



Crystal Whitecaps

The Newsletter of the Crystal Lake & Watershed Association
Vol. 7, No. 1, FALL/WINTER 2010

PRESIDENT'S LETTER

We are in the glory of winter in Benzie County: Ice covered lakes; unbroken fields of crystalline snow; skis, snowshoes, snowmobiles, ice shanties ... even an occasional glimpse of the sun burning in a blue sky.

The eastern basin of Crystal Lake froze over in a single January night when the temperature dropped below five degrees. As always, the deep west end took longer to close up.

Now, the lake surface appears as a vast field of white. Careful ice anglers have tested the surface with their spuds and augers, and gingerly pulled their shanties ever farther out from the shore.

This is a wonderful time of year for those of us who love the four seasons around Crystal Lake. We have the reality of winter, plus the anticipation of spring (just around the corner, as Daddy used to say) and summer.

Of course, we've been doing more than just gazing in wonder at the world around us.

Ongoing challenges such as Swimmer's Itch, water-quality testing, invasive-species control, fundraising, educational programs, Internet improvements and preparations for the new DNR boat launch are all getting attention.

We are negotiating with the state to develop specific plans for a boat-wishing station at the new boat launch (See Page 7). And a special committee is planning fund-

raisers to help support the cost of that project (See page 3).

CLWA's priorities task force, led by Roger Perry and three past **CLWA** presidents, has given us guidelines for exciting new programs in 2011 and beyond (See page 3). The Nominating Committee, chaired by Sandra O'Neal, is working on procedures to ensure the broadest possible representation on our board and committees.

We're collaborating with the Crystal Lake Swimmer's Itch Partnership and the Benzie Conservation District on specific issues.

All this, as we regularly remind ourselves, is intended for a single purpose, as stated in our mission: To protect and preserve the integrity of Crystal Lake, now and in the future.

The one remaining need is: YOU. As an organization managed by volunteers, **CLWA** relies on our

members for, well, for everything.

As we move from one lovely season into another, please keep in mind all that this lake and the surrounding landscape mean to you.

And, I hope you'll resolve with me to dedicate some time, talent and treasure to the promise that our children's grandchildren will still be able to enjoy this exceptional piece of the earth.

- Ed Hoogterp, *President*



This Crystal Lake shoreline will see major changes, with a new DNR Boat launch, scheduled to open on the site around Labor Day.

WATERSHED MANAGEMENT PLAN

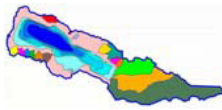
CLWA is working with several Northwest Michigan groups on a proposal to create a long-term Watershed Management Plan for the combined Betsie River and Crystal Lake watersheds. A Watershed Management Plan (WMP) considers all uses, pollutant sources, and impacts within a drainage area. [A watershed includes the drainage area (land) and the lakes and streams (water bodies) receiving the drainage.] More than 150 WMPs have been developed in MI at the local level utilizing grants from the Nonpoint Source (NPS) program of the MDNRE. These include most of the larger inland lakes in NW Lower MI (Platte, Herring, Glen, Torch, Lake Leelanau) except for Crystal Lake, which had operated independent of external funding for watershed management.

WMPs are developed by local communities and provide guidance to protect and improve water quality. Funding for implementation of best management (BMPs) identified within the Watershed Management Plans is available for funding under Section 319 of the federal Clean Water Act (CWA) and the Clean Michigan Initiative (CMI) Nonpoint Source Pollution Control Grant program. To be eligible for subsequent funding of implementation projects, the WMP must meet certain criteria approved by MDNRE, and for federal funding, it must also meet certain criteria of the U.S. EPA.

MDNRE issued a Request for Proposal (RFP) in October 2010 to develop WMPs, or to implement projects defined

(Continue on page 2)

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



WATERSHED MANAGEMENT PLAN (Continued from page 1)


by previously approved WMPs eligible for possible funding by mid-2011. The Crystal Lake Watershed was included in a list of watersheds targeted for priority consideration. The basis for this listing was data acquired during a supplemental survey of bathing beaches indicating a possible impairment of recreation by E. coli bacteria. The issue had been resolved locally several years ago, but may demand further testing to resolve any future concerns.

The **CLWA** recognized this RFP as an opportunity to develop a WMP and then attain approval to be eligible for future funding of possible implementation projects. The current timing is advantageous for a mutual effort, esp. given the ongoing construction of a new public boating access and increased concerns for invasive species and Swimmer's itch.

