



Crystal Whitecaps

The Newsletter of the Crystal Lake & Watershed Association

Vol. 6, No. 2, SPRING/SUMMER 2010

PRESIDENT'S LETTER

Dear Friends of Crystal Lake;

It's time to look ahead.

As we move beyond our long and contentious battle to improve the state boat launch (see story below), we see many opportunities to continue working for Crystal Lake.

We are re-evaluating our water monitoring, to ensure that we have information about the most important water quality issues. We have good data on some physical and chemical parameters, such as phosphorus levels and water clarity. We may need to gather better information about the lake's biology – including minnow and crayfish populations, weed beds, and so forth.

And, **CLWA** is determined to begin an aggressive campaign to stop the

spread of invasive species into the lake. (For more information on that, see the "Boat Wash" item on page 4.)

High on everyone's mind is the need to control swimmer's itch. Reports from other Northern Michigan lake associations tell us this is a growing problem throughout the region, and Crystal Lake is no exception.

Swimmer's itch is caused by a tiny parasitic flatworm that moves between snails and birds (typically mergansers on Crystal Lake). If the parasite accidentally encounters a human in the water, it can result in an allergic reaction.

We are working with a lake-wide task force to develop uniform signage for the major beaches, and to provide the best available information for prevention of swimmer's itch. Unfortunately, for now there is no proven way to prevent the problem. We hope to work with other

lakes on restarting research programs.

In the meantime, lake property owners are searching for better ways to discourage mergansers from roosting on their docks, and the task force has initiated a program of raking the lake bottom at several beaches to disrupt the snail habitat.

All this work will require a strong and well-funded association. I encourage you to make a financial contribution to CLWA. And, at least as important, get involved personally. As a volunteer organization, we rely on our board members, committee members and volunteers for everything.

Together, we can ensure that Crystal Lake is preserved for our grandchildren – and their grandchildren.

- Ed Hoogterp, *President*

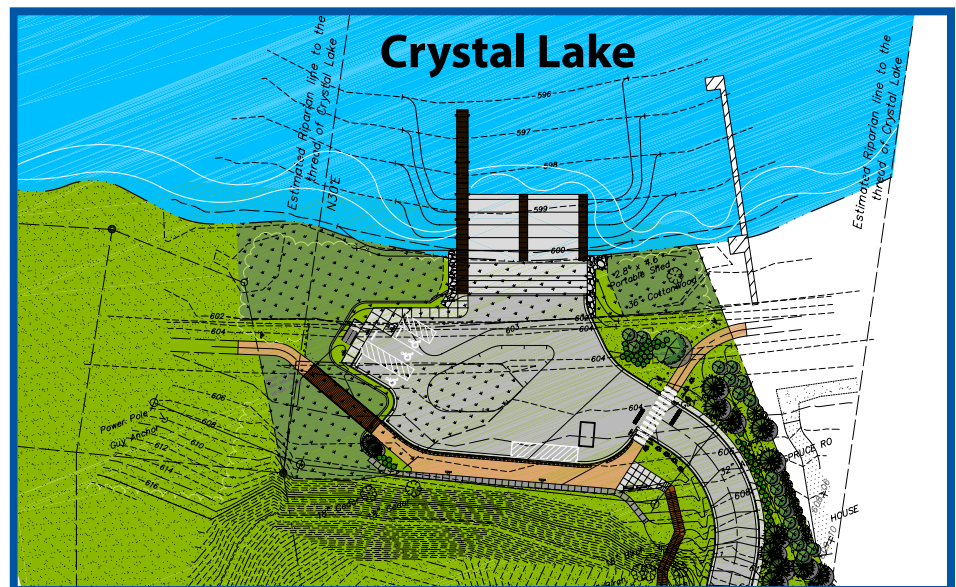
BOAT LAUNCH CASE SETTLED; CONSTRUCTION BEGINNING SOON

Construction will begin this summer on a state boat launch on the south shore of Crystal Lake, ending years of controversy in Benzie County.

