



**SUMMER  
2008**



## **CWC PURSUES CONSERVATION OF POPULAR RECREATION SITES**

The Conservancy is pleased to announce that it has **signed an agreement to purchase 210 feet of lakeshore at Sandy Bottom**, north of Stow, NY. This popular site for swimming and boating contains about 3.5 acres of moist forest, interlaced with springs, watercourses and small wetlands. “We are delighted that we could work with conservation-minded landowners to avert this property from going on the market. With an agreement in place, CWC must now raise the funds to complete the purchase of this site,” said John Jablonski III, CWC Executive Director. The CWC has applied for state funding toward half the project cost and will be requesting your support to permanently protect this land. The Conservancy is also negotiating to conserve an additional forest and wetland shoreline site in Ellery and a beach site on Lake Erie. These two sites are presently on the market, so **we need to secure major contribution pledges quickly in order to save these sites before they are sold!** Please contact the CWC office or a board member if you would like to participate in providing funds or seeking donors to help us permanently protect these sites. ❁



*Sandy Bottom is a popular recreational site for both boaters and swimmers.*

## **CWC HOSTS SHORELINE MANAGEMENT PROGRAM**

On July 9<sup>th</sup>, the CWC hosted the second installment of its 2008 Healthy Landscapes ~ Healthy Waters program series at the Village Casino in Bemus Point. The program focused on the impacts that shoreline management has on lake fisheries, plants and lake food chain and asserted that **wild shorelines are best for healthy fish populations and diverse plant communities**. Featured speakers were Robert Johnson (Manager and Research Support Specialist of Cornell University Research Ponds), Jan Bowman (Associate Professor of Biology at Jamestown Community College), Christopher Ecker (a recent JCC graduate), and John Hiebert (Coordinator of the Shoreline Habitat Program for the Minnesota Department of Natural Resources). Sixty persons attended the event, including county staff, elected county and town officials, Lake Commission committee members, NYS Dept. of Environmental Conservation staff, and members of the general public.

Johnson, who has studied the relationship between lake insects and nuisance plant abundance on Chautauqua Lake since 2002 and who has documented aquatic weevil and moth larvae damage to the lake’s milfoil at various locations, reported that there is no milfoil present in Burtis Bay this summer. Johnson attributed this to the highly successful reproduction of the caddisfly in the summer of 2006. During his 2007 research, Johnson tracked the movement of caddisfly larvae and damage to milfoil from these insects as they crossed the lake and decimated the standing population of milfoil in late summer and fall 2007. *(continued on page 5)*

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Chautauqua  
Watershed  
Conservancy

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John Jablonski III, *Executive Director*  
Jill Desborough, *Director of Operations*  
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Founded in 1990, the Chautauqua Watershed Conservancy is a non-profit organization under Section 501(c)(3) of the Federal Tax Code whose mission is to preserve and enhance the water quality, scenic beauty and ecological health of the lakes, streams and watersheds of the Chautauqua region. The CWC is the only organization in the Chautauqua region working to promote best land management practices and to conserve local, undeveloped shoreline and wetland areas. All donations to the CWC are tax-deductible to the full extent of the law and any and all donations are greatly appreciated. *The 'Shed Sheet* is a quarterly publication of the Chautauqua Watershed Conservancy and is issued in January, April, July and October.

## *A Message from the President*

by Arthur D. Webster

Dear Friends,

Your Board of Directors has focused on land conservation as a major priority for the foreseeable future. This is an urgent issue because there is now only about one mile of undeveloped land bordering Chautauqua Lake. Conserving this land is important for the health of the lake because land bordering the lake provides the best filtration of water runoff before it enters the lake.

So the CWC is embarking on a **LAST MILE CAMPAIGN** to purchase much of this remaining undeveloped land. Your Board of Directors recognizes that the CWC has an immediate and possibly final opportunity to conserve two of the most popular boating and swimming sites on Chautauqua Lake by purchasing the adjacent shoreline forest and wetland sites.

But in order to save these rare natural habitat sites from being sold for residential development, we must move quickly to raise the funds to purchase them. **Your Board is committed to acting now. If we don't, we lose these sites forever.**

The first site is the Greenhurst Forest Boater Recreation Site, which includes 3.9 acres and 308 feet of shoreline and is located in Ellery on Route 430 west of Greenhurst. It is one of the last remaining popular boating and swimming spots which has not been blocked for public use by docks, buoys or moorings. It is an important piece of property not just for recreational reasons but because it possesses wetland and because it slows and stores the stream waters flowing from the steep hillside above.