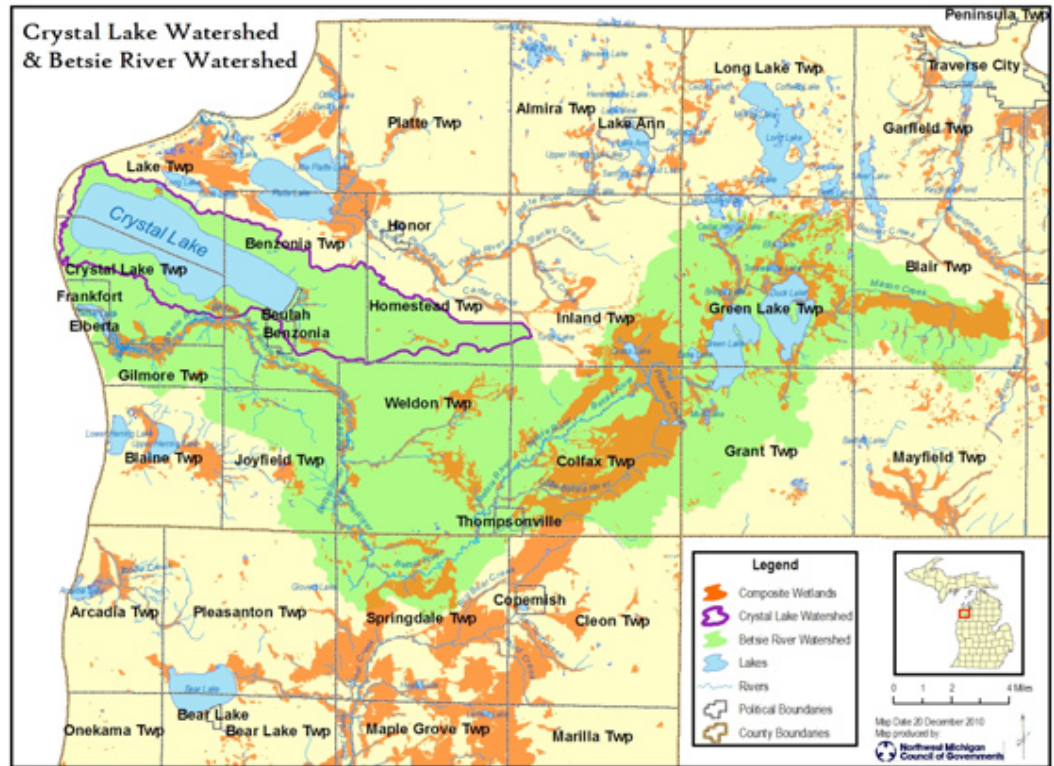
As a consequence, the Northwest Michigan Council of Governments (NWMCOG), in association with the **CLWA** and the Grand Traverse Regional Land Conservancy (GTRLC), has submitted a proposal to develop a WMP for the combined Crystal Lake and Betsie River Watershed. Other partnering stakeholders include: the Benzie Conservation District; the Conservation Resource Alliance; the Benzie/Lelanau District Health Department; the Benzie Co. Drain Commission; the Benzie Co. Board of Commissioners; Benzonia, Crystal Lake, and Lake Townships, the Conservation Resource Alliance, the Green Lake/Betsie River Association and the Sleeping Bear Dunes National Lakeshore.

The proposed planning process would begin mid-2011 and extend over a two-year period. Funding would be \$150,000 plus in-kind matches by the partners. The process will involve assessment of the extensive files of available data and reports, and extended participation by the general public.

The U.S. EPA requires all watershed projects funded under Section 319 of the Clean Water Act to be supported by a Watershed Plan which includes the nine minimum elements: the geographic scope of the watershed, designated and desired uses, water quality threats and/or impairments, known or suspected causes, sources of pollutants, water quality improvement or protection goals, tasks needed to prevent or control critical sources of pollution or addresses causes of impairment, estimated costs of implementation activities, and a summary of public participation. Much of the necessary data for Crystal Lake are already available in the archives of the **CLWA**.

The Betsie River Watershed encompasses parts of three counties, and 17 townships. The Crystal Lake Watershed of 44 sq mi (inc. 15.4 sq mi of Crystal Lake) is a small but significant part of the total Betsie River Watershed of 259 sq mi (including 93 mi of streams). Also included are Green Lake and Betsie Bay. 