Jaran Construction of Allegan, MI entered the low bid for the project, at just over \$1 million. Work is to begin in August and will likely be completed in the spring of 2011.

CLWA had contested the environmental permits for the project. Under a legal settlement entered in Benzie County Circuit Court on March 31, the Department of Natural Resources and Environment agreed to make changes that will reduce the project's impact.

"The battle over this boat launch went on far too long. I'm really, really happy to get it resolved," said **CLWA** President Ed Hoogterp.



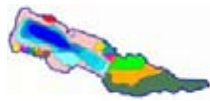
"Boaters will have a safe facility to get on and off Crystal Lake," Hoogterp said. "And the state has agreed to a new design with much less lake-bottom

dredging, less wetland fill, and less hard-surface parking."

The agreement also allows **CLWA** to develop a boat-cleaning station on

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"Protecting the integrity of Crystal Lake, Benzie County, now and for the future."



BOAT LAUNCH CASE SETTLED; CONSTRUCTION BEGINNING SOON

Continued from Front Page

the site. The boat-cleaning station, to be financed by private donations, is part of a larger campaign to stop the spread of invasive plants and animals, including quagga mussels, which have devastated the ecology in parts of Lake Michigan.

Boaters have been able to get on Crystal Lake at more than 20 public access points, including a launch ramp in the village of Beulah. But those sites are limited by parking, water depth, wind and other factors.

The DNR proposed a state-owned access site on the lake more than a decade ago, and completed plans in 2004 for a launch on the south shore at the intersection of Mollineaux Road and M-115. CLWA contested the plan, because we believed the facility was larger than needed, and because the design called for unnecessary amounts of wetland fill, lake bottom dredging and hard surface parking.

The property includes a large open area, 78 feet above the lake, and a smaller section of shoreline that includes a wetland and a portion of the Betsie Valley bicycle trail.

A two-lane paved road and a pedestrian stairway will link a parking area on the hilltop with the launch site on the lakeshore below.

Among major design changes approved in the settlement:

- A section of the Betsie Valley Trail will be built as an elevated boardwalk, preserving wetland that would otherwise have been filled.
- A separate “staging dock” has been eliminated, reducing both wetland fill and the amount of lake-bottom dredging. In the new design, a floating dock will extend from one of the launch piers, giving boaters a convenient spot to tie up while they retrieve their vehicles.
- One of two planned asphalt

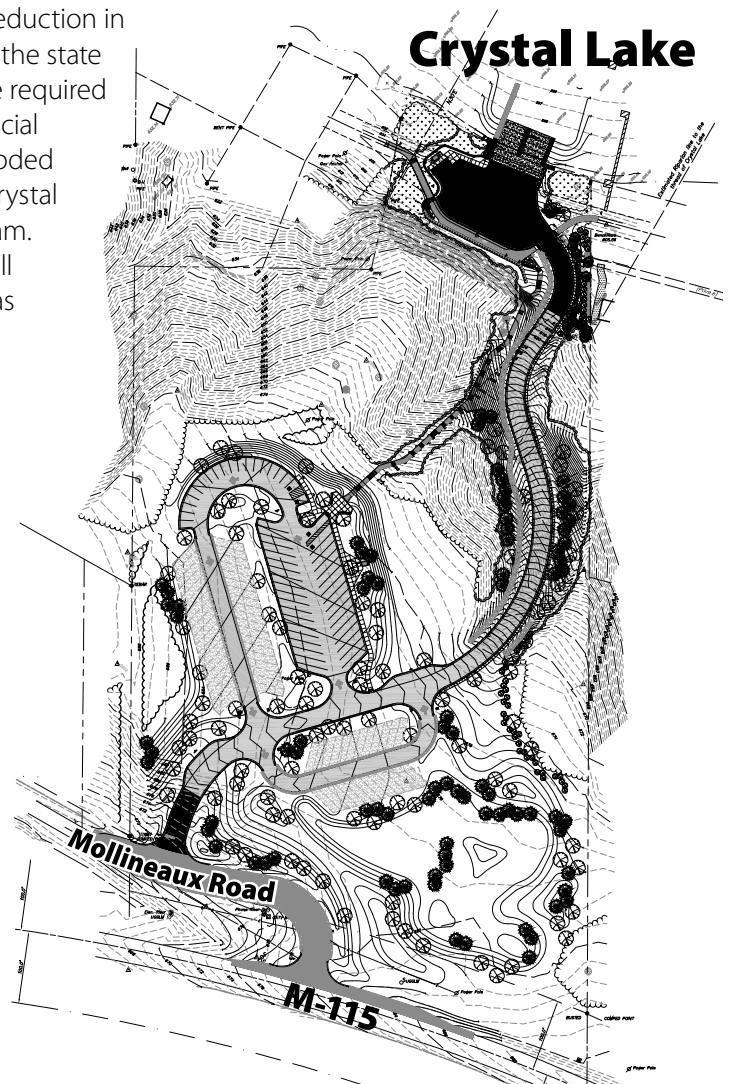
parking lots will be maintained as a grass area for overflow parking, reducing hard-surface paving by nearly 50 percent. All parties agree that the state has the right to pave the lot at a later date, if that is warranted by usage of the site.