The second site is the Sandy Bottom Lakeshore Forest Boater Recreation site, which is located directly across from Long Point State Park. It is in the town of Harmony at the west end of Wells Bay Road, north of the hamlet of Stow, and it consists of 3.5 acres including 210 feet of shoreline. This parcel is especially important to conserve because any residential development on it would preclude future use of lake surface for swimming and boating. This site is also important because it is a moist, forested wetland habitat.

***To accomplish these outstanding projects, the CWC must raise \$1,000,000 in one year and another \$500,000 within two years.***

Your Board is committed to these projects and will lead the way in making their purchase possible. We trust that you, as members of CWC, will join us in a concerted effort to make this phase of the **LAST MILE CAMPAIGN** a success.

Land conservation is the primary focus of the CWC, and we are truly fortunate to have the leadership of Executive Director John Jablonski, Director of Operations Jill Desborough and a dedicated and forward-looking board of directors. But nothing would be possible without the support of members like you, and we thank you for your continued involvement, support and commitment.




## **A Message from the Executive Director**

by John Jablonski III



### **Enjoy the beauty of Chautauqua!**

I hope that you will take the time during your busy summer to pause, appreciate, experience and enjoy the beauty of the Chautauqua region. Watch a sunset over the lake, paddle down a creek, float on a raft, lounge on the dock, sit at a park, hike a trail or explore a preserve. We really have something special here!

The dedicated directors and staff of the Conservancy are pursuing multiple avenues to conserve and enhance our watersheds, forests, wetlands, streams and lakes so that, now and for years to come, we and future generations of families can enjoy this beauty and these lake and outdoor experiences as we have. We won't have another chance to save many of these sites.

The Conservancy board of directors and staff are working hard to:

- Negotiate fair deals with landowners to conserve some of the most threatened important shoreline sites on Chautauqua Lake and Lake Erie. *Time is of the essence!*
- Build the strategy, team and community support to launch an urgent campaign to raise the funds needed to save two sites on Chautauqua Lake and one on Lake Erie which are presently on the market!
- Build partnerships with Chautauqua County, the Chautauqua Lake Management Commission and Cornell Cooperative Extension to hire a watershed steward and launch an expanded watershed education program that will educate landowners on the various ways they can manage their properties in order to absorb storm-water to recharge groundwater, avoid erosion, and absorb pollutants. ***We need to restore healthy watershed functions to the basin around our lake!*** It is our intent to engage a knowledgeable person who can help you with practical ideas on how to landscape your property to make it part of the solution.
- Present informative programs to help you take care of your piece of the watershed.
- Keep you aware and engaged in all of these activities.
- Encourage you to generously support these activities through making membership donations and special contributions, contacting your elected officials, speaking in support of these activities, and volunteering.

Over the last two weeks, I have had the opportunity to fish and boat around much of Chautauqua Lake. On one such trip with John Hiebert from the Minnesota Department of Natural Resources, we observed that very little of the lakeshore remains in a wild, natural condition. We were, however, encouraged to see that not just a few but many lakefront property owners have left willows and other trees growing in front of their lakeshore homes. Many have also stopped mowing right down to the water's edge, thus giving shoreline grasses and shrubs the opportunity to get a foothold on the soils.

So plant some trees and shrubs. Ask a landscaper's advice. Use native plants and trees. Use phosphate-free fertilizers. Save time, gas and money by leaving more of your property unmowed.

**Join in on protecting and restoring your part of the watershed!**



*John Jablonski III*

*Need more help?*



CWC will soon be placing various landscaping links and plant species lists on its website. The Conservancy also has copies of the book *Lakescaping for Wildlife and Water Quality* and its companion how-to DVD available for you to borrow.

Call the Conservancy's office or one of the following landscapers who has received CWC's Healthy Landscapes ~ Healthy Waters workshop training: Andersen Landscape (814-449-3260), Native Roots (716-287-3142), Krist Hansen Nursery (716-763-2452), Stone Hill Landscape and Design (716-499-2883), or GardenWorks (716-789-3712).

## CWC Welcomes New Directors



*John Rappole (above) and  
Dean Weaver (below)*

The Chautauqua Watershed Conservancy is pleased to announce the addition of *John H. Rappole* and *Don S. "Dean" Weaver, Jr.* to its Board of Directors.

A native of Jamestown, NY, **John Rappole** holds a Bachelor's Degree in zoology from Colgate University, a Master's Degree in ecology from the University of Minnesota and a PhD in zoology from the University of Minnesota. He has been a Research Scientist at the Smithsonian National Zoological Park's Conservation and Research Center in Front Royal, VA, since 1989 and has published 11 books and 120 professional papers. The main focus of his professional work has been the ecology and evolution of migratory birds and the conservation biology of endangered birds and mammals. John plans to retire from the Smithsonian at the end of 2008 and looks forward to working with CWC to help preserve and protect critical watershed elements in Chautauqua County. He and his wife, Bonnie, currently reside in Jamestown, NY.