The Crystal Lake and Betsie River Watershed

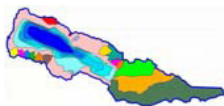


REQUEST FOR PHOTOS OF THE CRYSTAL LAKE WATERSHED

The **CLWA** website continues to evolve, being refined and updated to reflect the interests and needs of our readership. With the encouragement and enthusiastic support of Jim Stamm, our Webmaster, we have added a "Featured Photo" feature one can access directly from our homepage, found here : www.CLWA.us We will be displaying photographs showing some of the many wonderful aspects of Crystal Lake and/or its Watershed, in Benzie County, Michigan: its beauty, uniqueness, and intriguing nature. To this end, we are seeking your photos which highlight something special

about Crystal Lake and its surrounding Watershed. If we use your photo, it will be displayed on our current Featured Photo page, and with full credit to you, the photographer. The Crystal Lake Watershed has many intrinsic values, such as aesthetic, scientific, romantic, and poetic. The photos used will strive to feature the many unique aspects of the Lake and its Watershed. The name of the photographer, location specifics, and date, are preferred.

See guidelines www.clwa.us/photos_request.htm
We solicit your contribution, so get your camera in hand! 



TASK FORCE ON PRIORITIES AND STRATEGY

Your lake association has many accomplishments over the years, but we know there is much more to do.

Consider this list of challenges:

- Redouble our efforts to combat Swimmer's Itch, in partnership with other lake groups;
- Improve our communication programs to help members understand issues facing our watershed;
- Retain a professional limnologist (lake scientist) to assist in defining our long-term water-quality efforts;
- Support an ordinance to require boat-washing as an effort to stop the spread of invasive species;
- Create a long-term lake protection plan
- Strengthen the work of standing committees.

Those are some of the recommendations in a report by a special committee formed to consider strategies and priorities for protecting Crystal Lake in the next few years.

The **CLWA** Board of Directors in September accepted the report of the "Priority and Strategy Task Force."

Work has already begun on fulfilling some High Priority recommendations, and **CLWA** members can expect to see results in the coming summer. Recruitment of a lake expert is in process; **CLWA** is financing Swimmer's Itch informational signs and other programs through the Crystal Lake Swimmer's Itch Partnership; and we are reviewing our Internet presence, printed materials and phone system for possible changes.

The task force membership included three past presidents: Bob Appleford, Ron Renner and Cliff Graves, along with current board member Roger Perry as chair. The

members met numerous times, consulted with others in the community and analyzed a survey that was distributed at the 2010 annual meeting.

The final report, presented to the Board on Sept. 7, 2010, noted that the time is right for reassessing CLWA's priorities. The association has marked six years since it was created by the merger of two separate lake groups, and it recently completed a long and expensive legal battle to limit the environmental impact of a state boat launch.

The report's introduction put it this way: "... While numerous individuals and committees have worked diligently on important activities and programs like the "Walkabout" over the past few years, it is also true that the boat launch litigation made budgeting difficult and consumed much of the **CLWA**'s funds. Perhaps even more important is the unfounded perception, by some, that the Association has lost some of its focus and momentum. Questions like: what has the Association accomplished lately? how does it benefit me? haven't we done enough research? why can't we stop swimmers itch? etc. reflect the thinking of some in our community. While it is hard to determine the pervasiveness of these feelings, the committee believes the Association needs to actively address these concerns."

The Board of Directors agreed.

CLWA is determined to maintain the good programs already in existence, while working aggressively to answer new challenges.

As always, members are encouraged to get involved by calling our office (231) 882-4001.

A GREAT TIME FOR A GREAT CAUSE: HELP PRESERVE CRYSTAL LAKE

Would you like to attend Breakfast at Wimbledon? Celebrate Bastille Day in Frankfort? Enjoy a wine tasting and gourmet picnic in a cherry orchard? Sip Champagne as the regatta boats flutter by on Crystal Lake or ride your bike around Crystal Lake stopping for a historical lecture and beach lunch? These and more are possibilities for the summer of 2011. To make them a reality, we need your help and your creativity by hosting or contributing to an event!

WHAT?

Throughout the summer, members of the **CLWA** will have the opportunity to attend one (or more) of many "**CRYSTAL CULINARY CELEBRATIONS**". The Culinary Celebrations will be hosted by CLWA members and held at various locations around Crystal Lake.

WHY?

100% of the proceeds will go toward the construction of the boat washing station that will be located at the new boat launch site. The new boat wash will allow for all boats entering Crystal Lake to be cleaned of any invasive species that could change the lake's ecology, forever. We know the destruction that invasive species can cause. Please help protect our lake! Our goal is to raise \$30,000 for the boat

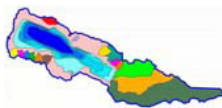
wash construction. To reach this goal we will need to have 20-30 hosted events and over 500 participants. We hope to accomplish this during the summer of 2011 and with your support, we can!

