About 75 people attended the Otsego County Conservation Association open house on Saturday, July 28. OCCA Board members and staff met with visitors from 9:30 a.m. to noon for informal conversation and to celebrate the new office at Mohican Farm, 7193 State Highway 80. The open house event included discussions on the current state of Otsego Lake as well as the $1 million Cleaner, Greener Communities Program grant announced in June to the Mohawk Valley Region (Fulton, Herkimer, Oneida, Otsego, Montgomery, and Schoharie counties, with Otsego County as the lead applicant). Tours of the Mohican Farm composting facility by Robert Sutherland, farm manager, and information on a solar hot water installation by CNR Energy Solutions were also featured. Lia Solensten, one of seven winning essayists in OCCA's Campership Sponsor Program Essay Contest, was also recognized. OCCA's main office—which houses Executive Director Darla M. Youngs, Environmental Planner Rima Shamieh and Program Director Travis Sauerwald—was relocated to Mohican Farm in April of this year. Mohican Farm is situated on the corner of State Highway 80 and Allen Lake Road. The OCCA office is in the white building closest to the greenhouse—visitors should use the Allen Lake Road access to the parking area. OCCA Special Projects Manager Martha Clarvoe retains a satellite office at 101 Main Street, Cooperstown where she has relocated next door to the American Red Cross.

Top right: OCCA’s main office at Mohican Farm is also the new site for monthly meetings of the OCCA Board of Directors. Right: Robert Sutherland and Jason Vickerson of Mohican Farm mount the sign on OCCA’s new office. They are joined by office mascot Romeo, whose sister, Juliet, was not present for the photo.
Otsego, Schoharie stakeholders sought for Mohawk Region CGC

The Otsego County Conservation Association is working to identify and recruit stakeholders from Otsego and Schoharie counties for the Mohawk Valley Region Cleaner, Greener Communities Program. “The recent award of the $1 million Cleaner, Greener Communities grant to the Mohawk Valley Region is a great step toward bringing our local communities and our region as a whole closer to a sustainable and energy-efficient future,” said OCCA Executive Director Darla M. Youngs.

The Cleaner, Greener Communities Program funding comes from the New York State Energy Research and Development Authority (NYSERDA) and is intended to empower regions to create more sustainable development and encourage smart growth practices.

Sustainable communities adopt smart growth practices to:
• Use renewable energy to become more energy independent
• Control sprawl to reduce housing and transportation costs
• Invest in public transit systems to serve more people and minimize pollution
• Build stores, schools, and workplaces near neighborhoods to reduce vehicle miles traveled
• Attract businesses to neighborhoods to create jobs, and keep dollars local
• Make walking and bicycling easy to foster healthy lifestyles
• Reuse developed land to improve economic potential
• Adopt clean technologies to grow our 21st century economy
• Conserve resources to strengthen the natural environment
• Reduce greenhouse gases to improve and protect our environment.

The first phase of the program is creating a sustainability plan to outline the region’s vision, goals, and objectives for a sustainable future. It will identify infrastructure and policy improvements that can be made at the regional level which will have the greatest impact on reducing air pollution and carbon emissions and will increase energy efficiency and renewable energy development. The sustainability plan will align with the strategic plan of the Mohawk Valley Regional Economic Development Council.

Through the second phase of the program, up to $90 million will be available statewide on a competitive basis to implement projects that support the goals of each region’s sustainability plans. Projects identified during the planning process must create opportunities that provide the greatest probability to reduce greenhouse gas emissions, save energy, and deploy renewable energy, while improving the economic and environmental health of the Mohawk Valley Region’s communities.

Cleaner, Greener Communities stakeholders include regional entities (municipal and economic development agencies, non-profit organizations, business associations, and colleges/universities) and individuals, and they are encouraged to be part of the planning process. The planning process requires formation of working groups whose members will have expert knowledge or key perspective in the following topic areas:

1. Economic Development (including tourism)
2. Transportation
3. Land use and Livable Communities (including public open spaces)
4. Water Management
5. Waste Management
6. Energy
7. Agriculture and Forestry
8. Governance
9. Climate Change Adaptation

Working group members will be selected by the Consortium based on their ability to satisfy the necessary time commitments and the need to ensure a balanced group is formed in the following areas:

• Geographic location
• Organizational representation
• Viewpoint or perspective
• Type of organization: government, NGO, academic, private, etc.

Stakeholders not qualified to serve on a working group will be able to participate through input to working group members. Groups and individuals who are interested in participating – but aren’t able to become working group members – can also sign on as stakeholders and will have an opportunity to participate through a series of public workshops.