**Dean Weaver** earned a Bachelor's Degree in Ceramic Engineering from Alfred University and is the current CEO and President of Weaver Materiel Service, Inc. in Jamestown, NY. He is an avid hunter, fisherman and golfer as well as a regular Chautauqua Lake boater. A lifelong area resident, Dean resides in Jamestown, NY, with his wife, Debbie.



## Thank You Becky Nystrom!

The Chautauqua Watershed Conservancy extends its deepest appreciation and gratitude to retiring CWC board director **Rebecca L. "Becky" Nystrom**, for her many years of dedicated service and passionate support of the Chautauqua Watershed Conservancy. Becky, a professor of biology at Jamestown Community College whose master's thesis was on Chautauqua Lake's aquatic plants, was one of the founding trustees of the Conservancy, and her knowledge, vision and leadership has helped the organization grow from a handful of concerned citizens meeting over coffee to the 1,400+ member not-for-profit organization it is today, some 20 years later.

It would not be possible to list all of Becky's numerous contributions to the organization, but here are just a few: She served in the offices of president, vice president and secretary, led CWC's annual spring wildflower tour and numerous other tours of Conservancy sites, initiated plant inventories of most of CWC's preserves, and served on the NYS Region 9 Open Space Committee, which developed recommendations for western New York projects in the 1998, 2002 and 2006 NYS Open Space Conservation Plans. Becky also provided valuable biological expertise to the organization, writing several of CWC's position letters on various lake proposals over the years. Executive Director John Jablonski said, "Becky has provided the heart and soul of this organization, keeping its activities true to its ecological mission over the last 18 years."

Suffice it to say, CWC owes a great debt of gratitude to Becky and will miss her greatly. Upon her retirement from the CWC Board of Directors, Becky was given the honorary title of *Board Director Emeritus* and will remain a key advisor for the organization. Everyone at the Conservancy will miss her greatly and wishes her the best in all her future endeavors. **Many heartfelt thanks to you Becky!**



*Becky Nystrom speaks about the importance of land conservation during a recent CWC field trip.*

## Shoreline Management Continued...

When asked if harvesting and herbicides hurt the ability of insects to control the plants, Johnson replied that harvesting generally doesn't remove all plants, and therefore, there is still some habitat for insects to utilize. Herbicide treatments, on the other hand, generally kill all the habitat for insects, including the beneficial milfoil moths and caddisflies.

Jan Bowman and Chris Ecker presented from their ongoing research on the abundance and diversity of the lake's macro-invertebrates (i.e., worms, insects, leeches and freshwater clams). These creatures are not only an essential link in the food web for gamefish and a variety of birds but also a good indicator of water quality. Their research found healthy, diverse populations of insects in the lake adjacent to undeveloped naturally-vegetated shoreline sites and found poor water quality indicator species in front of developed properties with breakwalls along the shoreline.

John Hiebert addressed the fishery impacts of shoreline development and various methods of shoreline erosion control. He reported on research in Minnesota and Wisconsin which has shown that largemouth bass and black crappies will select spawning sites related to natural shorelines and select against using sites adjacent to developed shorelines. As



*The prized muskellunge needs woody debris along wild shorelines for successful reproduction and survival. (Photo by John Hiebert/MN DNR.)*

lakes become more and more developed, fewer and fewer attractive spawning sites remain available for these and other gamefish. Hiebert also reported that fallen trees, logs, branches and twigs in and along the lake provide important shelter, food, breeding and nursery habitats for a large number of beneficial insects and fish species. He encouraged leaving these trees and logs in the lake where they fall, so long as they are not creating a navigational or recreational hazard, noting that the removal of downed trees and logs can impact the quality of the aquatic community for as long as two centuries. Hiebert further noted that lakes in Minnesota with healthy, heavily-forested watersheds have not shown a significant problem with milfoil invasions. Likewise, if there is not excess sedimentation and pollution in a lake, beneficial native plants can remain dominant.

Hiebert emphasized the importance of informing landowners of the **numerous advantages of natural shorelines** and convincing them to conserve natural shorelines wherever possible. Conserving shoreline vegetation or "buffer strips" is important to:

- 1. anchor the shoreline in place with plants whose stems, trunks and roots absorb and deflect wave and ice action, thus controlling erosion, and**
- 2. filter nutrients and sediments from human activities on shore before these pollutants reach the lake and serve to fuel algae and aquatic plant growth.**

Hiebert also emphasized that conserving the watershed must be a high priority in order to maintain a healthy lake. For property owners with waterfront lawns, Hiebert encouraged them to consider returning their shorelines to a more natural condition by considering the following restoration treatment options: leaving the shoreline alone/in a natural state (i.e., by not mowing), controlling shoreline erosion, treating exotic/non-native plants and filling in with native shrubs and tree seedlings, and/or treating the entire site and restoring it with native seedlings and seeds.