HOW?

Each culinary celebration will have a different theme. **CLWA** members are welcome to host or attend one or more of these events. With the help of committee members, hosts will set the time, date, and theme for their party, invite guests, and set a donation suggestion for each guest.

Contact us today!! Our first priority is to get the host committee lined up. If you are willing to host an event, please reserve your date today by contacting one of the board members or Susan Teteak at 608-291-0391 or tsteteak@charter.net. If you are stuck for an idea, feel free to use any of the themes we have mentioned or contact any of the committee members listed below for other suggestions.


Fundraising Committee: Susan Teteak, Chair, Joel Buzzell, Peggy Burns-Deloria, Annie DeVries, Nancy Gaffney, Cynnne Hood, Molly Jones, Katie Mills, Wanda Shreiner



CRYSTAL LAKE “WALKABOUT” - FALL 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 Crystal Lake “*Walkabout*” was held on Tuesday, Oct. 6, for 180 students from the 8th grade classes of Benzie Central and Frankfort/Elberta Schools. The enthusiastic participants encountered a bright fall morning visit four 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 Fall 2010 Site Interpreters: Ed Hoogterp, and Jim Laarman, Crystal Lake & Watershed Association; Bill Herd (ret'd) Sleeping Bear Dunes National Lakeshore; docents for the Friends of Pt. Betsie Light; and the crew of USCG - Station Frankfort. Dr. Stacy L. Daniels of the Crystal Lake & Watershed Association (**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). In 2009 the “*Walkabout*” was expanded to include a selection of twelve different Interpretive Sites. Further changes are anticipated in 2011 to respond to the changing needs Science, Technology, Engineering, and Mathematics (STEM) educational programs in the K-12 grades. 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 (available online at www.clwa.us/educ_comm.htm#EDUCATION). Additional “*Walkabout*” T-shirts, Watershed maps, and Interpretive Manuals (52pp) are available for purchase from the **CLWA**. 

CLWA ANNUAL MEETING

The 2010 annual meeting of **CLWA** members was Saturday, July 17 at the CSA Assembly Hall, 2128 Pilgrim Hwy (M-22). A short business meeting was followed by Committee updates and a question and answer session with CLWA President Ed Hoogterp.

The special program “Land Conservation Programs in the Crystal Lake Watershed” featured remarks by Glen Chown of the Grand Traverse Regional Land Conservancy.

Mr. Chown gave an update on the Conservancy’s plans for the Trapp Farm preserve along Cold Creek. He also noted that Benzie County and Crystal Lake residents have been important donors for such significant efforts as the purchase of the Arcadia, Elberta and Green Point dunes.


At the annual meeting, members elected two new board members: Joel Buzzell and Eddie Ellsworth. Re-elected were President Ed Hoogterp and at-large board members Hugh Walton and Stacy Daniels. Our thanks to outgoing board members, Phil Meek and Tom Clare, for their service.

CLWA 2011 SUMMER INTERSHIPS

CLWA continued our summer internship program in 2010, employing two 2010 high school graduates in a program partially supported through the Grand Traverse Community Foundation. Chelsea Spaulding and Tiffany Moore assisted with educational programs and helped to staff our booth at local art fairs. Kassie Ford also participated in the program as a volunteer.

For the summer of 2011, the **CLWA** board has selected Michigan Tech student Paul Gerhardt as a science intern. Paul is enrolled in Tech’s Forestry and Ecology programs. He’ll use that training to research the forest cover in the watershed and he’ll work with his professors to make recommendations for best management practices regarding management of our forests.

He is also looking at groundwater and other important ecological issues that affect the watershed. Paul’s family have longstanding ties to Crystal Lake, and the board is excited to share his expertise and enthusiasm.

Internship Coordinator Stacy Daniels and **CLWA** President Ed Hoogterp are accepting recommendations for a possible additional internship for summer 2011. Interested candidates may call (231) 882-4001 or email CLWA@CLWA.US for information. 

OTHER PLAUDITS, THANKS & CONGRATS

The 2010 Summer interns, Chelsea Spaulding, Tiffany Moore, and Kassie Ford.

Grand Traverse Regional Community Foundation for partial support of our summer interns.

Ralph Bednarz, Env. Qual. Spec., MDNRE, and long-time coordinator of the **Cooperative Lakes Monitoring Program**, for his dedication in teaching generations of volunteer water quality monitors.

Benzie County Conservation District for passage of a millage for operational support.