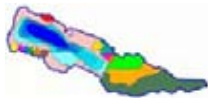
- The Crystal Lake & Watershed Association will have an opportunity to develop a boat-cleaning station on the upland portion of the site, as part of a larger effort to control the spread of invasive species into the lake.
- Guardrails and “bollards” will be installed to keep vehicles off the bicycle trail.
- Because of the reduction in wetland impact, the state will no longer be required to create an artificial wetland in a wooded area along the Crystal Lake Outlet Stream. That property will remain for now as a natural area.

- Additional screening will be installed to reduce the impact on nearby residences. The settlement resolves two separate legal cases, involving state and local government and two local citizen groups.

“This is a compromise,” said CLWA president Ed Hoogterp.

“No one got everything they wanted, but everyone worked in good faith for an agreement . . . Now, we have to work together to ensure the facility becomes an asset to the lake, and not a detriment.” ■





MICHIGAN INLAND LAKES STEWARD OF THE YEAR AWARD

The Michigan Lake and Stream Associations (www.MLSWA.org), which represents 300 member associations across Michigan, recently honored the **CLWA** with the prestigious Michigan Inland Lakes Steward of the Year Award for 2010. At the 49th Annual Meeting of ML&SA held in Lansing on April 1 - May 1, 2010, a plaque was presented "in recognition of outstanding leadership, teamwork, and dedication in preserving and protecting Michigan's freshwater heritage for future generations". The award was presented by ML&SA Executive Director, William S. Brown and accepted by Dr. Stacy L. Daniels, **CLWA** Chair, Education & Communications Committee. In presenting the award, Brown said, "You and the **CLWA** have always been there for ML&SA – your continued support of our humble organization is greatly appreciated!

We recognize lake associations who through their hard work and dedication have set an example of proactive stewardship and leadership in working to preserve and protect their lakes and watersheds that others may follow." "ML&SA was founded nearly fifty years ago on the premise that the best way to help preserve these freshwater gems for future generations was for concerned riparians to create and sustain active lake associations focused on resolving local lake management issues. You and your organization have established a solid path for other lake associations to follow."