### Additional Resources:

CD: Minnesota's Dept. of Natural Resources' *Restore Your Shore*

Book: Minnesota's Dept. of Natural Resources' *Lakescaping for Wildlife for Water Quality* (Available to purchase at <http://www.dnr.state.mn.us> or borrow from the CWC office)

### Helpful websites:

<http://www.dnr.state.mn.us/shorelandmgmt/index.html>

<http://files.dnr.state.mn.us/assistance/backyard/shorelandmgmt/savewateredge.pdf>

## **Natural Shoreline: Aesthetically Beautiful & Ecologically Important**

By Jan Bowman

When looking for the most scenic, most beautiful spots to visit, what do you look for? Beauty is truly in the eye of the beholder, and an individual's perspective may be quite unique in defining "beauty." However, I think I can safely say that some of the most visited and cherished places on our planet are those that have been relatively untouched by man. It's mother nature who wins the prize! Perhaps part of what makes nature so beautiful is that it serves so many, humans as well as other living creatures, all of which are important to the delicate balance of our ecosystem. When considering the beauty of Chautauqua Lake, a place where I personally spend a lot of time, those areas that possess aesthetic beauty as well ecological importance are those few remaining stretches of natural shoreline. These are the places where the plants and animals interact the most, creating not just a sustaining balance of life but also an entertaining playground for observers. Ashville Bay at the mouth of Goose Creek is an amazing "playground" every spring as the various migratory birds such as the common merganser, red-breasted merganser, American coot, and bufflehead, just to name a few, gather and perform courtship displays which are greatly enjoyed by yours truly. As other birds appear, those that are more permanent summer residents, families are reared and the interconnectedness between living organisms becomes all the more apparent and entertaining. What many fail to see is that these areas of natural habitat are declining around our lake, as they are around the world in general, and that many of these very important rituals that entertain the human observer cannot take place for many species without suitable habitat. Some animals seem to be well equipped to adapt to the changes created by man; however, many others are not able to do so and are eventually lost. One of the most attractive features of our lake is its "natural beauty."



*Unnatural shorelines, such as the one pictured here, can diminish the diversity of macroinvertebrates in the lake, increase shoreline erosion along adjacent shorelines, and stir up sediment and other materials.*

I spent last summer, along with JCC student Chris Ecker, looking at a portion of the ecological food chain that many ignore, or try to. Macroinvertebrates are generally small, but not microscopic, organisms that lack a backbone. Clams, mussels, worms, tiny crustaceans and insect larvae, including those that will become the popular dragonflies and damselflies, are all examples of macroinvertebrates. The study last summer focused on developing a baseline so that we could document "what's out there." While looking at our data at the conclusion of the study, we noticed an increase in macroinvertebrate diversity (more types) in areas sampled with natural shoreline over those lacking natural shoreline (such as those with breakwalls). The overall average diversity of the lake was closer to those areas that were less natural, and we found this disturbing. These small organisms are important nutrient recyclers, potential indicators of organic pollution, and a very important food sources for organisms higher up in the food chain, such as fish. If we want a healthy lake and fishery, we must consider how human activity is affecting these small organisms that many wish to ignore.

This summer, Chris Ecker and I are on the lake again! This time we are looking to compare diversity over time between natural shorelines and areas with breakwalls, allowing us to consider seasonal changes and life cycles. Heavy wave action is created as water currents hit vertical breakwalls, and this high energy keeps organic material and sediments stirred up in the water column. Also, breakwalls shift wave energy and may increase the rate of shoreline erosion along adjacent shoreline areas. The increase in wave action makes it difficult for plant survival, especially the more ecologically important native plants, which in turn makes it hard for various types of macroinvertebrates and those organisms that feed on them. Fish nurseries will most likely be found where there is less water action, where plants are plentiful and where food is abundant. Let's not forget that other animals, such as frogs, salamanders, turtles, and various bird species, also depend upon the natural shoreline for habitat. You won't find a turtle sunning itself on a breakwall! Conserving the "last mile" of natural shoreline is both aesthetically and ecologically important for Chautauqua Lake.