Those wishing to be added to the Cleaner, Greener Communities stakeholder list on behalf of Otsego and Schoharie counties, and/or who would like further details on the working groups, are asked to contact OCCA Program Director Travis Sauerwald as soon as possible at programdirector@occainfo.org or (607) 282-4087.

The Cleaner, Greener Communities Program grant was awarded by NYSERDA to Otsego County on behalf of the Mohawk Valley Region – Fulton, Herkimer, Oneida, Otsego, Montgomery and Schoharie counties. To learn more, visit http://www.nysdera.ny.gov/en/Statewide-Initiatives/Cleaner-Greener-Communities.aspx?sc_database=web.

WE NEED TO ENSURE THAT INEVITABLE CHANGE IS CAREFULLY PLANNED AND WILL NOT DESTROY THIS AREA THAT WE HAVE COME TO LOVE. OCCA IS WORKING HARD TO EDUCATE, AND TO GUIDE AND LEAD THAT PROCESS, SO THAT THESE TREASURES WILL NOT ONE DAY BE LOST.

Our effectiveness is directly linked to the degree to which our members support us. Among other initiatives, with your help we can:

☑ SAFEGUARD AGAINST THREATS TO OUR ENVIRONMENT IN GENERAL, AND WATER QUALITY, THE CORNERSTONE OF OUR MISSION, IN PARTICULAR.

☑ WORK WITH AREA MUNICIPAL OFFICIALS, OTHER ENVIRONMENTAL ORGANIZATIONS AND INDIVIDUALS TO PROTECT THE PLACE WE ALL CALL OUR HOME.

☑ MEET OUR CHALLENGE – NATURAL GAS DRILLING AND OTHER FORMS OF HIGH IMPACT DEVELOPMENT – WITH SOUND REGIONAL LAND-USE PLANNING AND REVIEWS.

NOW, MORE THAN EVER, WE NEED YOUR SUPPORT!

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YES, I would like to renew my OCCA membership.

☐ Friends of OCCA (under $200) ☐ The Contributors’ Circle ($200-$499) ☐ The Sponsors’ Circle ($500-$999)

☐ The Stewards’ Circle ($1,000-$4,999) ☐ The Benefactors’ Circle ($5,000-$9,999) ☐ The Trustees’ Circle ($10,000+)

Name ________________________________

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Address ________________________________

City ___________________________ State _____ Zip ______ Phone ________

Clip and mail to: Otsego County Conservation Association, PO Box 931, Cooperstown, NY 13326

www.occainfo.org

Photos by S. Tier French
Cooperstown paints sharrows on Main Street

What is that new symbol painted on Main Street? It is a sharrow.

A sharrow, or share the road arrow, is an instructional road marking that promotes traffic safety for bicyclists, motorists, and pedestrians. A sharrow is usually painted on a low speed road which is not wide enough for a bicycle lane.

The presence of a sharrow reminds everyone that a bicyclist has the legal right to drive a bicycle on the road in the traffic lane and not on the sidewalk where pedestrian injuries occur. (In Cooperstown it is illegal for an adult to drive a bicycle on the sidewalk.)

The direction of a sharrow teaches everyone that a bicyclist must follow the same traffic rules as a motorist, including driving on the right with traffic, and not on the left against traffic where “wrong way” collisions occur.

The peak of a sharrow indicates where, in the traffic lane, a bicycle should be positioned for safety at that specific location. On Main Street, which has parallel parking, the peak of a sharrow is painted in the middle of the traffic lane, 4 to 5 feet to the left of parked cars. This lane position avoids injuries that occur when a parked motorist inadvertently opens a car door into an oncoming bicyclist (the open door zone). In this lane position, a bicyclist is legally and safely “taking the lane,” in line with motorists, as opposed to “sharing the lane” by staying more to the right. A bicyclist taking the lane must be predictable by driving a straight line in the lane without swerving, maintain an adequate speed so as not to hinder motor vehicles (easy to accomplish on Main Street), yield to pedestrians in crosswalks, stop at red lights, and signal all turns.

The sharrows on Main Street encourage more locals to bicycle safely and knowledgeably around town. They inform visitors that Cooperstown is a bicycling tourist destination. They tell the world that Cooperstown is a bicycle friendly community.

Motorists – take note that sharrows, by encouraging more people to ride bicycles, result in more available parking spaces for cars!