The **CLWA** has been a long-time supporter of ML&SA. The **CLWA** has participated in the Cooperative Lake Monitoring Program (CLMP) sponsored by the ML&SA, MDNRE Water Division, and MiCorps. Volunteers collect



CLWA President Ed Hoogterp and Education & Communication Chair Stacy Daniels with the Award.

samples in the Spring and Summer for analysis of total phosphorus (a nutrient), and periodic samples for Chlorophyll a (an indicator of algal productivity) and Secchi disk depths (water clarity). ❏

NEW BOARD MEMBER

The **CLWA** would like to welcome new Board member, Dr. Roger H. Perry. Roger is a former President of Champlain College, Burlington, VT. Originally from Massachusetts, Perry served in the Peace Corps in the Marshall Islands and received his undergraduate degree in economics from Dartmouth College and his Ph.D. in administration from Syracuse University. Prior to Champlain,

Perry was a member of the graduate faculty at Washington University in St. Louis and an associate superintendent of the St. Louis School system. He was also a management extension specialist at Cornell University's School of Industrial and Labor Relations and he taught at Cardigan Mountain School in New Hampshire. Perry came to Champlain in 1982 as vice president

for academic affairs, and later became provost. During his tenure, Perry instituted 16 new bachelor's degree programs, established the College's first master's degree, established an online learning division, initiated international programs, and brought industry-related organizations on campus. ❏

CONSERVATION DISTRICT SEEKS MILLAGE SUPPORT

The **CLWA** Board of Directors has adopted a resolution in support of the Benzie Conservation District's millage request on the Aug. 3 primary election ballot.

The ballot proposal calls for a county-wide property tax of 0.1 mill – which is 10 cents per \$1,000 of taxable value. That should come to about \$10 a year on property with a market value of \$200,000.

In the past, the Conservation District received state and county funding. That was eliminated over several years

because of budget shortfalls at all levels of government.

Following is the text of the **CLWA** Board's resolution:

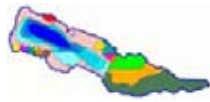
Whereas the Benzie Conservation District is a governmental agency charged with protecting soil, wetlands and water quality in Benzie County, and;

Whereas the BCD has a history of assisting farmers and landowners in reforestation projects, native species plantings, wetland restoration and acquisition of federal grants for natural resource protection activities, and;

Whereas those activities in the Crystal Lake watershed have a direct, positive impact on the quality of water in Crystal Lake, and;

Whereas the Crystal Lake & Watershed Association has worked together with the BCD on lake monitoring, grant applications and other activities,

Therefore, the Board of Directors of the Crystal Lake & Watershed Association expresses its support for continued funding of the Benzie Conservation District through direct property taxes and other sources. ❏



BOAT WASH PLANNED FOR STATE LAUNCH SITE

Zebra mussels and Eurasian milfoil are already in.

Round gobies, ruffe, hydrilla, spiny water fleas, quagga mussels, bacterial kidney disease, viral hemorrhagic septicemia and Asian carp are still out – so far as we know.

This year, your Crystal Lake & Watershed Association begins a major effort to stop the spread of dangerous invasive plants and animals into Crystal Lake.

The legal settlement allowing a Michigan DNRE boat launch on Crystal Lake includes a provision that will permit **CLWA** to design, build and operate a boat washing station at the new state access site.

The wash station will be designed so that boaters can clean off their vessels before and after using Crystal Lake. Boat washing is an important part of an overall strategy to slow or stop the accidental spread of invasives from Lake Michigan into the state's inland

lakes. The program will also include educational activities, printed material and signs at other Crystal Lake launch sites to alert boaters to the problem.

State contractors will provide much of the site work and access pavement for the wash station, which will significantly reduce the cost to the non-profit lake association. Even with that help, the cost to **CLWA** is likely to be approximately \$40,000.

The tentative plan is for a facility that boaters can operate by themselves, with help from volunteers at busy times. A similar system opened on Higgins Lake in 2009 at a cost of some \$80,000.

CLWA will seek grant funding for part of the cost, and will conduct a special fund-raising campaign for the rest, according to Ed Hoogterp, **CLWA** president. In addition to developing the wash station at the state launch site, **CLWA** will initiate an educational campaign to show boaters how – and why – boats should be cleaned before

moving from one body of water to another.