*(continued next page)*

*Natural Shoreline continued...*

For those that own homes on the lake, there are some options that will add beauty and provide improved habitat for the living creatures dependent upon Chautauqua Lake for survival and success. Shoreline erosion is a problem that lakefront residents most certainly deal with. One ecological approach would include using large rocks to break up the wave action and reduce the suspension of sediments that would otherwise be created by a vertical breakwall. Also, allowing for a natural strip of shrubs, trees (such as willows), or even perennial plantings will provide two very important ecological benefits. First, the roots of larger plants will be better able to hold soil in place and prevent erosion. Grass roots run shallow and don't hold the soil in place against the wave action. Second, the deeper roots and thicker vegetation help to filter out nutrients and sediments heading for the lake as run-off. The wider the buffer strip, the greater the benefit. These natural or planted buffer strips are beautiful and ecologically functional. From the biological perspective, I can tell you what is better for the lake's ecology. From the human observer's perspective, which view of the shoreline would you be more drawn to for its beauty? I know my choice!! 

*Examples of shorelines along Chautauqua Lake with natural or planted buffer strips, which help reduce shoreline erosion as well as the sedimentation and pollution of the lake by filtering nutrients and sediments from water runoff before it enters the lake.*



## Chautauqua Watershed Conservancy

*Yes! I want to help preserve the lakes, streams and watersheds of the Chautauqua region.*

- I want to:  become a new member of CWC  
 renew my annual CWC membership

Name \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Address \_\_\_\_\_ Email \_\_\_\_\_

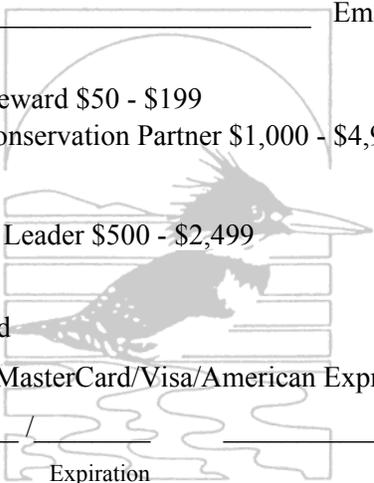
Individual/Family Memberships:

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Friend \$1 - \$49       | <input type="checkbox"/> Steward \$50 - \$199                   | <input type="checkbox"/> Contributor \$200 - \$499 |
| <input type="checkbox"/> Supporter \$500 - \$999 | <input type="checkbox"/> Conservation Partner \$1,000 - \$4,999 | <input type="checkbox"/> Land Legacy \$5,000+      |

Business/Corporate Memberships:

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Sponsor \$100 - \$499 | <input type="checkbox"/> Leader \$500 - \$2,499 | <input type="checkbox"/> Partner \$2,500+ |
|--|---|---|

- My tax-deductible check is enclosed
- Please charge \$ \_\_\_\_\_ to my MasterCard/Visa/American Express/Discover



Card Number

Expiration

Signature

Please remit with your contribution to: Chautauqua Watershed Conservancy, 413 North Main Street, Jamestown, NY 14701



## *News from the Chautauqua Lake Association*

### *Vegetation in Chautauqua Lake: The Good, the Bad and the Ugly*

There is much conversation, conjecture and speculation about the types of plants that exist in Chautauqua Lake. Most of these comments regarding plant growth sway toward the negative. The fact of the matter is there are many plants that are beneficial to the ecosystem of the lake. These plants provide food, shelter and healthy environments for waterfowl, animals and fish. I would like to take this opportunity to briefly inform people on exactly what types of vegetation benefit and hinder the lake's viability.

According to a study done by Robert Johnson of Cornell University's Ecology and Evolutionary Biology Department, "A high diversity and moderate density of native plants is the most favorable mix for the lake's ecosystem." Simply put, we need plants in the lake – we just need less of some and more of others.

As in life, we have to take the bad with the good and deal with those exotic plants that are not native to Chautauqua and neighboring lakes but that are now found in Chautauqua Lake or close by. These plants deserve special attention because many become over abundant and push out desirable species. The Cornell study points out that "although these plants provide some benefit to large populations of invertebrates and small fish, the negative influences far outweigh the positive ones in the Chautauqua Lake ecosystem." As we all know, these nuisance plants exist and have to be dealt with responsibly. However, there are numerous beneficial native plants residing in the lake that provide stability to the ecosystem of the lake every day as they have for decades. First, let's hear the good news.