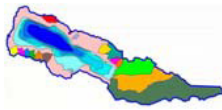
BookWear® by Field Crafts, Inc., for yeoman duty in printing the Archibald Jones shirts.

BaySide Printing, Inc., for continued publication of the Directory & Crystal Whitecaps.

L’Chayim Delicatessen and **Crescent Bakery** for their support.

Dr. Dennis Pace and other volunteers who quickly raised funds to maintain the Benzonia Village ice sheet this winter.

CLWA members, for their continued interest and support.



IN MEMORIAM GEORGE PETRITZ

The **CLWA** extends condolences to the family of George Petritz, who passed away on December 23, 2010. George and his wife Althea, who survives, were generous supporters of the CLWA and the former Crystal Lake Watershed Fund (CLWF, a predecessor of the CLWA). In 1980, he was a member of the Crystal Lake – Lake Level Committee formed at the request of Judge Wickens to recommend what became established as the two-tiered (summer/winter) legal level of Crystal Lake. George and Althea, a Benzie County native, operated the Cherry Hut restaurant for many years, and then founded Petritz Foods to sell their famous frozen cherry pies. In 1960, he was instrumental in creating a community ski area, Buck Hills, which was later purchased by George and his partners and renamed as the Crystal Mountain Resort. He had a special love for Buttercup Shores on the north shore of Crystal Lake.

IN MEMORIAM DR. HARRY H. BLECKER

The **CLWA** extends condolences to the family of Dr. Harry H. Blecker, Professor Emeritus of Chemistry, University of Michigan-Flint, who passed away on January 24, 2011. Harry and his wife Charlotte, retired to the south shore of Crystal Lake in 1988, where he was a long-time volunteer and chair of the Water Quality Committee for the former Crystal Lake Association (CLA, a predecessor to the CLWA). He authored two comprehensive reports on the water quality of Crystal Lake and was a member of the Crystal Lake Handbook subcommittee for the CLA. He and his wife, Charlotte, who survives, were recipients of the Crystal Circle Award, established to honor permanently those who have contributed in a most generous way, their time, talents and/or financial support in an outstanding manner that has made a difference in the well being of Crystal Lake.

ARCHIBALD JONES DAY

The first Archibald Jones Day was held Saturday, August 28, in downtown Beulah, to celebrate the “man who pulled the plug at Crystal Lake”. We hope this will become an annual festival to commemorate our local heritage event. As described by Leonard Case (Benzie County, A Bicentennial Reader, 1976.): ***“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.”***

To summarize this historic event: Early in the morning of August 23, 1873, in an ill-fated attempt to create a navigable channel between Crystal Lake and Lake Michigan, Archibald Jones’ Betsie River Improvement Company caused the level of Crystal Lake to be lowered by 20 feet in a few weeks. This tumultuous event resulted in Crystal Lake losing 25% of its water volume (76,000,000,000 gallons), and reducing its surface area by 25% (3,093 Acres)! Crystal Lake is still the 9th largest inland lake in Michigan with a surface area of 9,854 A and a volume of 242,000,000,000 gallons of water! The actual event most probably occurred as a result of the whitecaps of Crystal Lake washing out a temporary dam intended to be part of a slack-water canal with locks.

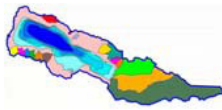
The drawdown was unsuccessful from a navigational standpoint, but created a 21-mile perimeter of sandy beach and prime recreational area around Crystal Lake where ~ 1,100 cottages and the Village of Beulah are now located. The “Tragedy” of Crystal Lake is forever preserved in the exposed terrace of sandy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

Thanks to the support of the **CLWA**, and the participation of the Beulah Boosters, Darcy Library, Crystal Lake Community Business Association, Friends of the Benzonia Library, and the Benzie Area Historical Society for working to make the day possible. Over 100 children and adults participated in era games, listened to music, saw a water demonstration and enjoyed lectures by Dr. Stacy Daniels at the Darcy and Steve “Archie Jones”, who described the “Tragedy/Comedy of Crystal Lake”. The original ballad, ‘Mistake on the Lake’. Mark your calendars for the last Saturday in August for next year’s event! 🗓️



Archibald Jones (Stacy Daniels) “pulling the plug” to simulate the ‘lowering of Crystal Lake’ in 1873.

Credit: Carol South, Traverse City Record Eagle, 18 Aug, 2010.



MINNOWS CAN MAKE A “WHALE OF A DIFFERENCE”!