The spread of invasive species by boaters is seen as such a problem that California now requires inspection of boats before they can be launched in some waters. In other states, some launch sites have been closed due to fears of invasive species.

In Crystal Lake, as in most Michigan waters, boat washing is voluntary, though a new state law does make it illegal to launch a boat with an aquatic plant attached. (Township ordinances in Leelanau County require that boats be washed before launching in Glen Lake. No such ordinances have been proposed in Benzie County.)

The wash station is only one step in what will be a never-ending battle against invasive species that could alter the ecology of the lake. "We have to persuade boaters that they can make a difference," said Hoogterp, "and we have to give them a way to do it." ■

DAY-USE DOCK COMING TO BEULAH

The Beulah Village council has given the go-ahead for installation of a public, day-use boat dock by accepting the donation of an "eight-boat docking system" from the Beulah Boosters.

The Beulah Boosters approached the Village with a proposal to build and install a docking facility that will accommodate up to eight boats, so that the boaters may visit the downtown

business district shops and restaurants.

Many boaters have asked for a public docking facility so they could visit Beulah by boat to shop and dine. Now it will become a reality.

The project still needs approval from the Michigan Department of natural Resources and Environment before construction will began.

The group is hoping to have the dock

in place this summer. An anonymous Boosters member offered to advance the necessary funds to build the dock right away, as soon as all the approvals are received. The Boosters intend to raise the funds through donations as quickly as possible to pay back their generous member. ■

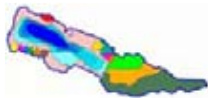
INVASIVE SPECIES & SWIMMER'S ITCH

Invasive species in the Crystal Lake Watershed continues to focus on Garlic Mustard (GM), but other nuisances have also received preliminary assessment. GM is a nuisance plant that proliferates rapidly, degrades wildlife habitat, displaces rare plants, and causes long-term degradation of forests by shading out other species. GM is a biennial plant that produces

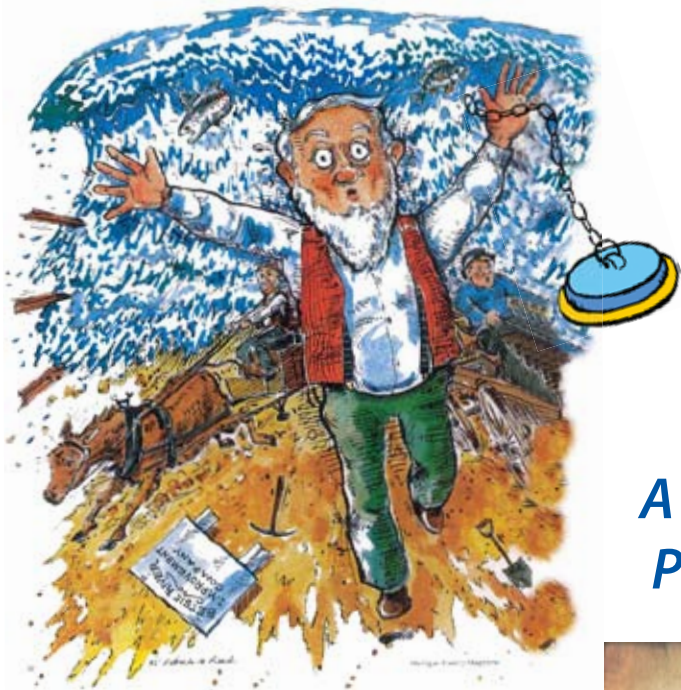
many seeds that survive from year-to-year in the ground. There is some hope that this invasive and destructive plant can be managed with repeated pulling of second-year plants that bloom and form seed pods. The **CLWA** recommends that property owners remove GM wherever possible! The **CLWA** also supports efforts by other local organizations to pull plants with

roots intact in spring and early summer and place them in black bags for land disposal at approved collection sites.

The incidence of Swimmer's Itch (SI) was unusually widespread around the Lake in Summer 2009. Call the **CLWA** hotline (231/352-5328) to report infestations of GM or incidences of SI.