The following are a few of the many indigenous plants to the area and New York State that provide many benefits for the Chautauqua Lake Ecosystem, especially a great variety of animal species (all information is based on the Cornell study):

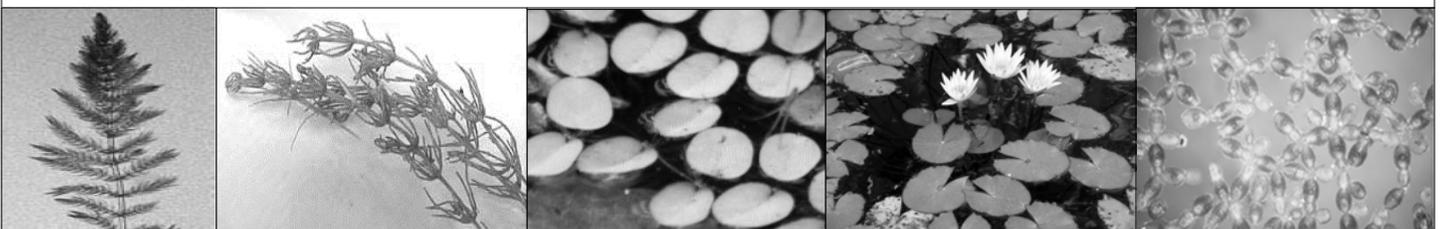
**Coontail (*Ceratophyllum demersum*):** Coontail is a native submersed aquatic plant that lacks true roots and can grow in very deep waters because of its ability to grow with low light intensity. The leaves of this "tail-like" plant provide shelter for many organisms and foraging possibilities for fish. Waterfowl (black duck, bufflehead, mallard, etc.) eat the foliage and fruit of this plant.

**Muskgrass (*Chara vulgaris*):** Characterized by its strong musk, skunk or garlic-like odor produced when removed from deeper waters (up to 30 feet), chara often display orange fruiting bodies that produce spores. This crusty feeling plant is a favorite for waterfowl and is also a valuable fish habitat and shelters food for young trout and large- and small-mouth bass.

**Common Duckweed (*Lemna minor*):** Found in the still waters of bays and ponds, this native species belongs to a group of plants known as free-floaters. New leaves remain attached creating floating clusters on the water. Duckweed can provide up to 90% of the dietary needs of a variety of ducks and geese. It is also a food source for muskrat, beaver and fish. An important fact about duckweed is its natural ability to prevent excessive mosquito breeding.

**Common White Water Lily (*Nymphaea odorata*):** A well-known native aquatic plant easily identified by its round floating leaves. The lily's blossom is about 4-8 inches wide with many white petals (*continued next page*)

*Below (left to right): coontail, muskgrass, common duckweed, white water lily & common water meal.*

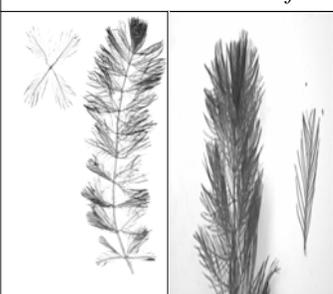


*News from the CLA continued...*

arranged around a yellow center. They occur in calm waters of the lake growing in shallow areas of less than 10 feet in depth. This plant provides seeds for waterfowl. Deer, muskrat, beaver and porcupine eat the plant's rhizomes, and the pads offer shade for fish.

**Common Water Meal (Wolffia Columbiana):** Water meal is a small, grainy free-floater that lacks roots, stems or true leaves and is found mainly on the shoreline. Its tiny round body floats on the surface absorbing nutrients directly out of the water. A food source for a variety of ducks and geese, including mallard, it is particularly useful because of the dense canopies they form which physically block mosquito larvae from getting the necessary oxygen for survival.

*Below: Eurasian watermilfoil*



Here are some non-native species that are not always welcome in Chautauqua Lake:

**Eurasian watermilfoil (Myriophyllum spicatum):** Perhaps the most notorious of the bad vegetation residing in the lake, milfoil often shades out other native plants when it creates a canopy of slender stems that emerge above the water's surface. An extremely adaptable plant, it is able to thrive in a wide variety of adverse conditions.

**Curly-leaf pondweed (Potamogeton crispus):** A non-native species that grows early in the season and will often reach the water's surface by mid-June. The good thing is that it eventually dies back, dropping out of the water column by the end of July. This plant can even grow under thick ice and often dominates the submersed plant community. It is able to thrive in waters that are polluted, disturbed or lacking in sunlight.

*Below: Curly-leaf pondweed*



Here are some plants that are *not* currently found in the lake but require vigilance as they may become a threat:

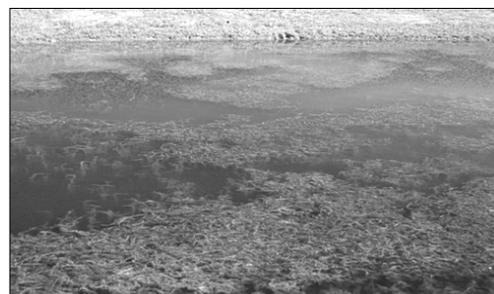
**Water chestnut (Trapa natans):** A floating aquatic plant, whose submersed leaves are feather-like, is easy to recognize but difficult to eradicate once established. This non-native species flowers in mid-July producing large fruit or "chestnuts" which can be very painful if stepped on. These nuts fall to the bottom of the lake, generating new growth.