Have you ever dangling your feet in Crystal Lake on a summer day and had little fish come and nibble at your toes? Did you watch them dart about the shallows crisscrossing the bottom in search of food? These are minnows. Most never grow larger than 3 in; many never exceed 8 in; and none native to Michigan exceeds 12 in. But they are more than just small fish that never grow up into big fish. The term “minnow” is often misapplied to any small young fish of common sport fish species, like suckers, trout, bass, perch, or pike. “Minnows” used as “bait” for sport fish include: alewife, bluntnose minnow, emerald shiner, creek chub, fathead minnow, golden shiner, rainbow smelt, sand shiner, spottail shiner, and white sucker.

Not all “minnows”, however, are “true minnows”, as classified by ichthyologists, i.e. those who study fishes and fish behavior. Minnows are a separate family of fish called the Cyprinidae, i.e. those having toothless jaws and no stomachs! This family includes the true minnows, and also carp and goldfish. True minnows are distinguished from all other fishes by several characteristics: their teeth are in their throats (*) and not on their jaws, their heads have no scales, and their fins have no spines! (*) These pharyngeal, or “throat” teeth, are used to identify minnows.

Minnows play an important role in the ecology of a lake where they are intermediate in the food chain. Larger game fish, like trout, bass, and pike, subsist almost entirely on a fish diet, principally minnows, their own young, and other fish species. Minnows eat a variety of small insects, algae, and other microorganisms. They often scavenge the bottom for decomposing biological matter. They are beneficial in destroying eggs and larvae of mosquitoes and other insects. There is some evidence that minnows may eat the free-swimming cercariae of the Swimmer’s Itch parasite.


The **CLWA** has discussed aquatic invasive species, e.g. Zebra mussel and Eurasian watermilfoil. (See “Invasive” or “Native” Species? http://www.clwa.us/PDF/Crystal_Whitecaps_2008_sum.pdf) There have been anecdotal observations that the numbers and kinds of minnows in Crystal Lake have been changing. The **CLWA** is considering options for evaluating the minnow population. Another concern is Viral Hemorrhagic Septicemia (VHS), a deadly fish virus that is threatening fish throughout the Great Lakes.



Crystal Lake “Whales” nibbling at your toes.


VHS infects fish gills, then internal organs, and finally blood vessels, which become weak leading to hemorrhaging and death. Symptoms include: bleeding, bulging eyes, bloated stomachs, and strange behavior. VHS is not a threat to people who handle infected fish or want to eat their catch, but it is threat to more than twenty-eight species of fish, including 19 common game fish, and the minnows used for bait. VHS-affected waters are closed to all harvesting of wild minnows to prevent the spread of this disease. Fortunately, most inland lakes of Michigan, including Crystal Lake, are free of VHS.

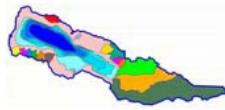
Other potentially invasive species in the news include the Asian carp (Bighead carp), a giant member of the minnow family that can grow four feet long (!) Although they are primarily “vegetarians” they can eat 40 % of their weight in plankton every day, and disrupt the ecology by starving out more desirable native fish and shellfish. Preventing exotic species from getting into a lake is

accomplished through boater education: drain all water from boats, containers and fishing equipment before leaving a lake or stream; wash boats and trailers thoroughly before entering any other uninfested waters; and not transporting live fish or fish eggs, except bait minnows obtained from a registered dealer. The **CLWA** has proposed the installation and operation of a boat-washing facility at the new MDNRE boat launch off Mollenaux Road. 


NEW 2011 GARLIC MUSTARD DROP-OFF SITE

This year’s drop-off is not at last year’s spot. Paul May, located at 904 Adams Road, just off River Road has agreed to take all black bags full only of garlic mustard and only from the Crystal Lake Watershed & vicinity during the 2011 season.

It will be interesting to see if his stock of farm animals can keep up with the usual large supply. An added bonus to volunteer GM pickers dropping off their produce will be in viewing his goats, pigs and chickens munching the delicious flavorful stalks. 




BEULAH WATERFRONT PROJECT

The village of Beulah is to receive a Michigan Natural Resources Trust Fund grant to support a \$320,000 waterfront project that will include a boardwalk and other improvements to the village's popular Crystal Lake beach. The grant is expected to cover 75 percent of the cost, with the village providing 25 percent. This project – along with the day dock put in last summer by the Beulah Boosters – should make the waterfront even more inviting at the east end of the lake. 


RAILROAD POINT EXPANSION

Also in line for a MNRTF Grant in the Crystal Lake Watershed is the Grand Traverse Regional Land Conservancy. The trust fund board recommended a \$1.3 million grant to the Conservancy for land purchases to expand the Railroad Point Natural Area. The acquisitions could include at least one private inholding in the preserve, as well as larger parcels that could potentially expand public access in the reserve from the south shore of Crystal Lake all the way to the Betsie River. The CLWA board has endorsed the concept of expanding the natural area for wildlife habitat and passive recreation.