ARCHIBALD JONES DAY



**SATURDAY
AUG. 28, 2010
11 A.M. TO 3 P.M.
Downtown Beulah.**

A Celebration for "The Man Who Pulled the Plug at Crystal Lake".

ACTIVITIES:

"The Story of Archibald Jones" Re-enactment of the "Tragedy" Fun & games from the 1870's Entertainment, music, and food Come celebrate our local heritage!

COSPONSORS:

Crystal Lake & Watershed Association, Crystal Lake Community Business Association, Benzie Area Historical Society, Beulah Boosters, Benzie County Chamber of Commerce.

RELATED EVENT:

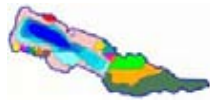
"The 'Tragedy' and the 'Comedy' of Crystal Lake, and the Role of Archibald Jones", Benzonia Academy Lecture Series, Mills Community House, Thurs. Aug. 12, 2010, 7 P.M. When did the "Tragedy" of Crystal Lake happen? And what really happened? Dr. Stacy L. Daniels of the [CLWA](#), through contemporary accounts, recorded legend, and scientific evidence, pinpoints the date and circumstances of the historic event that today defines the Benzie area. And through new research, for the first time, a complete biographical sketch of Archibald Jones, the man credited, or blamed, for the Lake's lowering.

History

On about August 25-27, 1873, in an ill-fated attempt to create a navigable channel between Crystal Lake and Lake Michigan, the Betsie River Improvement Company caused the level of Crystal Lake to be lowered by 20 feet in a few weeks. This tumultuous event released 25% of the water volume (76,000,000,000 gallons), and reduced the surface area by 25% (3,093 Acre)!

The drawdown was unsuccessful from a navigational standpoint, but thereby created the 21-mile perimeter of sandy beach and prime recreational area around Crystal Lake where 1,100 cottages and the Village of Beulah are now located. The "Tragedy" of Crystal Lake is forever preserved in the exposed terrace of sandy beach, the perimeter roads and trails, the deep lake sediments, and the outwash plain along Outlet Creek.

"The event was so epochal in its nature and has such a permanent bearing on the subsequent development of Benzie County that it is rightly considered as one of the major incidents of the county's early history." -- Leonard Case, Benzie County: A Bicentennial Reader, 1976.



CLWA 2010 SUMMER INTERNS

The **CLWA** would like to welcome three interns for the coming summer:

Chelsea Spaulding is a 2010 graduate of Benzie Central High School, where she was a member of the Science Olympiad, National Honor Society, and the National FFA Organization. She was a member of the Benzie Central Bowling team and participated in various community services. She has a particular interest in whales and dolphins, and plans to attend Unity College, Maine, a private, liberal arts college emphasizing the environment and natural resources, where she will major in marine biology. Chelsea will be assisting the **CLWA** in education programs and summer art fairs.

Tiffany Moore is a Lake Ann resident

and a 2010 graduate of Lake Leelanau St. Mary's, where she was a member of the student council, Grand Traverse Youth Advisory Council, National Honors Society, and Business Professionals of America. She also ran cross country and played basketball and softball. She will be attending Northwestern Michigan College taking basic engineering classes and intends to transfer to Michigan Technological University to complete a degree in biomedical engineering. Tiffany will be assisting the **CLWA** in compiling the results of the Crystal Lake Shoreline Survey and other activities.

