fishing and swimming in the bountiful lakes, rivers and streams found near his boyhood home in western Allegan County. Following a long and productive life of parlaying his encyclopedic interests and youthful passions into two highly successful careers that spanned seven decades as a caring public school educator and then as an advocate for the conservation of Michigan's freshwater resources, we are sad to report that Don Winne passed away on Tuesday, August 3, 2010, at the age of 92.

By every measure, Don Winne lived a life worth living. Don served as The Michigan Riparian Magazine Publisher and as Michigan Lake and Stream Associations Executive Director from the mid-1970s until his retirement in early 2009. Always kind, considerate and respectful, he worked hard to encourage and enable ordinary citizens to become directly involved in their communities as stewards and advocates for the conservation of their favorite inland lake or stream.

Don also worked tirelessly to promote, expand and develop Michigan's earliest volunteer inland lakes water quality monitoring effort, then referred to as the Self-Help program and involved only water transparency (Secchi disk) measurement, to becoming the elaborate, volunteer multi-parameter water quality monitoring initiative of today known as the MiCorps Cooperative Lakes Monitoring Program (CLMP).

The entire Michigan Clean Water Corps partnership extends heart-felt condolences to Don's family – his significant contributions to MiCorps and Michigan Lake and Stream Associations will be long remembered and cherished.

Author: <u>William Scott Brown</u> Executive Director Michigan Lake and Stream Associations