**Hydrilla (Hydrilla verticillata):** Hydrilla is dubbed the "perfect weed" because of its extraordinary adaptability to a wide range of environments. This plant is a threat to estuary systems because it is able to tolerate salinities of up to 10 percent per thousand. Hydrilla is considered one of the most problematic of aquatic invaders because it can grow up to 25 feet and tends to branch out, forming a tangled mat.

These are just a few of the many native and non-native plants growing in or close to Chautauqua Lake. As you now know, some of these plants provide benefit while others cause headaches for people and animals that inhabit the lake and its shores. The Chautauqua Lake Association is committed to understanding the science of our lake and its various forms of vegetation, both good and bad, and to promoting public understanding that not all aquatic plants are a nuisance and that, in fact, most are beneficial to the ecosystem of the lake. It is this knowledge that help us make responsible, informed and prudent decisions in the care and maintenance of the lake. 🌿

Sincerely,

Tad Wright,  
Chautauqua Lake Association President



*For decades, Eurasian milfoil has been one of the most common invasive aquatic plants plaguing Chautauqua Lake.*

\*\*\*\*\*  
 \* ~ *Special Thank You Notes* ~ \*  
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**Welcome New Members!**

Thomas & Tania Campbell  
 Cindi DelBrocco  
 Michael & Kelly Holland  
 A. Magdalyn King  
 Ward & Deborah Kinney  
 Pamela S. Meabon

Timothy & Nancy O'Brien  
 Diane Randolph  
 Benjamin S. Sorensen  
 Jack & Connie Thayer  
 Dennis & Sheila Webster  
 Christine Wipasuramonton

**Recent Support from Business & Club Members**

Chautauqua Yacht Club  
 JCC Earth Awareness Club  
 Jamestown Garden Club

Hartley Buick GMC Truck, Inc.  
 The Sportsmen's Club  
 Yule Tree Farms

**Memorials & Honorariums**

In memory of Margaret Miller Newman from Richard H. Miller & Ministrare, Inc.  
 In memory of Harlow "Ariel" Russell from Ronald Southland

**CWC Preserve Work Progresses with Help from HSBC**

The Chautauqua Watershed Conservancy was selected by **HSBC Bank and Beneficial Finance** for their community volunteering day this year. On June 14<sup>th</sup>, **HSBC employees and volunteers Jodi Fellows, Jessica Ehman, Jerrod Becker and Bryan George** spent the morning removing exotic invasive vegetation, cutting and marking a trail, and installing erosion control at the Conservancy's Chautauqua Lake Outlet Greenway Preserve on Fluvanna Avenue in Jamestown.



*Employees from HSBC Bank volunteer at CWC's Outlet Greenway Preserve on Fluvanna Avenue in Jamestown.*

We thank HSBC and these four employees for the help provided as CWC readies a new parking area and trail head. The CWC had a parking area graded in June and expects to install landscaping in early fall. Students at the Erie 2 Chautauqua Cattaraugus LoGuidice Educational Center have constructed a kiosk for a map and interpretive signs.

CWC would also like to thank **Paul Gustafson, Dr. David Todd and Jim Mayshark** for cleaning up an old residential dump and miscellaneous debris on the Outlet Greenway parcel adjacent to Fluvanna.



## **Eutrophication and Hypoxia Cited for Coastal Areas Worldwide**

From NALMS Notes 5/20/08

According to a report released by the World Resources Institute (WRI), coastal communities are experiencing very real economic hardship from agricultural and industrial pollution. Excessive nitrogen and phosphorus are one of the leading causes of degraded water quality and related problems. WRI identified 415 eutrophic coastal areas throughout the world. Over half the systems are experiencing one or more symptoms of eutrophication, including toxic algal blooms, loss of biodiversity, and coral reef die-off. Oxygen depletion, creating "dead zones" that are unable to support marine life, are also common. Few areas identified exhibit signs of recovery. 78% of the assessed continental U.S. coast and 65% of Europe's Atlantic coast rated eutrophic. In the United States and Europe, agricultural sources such as animal manure and commercial fertilizers are typically the main causes of eutrophication. Sewage and industrial discharges are a secondary source, but better treatment is still needed in many areas. As a result, the WRI recommends environmental agencies and costal authorities in the United States should: (1) continue coastal zone assessments; (2) ensure that eutrophication assessment methodologies are being consistently applied; (3) and enhance decision-support tools. Eutrophication and Hypoxia in Coastal Areas: A Global Assessment of the State of Knowledge, can be found at: <http://www.wri.org/publication/eutrophication-and-hypoxia-in-coastal-areas#>.