Parker Laubach is a Junior majoring in geological engineering at the University of Illinois. He will be assisting the **CLWA** in delineating the outwash



Summer Interns: Chelsea Spaulding, Tiffany Moore, and Parker Laubach

plain created by the artificial lowering of Crystal Lake in 1873 and still in evidence. ▣

CRYSTAL LAKE "WALKABOUT" - SPRING 2010

The Crystal Lake "*Walkabout*" is a continuing educational program to teach students, property owners, and visitors about the Crystal Lake Watershed using a "hands-on" approach of observational monitoring and environmental exploring. The program focuses on hydrology – how water moves about the watershed - but also addresses water quality, ecology, land use, zoning, wells and septic tanks, green belts, sustainable development, watershed management, and local history. Participants "walk about" Interpretive Sites that represent different parts of the Crystal Lake Watershed, where they interact with environmental professionals from the cosponsoring organizations. The "*Walkabout*" was expanded in the Fall of 2009 to include three new Interpretive Sites: Round Lake,

Hurdman's Bay, and the Betsie Lake Utility District, making a total of twelve Interpretive Sites.

The Crystal Lake "*Walkabout*" was held on Wednesday, May 19, for 180 students from the 6th grade classes of Benzie Central and Frankfort/Elberta Schools. The enthusiastic participants encountered a bright spring morning to visit three Interpretive Sites to learn about the Crystal Lake Watershed. The "*Walkabout*" is supported by the dedicated teachers and administrators of Benzie County schools who provide their inquisitive students as participants. Special thanks are extended to the Spring 2010 Site Interpreters: Ed Hoogterp, Jim Laarman, and Jim Buzzell, **CLWA**; Peggy Burman and Bill Herd (ret'd) Sleeping Bear Dunes National Lakeshore; Nancy Baglan, CSA; and

Doug Gibson, and the crew of USCG - Station Frankfort. Dr. Stacy L. Daniels, **CLWA**, is the "*Walkabout*" Coordinator.

This year (2010) represents the 18th year of the Crystal Lake "*Walkabout*". Since 1993, this successful program has been presented to more than 4,500 students, residents, and visitors to the Crystal Lake Watershed. It is offered three times each year: Spring (6th grades), Fall (8th grades), and Summer (general public). Each participant receives a commemorative "*Walkabout*" T-shirt with a colorful map of the Crystal Lake Watershed, and (in the Fall) a copy of the "*Walkabout*" Interpretive Manual (http://www.clwa.us/educ_comm.htm#EDUCATION). Additional "*Walkabout*" T-shirts, Watershed maps, and Interpretive Manuals (52pp) are available for purchase from the **CLWA**. ▣

OTHER PLAUDITS & CONGRATS

Molly Walton, **CLWA** 2008 Summer Intern, for her MS in environmental policy from Boston U. The Village of Beulah for providing a collection site for disposal of Garlic Mustard. BookWear® by Field Crafts, Inc., for yeoman duty in printing our Fall 2010 "Walkabout" shirts. BaySide Printing, Inc., for continued publication of the Directory & Crystal Whitecaps. **CLWA** members, for their continued interest and support.



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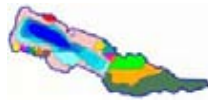
Roger Perry

Wanda Shreiner

Hugh Walton

Ex-Officio

Bob Appleford



WATER QUALITY

The **CLWA** subscribes to the Cooperative Lake Monitoring Program (CLMP), a long-running partnership between the Michigan Lake & Streams Associations (ML&SA) and the Inland Lakes and Streams Program of the Michigan Department of Environmental Quality (MDEQ). **CLWA** Volunteers monitor water clarity (Secchi depth) and collect samples for total phosphorus and chlorophyll a for analyses by MDEQ. Data are reported in an annual report for all participating MI lakes by MICorps. Changes that may occur over time are noted to assist lake, river, and watershed organizations in the management of waterfront property. The CLMP is also a cost-effective way for the MDEQ to compile baseline data on lake water quality, determine trends, and compare lakes.

CLWA has contracted with Rob Karner, of the Leelanau School, and biologist for the Glen Lake Association, to train and assist our volunteers in conducting deepwater profiles of

temperature, dissolved oxygen, pH, conductivity, redox potential, and turbidity, using our own Hydrolab® H20 multiprobe and data logger. Periodic surveys are usually done from April to October. Since 1994 the profiles continue to be indicative of good water quality in Crystal Lake.