Also approved by the trust fund board is a proposal that could open a mile of Betsie River frontage in Manistee County to public access.

The Trust Fund board recommendations still must be approved by the Legislature and governor. The money comes from oil and gas sales on state-owned property. 

SUMMER 2010 EVENTS

The CLWA continued its outreach activities to the public at six 2010 summer events: the 14th Spring Craft Fair - Frankfort, The Beulah Art Fair, the 34th Annual Frankfort Art Fair, the CSA Art Fair, the CLWA Annual Meeting, and the Archibald Jones Day celebration. Similar events are planned for 2011. 

PHOSPHORUS FERTILIZER BAN

A new Michigan law, signed by Gov. Granholm in December, will ban the use of fertilizer containing phosphorus on most lawns throughout the state beginning Jan 1, 2012.

CLWA has long advised against the use of phosphorus or phosphate on lawns in the Watershed. Excess phosphorus can leach into the lake and promote blooms of algae, which diminish water clarity, reduce the level of oxygen and harm fish and other aquatic animals.


Crystal Lake's tremendous clarity is associated in part with the lake's extremely low levels of phosphorus, as shown in our annual water testing program.

(The ingredients in bagged fertilizer are typically described by a series of three numbers, for example 20-5-5, in which the first number is the percentage of nitrogen, the second is phosphorus and the third is potash. To comply with the new law, the middle number should be zero.)

Under provisions of the new Public Act 299 of 2010, phosphorus may be used on residential lawns only in a few limited circumstances, mainly when a new lawn is being established or when a laboratory soil test shows the soil to be deficient in the substance.

Phosphorus plays an important role in root growth. Most soils in our area naturally contain enough of the substance for healthy lawns and flower beds. CLWA continues to recommend the use of deep-rooted native perennial plants to form a buffer zone close to the shore.

Another source of phosphate that historically entered lake water also was banned recently when Michigan joined other states in requiring that dishwasher detergents be formulated without phosphorus.

Benzie County and the Crystal Lake community have been leaders in the effort to keep the substance out of surface waters. A precedent setting ordinance was adopted by Benzie County in 1989 to require upgrading of onsite wastewater systems such as septic tanks. 

PUBLIC ACCESS CONSTRUCTION PROGRESS REPORT


Construction of the Department of Natural Resources Boat Launch on Crystal Lake fell behind schedule last summer due to weather issues and delays in relocating utilities.

The current schedule calls for construction through the spring and summer of 2011, with a likely opening around Labor Day.

The state's contractor, Jaran Construction of Allegan, Mich., completed the rebuilding of the intersection of Mollineaux Road and M-115 in November. In addition, the site has been cleared of brush and a number of trees have been removed in preparation for further construction.

When work resumes in the spring, Jaran will build an entrance to the launch site off Mollineaux Road. The project includes one paved parking lot, a road and a pedestrian stairway down the hillside to the lake, and the launch site itself.

CLWA has closely monitored the work. We remain concerned about possible erosion during the construction period. The state and the contractor have thus far been sensitive to our environmental concerns. The old railbed that supports the Betsie Valley Trail was left in place over the winter in part to serve as a barrier to prevent silt from reaching the lake. The contractor is required to use best practices over the summer when relocation of the trail and dredging of the lake bottom will present even more challenges.

CLWA is continuing discussions with the state on our proposal to construct a boat-washing station on the upland portion of the site. The boat-wash is part of a larger strategy to prevent the introduction of invasive species into the lake. Under terms of a 2010 court settlement, the state will provide CLWA with a lease to build and operate the wash station. Several designs are under consideration and CLWA will be engaged in fund-raising to make the boat-wash a reality. 