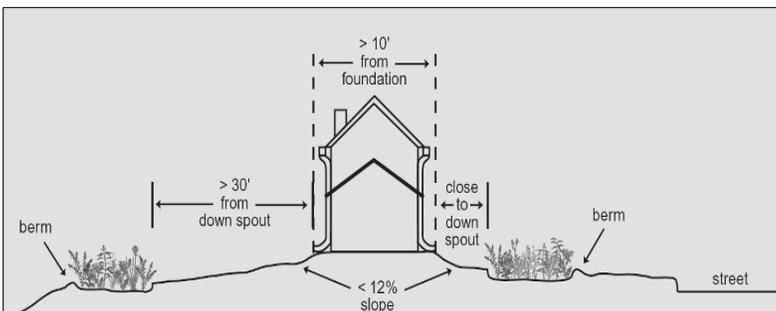
## **Watershed Steward Wanted**

Cornell Cooperative Extension of Chautauqua County, in partnership with the Chautauqua Watershed Conservancy, is seeking applications for the position of Watershed Steward to be funded through Chautauqua County/Chautauqua Lake Management Commission. This person will develop and deliver watershed education materials, programs and technical assistance to reduce the nutrient and sediment loading to Chautauqua Lake. Desired qualifications for this position include a positive, dynamic, self-starting person with excellent communication and teaching skills and a bachelor's or advanced degree in landscape design, horticulture, turf grass management, biology, environmental science or science education with a fundamental knowledge of plant and soil science and use of herbaceous and woody plant materials. Interested candidates should send resumes to: [jtp67@cornell.edu](mailto:jtp67@cornell.edu) no later than August 15th. EOE/EPO



## **Watershed Steward Talks Stewardship**

On June 14<sup>th</sup>, CWC hosted the first of its 2008 Healthy Landscapes ~ Healthy Waters workshops entitled **Landscaping and Maintaining Your Yard and Home for Clean Waters**. The event was held at and co-sponsored by Chautauqua Suites Meeting and Conference Center in Mayville. Featured speaker Sharon Anderson, Watershed Steward for the Cayuga Lake Watershed Network, noted that half of all residential lawns are over-fertilized and that *residential lawns receive ten times the amount of chemicals on a per acre basis than agricultural lands*. She stated that most lawns in



Rain garden placement for groundwater recharge and pollution control.

New York State do not need additional phosphorus and recommended that landowners have a soil test performed through Cornell Cooperative Extension to get accurate soil liming and fertilization recommendations. Homeowners who choose to fertilize lawns should apply a nitrogen fertilizer once in early September or one-half the recommended amount in late May and the other half in early September. Sharon also encouraged landowners to landscape their yards in such a way that allows rain water to soak into the ground rather than run off.





# Upcoming Events

*Mark your calendars!*



Saturday, August 2nd,  
10:00 a.m. to 12:30 p.m.

*Chautauqua Gorge Hike* led by Jay Stratton. Meet at the Patterson Library on South Portage Street in Westfield, rain or shine, for a hike through Chautauqua Gorge. Dress appropriately for slippery stones and cold water.

Sunday, August 17th,  
4:00 p.m. to 6:00 p.m.

*Tour of Last Mile Campaign Sites* led by CWC Board Director Emeritus and JCC Biology Professor Becky Nystrom and CWC Executive Director John Jablonski. Meet at Hogan's Hut in Stow to go on a first-hand tour of the Sandy Bottom site and other potential conservation sites and learn why they are important to conserve.

Monday, August 18th,  
7:00 p.m. to 8:15 p.m.

*Managing Geese as Nuisance Wildlife* presentation by Cornell University Wildlife Science Professor Dr. Paul Curtis, Cornell University Department of Natural Resources. Dr. Curtis will discuss several goose management alternatives and results from urban goose research conducted in western New York. Presentation will be held at the Celoron Community Building (log cabin) at Lucille Ball Park, Boulevard & Dunham Avenues, Celoron. (Follow signs for The Summer Wind.)

(Dr. Paul Curtis will also be presenting on Tuesday, August 19th at 12:15 p.m. for the Bird, Tree & Garden Club at Smith Wilkes Hall at Chautauqua Institution.)

*NOTE: All events are open to everyone at no charge, with donations gratefully accepted. Please register for all events by e-mailing [info@chautauquawatershed.org](mailto:info@chautauquawatershed.org) or calling 716-664-2166.*

## Chautauqua Watershed Conservancy



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*Preserving and enhancing the water quality, scenic beauty and ecological health of the lakes, streams and watersheds of the Chautauqua region.*

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