The elevation of Crystal Lake is set at a summer level of 600.25 feet (May 1 - Oct 31), and at a winter level of 599.75 feet (Nov 1 - Apr 30). This allows for a higher water level for recreational use in the summer and a lower water level in the winter to minimize shoreline erosion. During the summer of 2009 the level varied only about ± 2 inches of the set level. Through early July 2010, the level has been slightly above the set summer level due to frequent rainstorms. Thanks to the Benzie County Drain Commission, Terry Money & Bob Crossman, for maintaining the Outlet Dam and measuring Lake level. Graphs of lake levels are at http://www.clwa.us/water_quality.htm#LakeLevelMonitoring. ❏

FINANCIAL DEVELOPMENT

CLWA MEMBERSHIP

Membership in the Crystal Lake & Watershed Association includes: Crystal Whitecaps, The **CLWA** Newsletter; the Annual **CLWA** Membership Directory; progress reports on Crystal Lake Watershed activities and issues; and an active voice in the protection of the Crystal Lake Watershed.

CLWA memberships are \$35 per year. Gifts to the 2020 Vision Fund are for stewardship projects, scientific studies, and educational programs; and those to the Endowment Fund are for future needs. Please contact the **CLWA** with your concerns and comments.

THE CRYSTAL LAKE & WATERSHED ASSOCIATION

"The purpose of the **CLWA** is to protect and promote the natural qualities of Crystal Lake (Benzie Co., MI) and its surrounding Watershed. The goal of the **CLWA** is to preserve for future generations the beauty and recreational resources of Crystal Lake and its Watershed. To these ends, the **CLWA** will engage in water-quality monitoring, educational programs, promotion of harmonious land development,

and promotion of the safe use of Crystal Lake. It will conduct other such activities as needed to advocate and ensure the continued aesthetic beauty and environmental integrity of the Lake and its Watershed." (**CLWA** Bylaws)

The **CLWA** is a nonprofit 501(c)(3) organization with over 1,000 members that support a comprehensive program of activities affecting students, riparian owners, and visitors in the Crystal Lake Watershed. The **CLWA** encourages members to contact local and state government on local issues of critical importance to the sustainable development of the Crystal Lake Watershed. The **CLWA** is comprised of the Executive Committee; four standing committees: The Water Quality Committee, the Zoning & Land Use Committee, the Education & Communication Committee, and the Financial Development Committee; along with ad hoc committees on Public Access, Shoreline Stewardship, Finance, Swimmers Itch & Invasive Species, and Long-Range Planning. Our newsletters and webpages describe recent and ongoing activities. Please contact the **CLWA** if you would you like to participate on a Committee! ❏



CRYSTAL LAKE & WATERSHED ASSOCIATION

P.O. BOX 89, BEULAH MI 49617

TEL 231/882-4001 FAX 231/882-7810

www.CLWA.us info@CLWA.us

 **CLWA ANNUAL MEETING**

The Annual Meeting of the **CLWA** will be held Saturday, July 17, 2010, at the CSA Meeting Hall, 2128 Pilgrim Highway (M-22). A short business meeting will be followed by Committee updates and election of new Board members and Officers.

• 2010 CALENDAR OF EVENTS •

CLWA

- July 17 Annual Meeting
- August 14 Board Meeting
- August 28 Archibald Jones Day
- September 18 Board Meeting
- October..... Fall "Walkabout"

*Dates for **CLWA** events subject to change.

**All Board Meetings start at 9:00 am in the BLDHD conference room.

LOCAL

- July 17 Elberta Art & Crafts Fair
- July 21 Crystal Lake Fine Arts Fair, Beulah
- July 28 CSA Arts & Crafts Fair
- July 31 Ecology Day - CSA
- August 14 Crystal Lake Team Marathon
- August 20-21 Frankfort Art Fair

For updated event lists: www.CLWA.us • www.benzie.org • www.frankfort-elberta.com