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) 📄

Board of Directors

Officers

President: Ed Hoogterp

Vice President: Alan Appelhof

Treasurer: Bob Schmidt

Members at Large

Jim Buzzell

Roger Perry

Doug Gibson

Bill Beck

Jim Hooker

Wanda Shreiner

Jim Laarman

Julianne McKnight

Joel Buzzell

Sandra O'Neal

Stacy L. Daniels

Eddie Ellsworth

High Walton

Ex-Officio

Bob Appleford

Administrative Support:

Karen Dennis (*Day Bookkeeping Service*)

WATERSHEDWARE

Denim Shirts \$ 30

CLWA "Wave" pocket crest
(Sizes: Adult S, M, L)

T-Shirts \$ 15

The **CLWA** now offers three colorful designs.
(Sizes: Adult S, M, L, XL, 2XL; Child S, M, L)

CD's \$10

"The Ballad Of Archibald Jones"

Maps \$ 3 each \$10 set of four

Denim Shirts



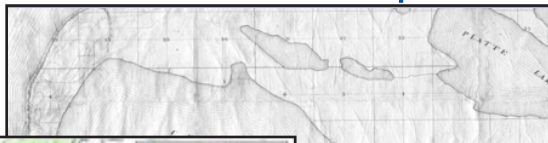
"Walkabout"

Archibald Jones

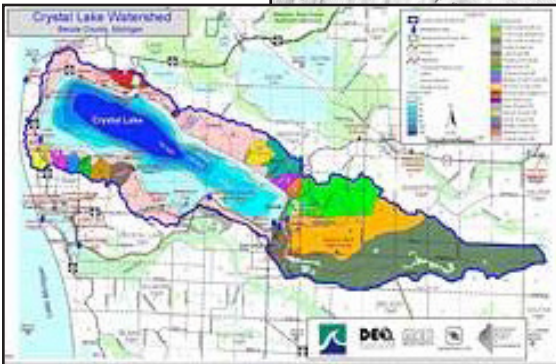


CLWA "Wave"

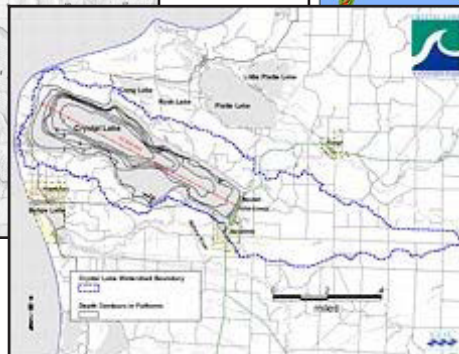
1860 Historical Map



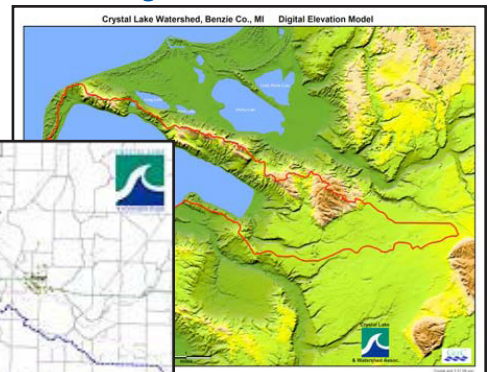
Full-Color



Outline



Digital Elevation Model





ARCHIBALD JONES JR?



FALL WALKABOUT: CSA BEACH



FALL WALKABOUT: COAST GUARD STATION



FRANKFORT ART FAIR



CLWA BOARD MEMBERS TOUR BOAT LAUNCH SITE



SCENIC SUNRISE



FALL WALKABOUT: POINT BETSIE



BEULAH JULY 4TH: ARCHIE AND THE INTERNS

• 2011 TENTATIVE CALENDAR OF EVENTS •

CLWA

April 23 CLWA Board Meeting
 May Spring Walkabout
 May 21 CLWA Board Meeting
 June 25 CLWA Board Meeting
 July 16 Annual Membership Meeting
 Aug. 13 CLWA Board Meeting
 Sept. 17 CLWA Board Meeting
 October Fall Walkabout

Regular board meetings will begin at 9 a.m. at the Benzie Health Department/Community Center on M-115. The annual membership meeting will begin at 9:30 a.m. at the CSA Assembly Hall.

LOCAL

Feb 12..... Winterfest - Beulah
 Feb 19-20..... Shiver by the River - Frankfort
 June 18..... Craft Fair - Frankfort
 July 4..... Parades/Fireworks – Beulah/Frankfort
 July 4..... Firecracker 5K Race - Beulah
 July 9 Beulah Art Fair
 July 18 Port City Run
 July 16 Elberta Art & Crafts Fair
 July 20 CSA Arts & Crafts Fair
 Aug 1 Ecology Day - CSA
 Aug 8 Crystal Lake Team Marathon
 Aug 19 Frankfort Art Fair
 Aug 27 Archibald Jones Day
 Oct 1 Fall Festival - Beulah
 Oct 8 Fall Festival- Frankfort

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



CRYSTAL LAKE & WATERSHED ASSOCIATION

P.O. Box 89 • Beulah, Michigan 49617

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www.CLWA.us • info@CLWA.us