The sharrows also help Cooperstown comply with the recently passed New York State Complete Streets Law, which requires that roadway design consider the safety needs of all roadway users including bicyclists, pedestrians, the disabled, the elderly and transit users as well as the safety needs of motorists.

If you are interested in learning more about bicycling safely in traffic, contact the Otsego Regional Cycling Advocates at (607) 547-4020 to sign up for a Traffic Skills 101 course.

ORCA, a committee of the Otsego County Conservation Association, promotes bicycling as an enjoyable, healthy, safe, environmentally friendly activity for people of all ages and abilities.

Otsego State of the Lake Report: Summer 2012

GUEST COMMENTARY
By Matthew F. Albright

When I first started working on Otsego Lake in 1990, there were two inter-related issues which were stressing the lake. The first, which had been long recognized and was tied to a downward trend in lake health, was excessive nutrient loading. Too much phosphorus was reaching the lake. This was stimulating excessive algae growth, causing the clarity of the lake to decline. More importantly, as that algae aged and ultimately decayed, dissolved oxygen levels in the deep, colder layers of the lake declined. That was jeopardizing the well being of the cold water fish (lake trout, brown trout, Atlantic salmon, Otsego bass). If oxygen in the deepest layer is completely lost, chemical changes cause even more phosphorus to be released from the substrate into the water. If that happens, managing phosphorus becomes almost impossible. The second concern of the time related to the newly-established alewife. That forage fish is very effective at eating the larger-bodied zooplankton from the water. Those plankton, when plentiful, are good at eating algae (which keeps the water clearer and helps keep oxygen levels up, since less dead algae are piling up in the deeper waters). So, these two contributing factors (phosphorus and alewife) both caused similar problems, the former by fertilizing algae, the latter by reducing the grazing on algae.

There were, at that time, two approaches to manage Otsego Lake (both consistent with the Otsego Lake Management Plan). The Biological Field Station provided our water quality data (both in-lake as well as from the lake’s tributaries) to the NRCS and the SWCD. Those agencies were then well aligned to compete for funds to address this issue through the implementation of agricultural Best Management Practices (at that time it was believed that agricultural activities were responsible for a large portion of the phosphorus load). Millions of dollars were acquired to conduct various projects across the watershed (with the farmer’s typical 25 percent match provided by OCCA). Though impossible to quantify, these projects clearly reduced phosphorus loading to the lake, and at the same time improved the viability of our local farming community. More recently, efforts to reduce nutrient loading by near-lake onsite septic treatment systems have ensued.

However, the continued high abundance of alewife prevented the benefits of reduced phosphorus to be realized within the lake. To address that, beginning in 2000, a walleye stocking program commenced. (Lake trout and other cold water fish eat alewife during the winter, but the surviving alewife come into shallow waters to spawn, so they were not being controlled.) Walleye had been in Otsego, but disappeared after DEC accidentally stocked cisco back in the 1950s; cisco eat walleye fry. As walleye became established over the 2000s, alewife declined markedly, and the lake responded with more and larger zooplankton, increasing water clarity and improving oxygen conditions.

Continued on Page 9
On Andy’s Trail

More than two dozen people attended the Spring Wildflower Hike at Betty and Wilbur Davis State Park on June 9. Park worker Joe Ritton led the walk on Andy’s Trail, helping to identify the park’s abundant wildflowers and vegetation along the way. The walk was co-sponsored by OCCA and Friends of Glimmerglass State Park. This year, 13 hikes on 11 trails countywide were featured in OCCA’s Nature Walk Series.

Board Member Spotlight

Meet Hinchey, Lea and Hill

By Richard J. deRosa

As per OCCA’s bylaws, the organization is governed by a Board of Directors numbering 12-15 members. Eamonn Hinchey, Pam Lea and Jim Hill joined the Board in 2011. They enrich the Board’s capacity to do its important work by bringing with them a varied array of skills, backgrounds and geographical diversity. As OCCA seeks to extend its initiatives throughout the county, it has actively searched for Board members who enable OCCA to be a truly countywide organization.

Eamonn Hinchey resides in Oneonta. He is a certified science teacher and teaches at Milford Central School, where he also coaches soccer and is very much involved in all aspects of the school community. His undergraduate work focused on conservation issues and he is currently writing a master’s thesis that concentrates specifically on the conservation of Otsego County lands and waters. He sees education as playing a vital and necessary role in gaining increasing support for the complex environmental and conservation issues the county faces. He says, “I dream of making Otsego County into a mecca for responsible citizenship and sustainable environmental initiatives.” Specifically, Hinchey looks forward to opportunities to educate people as to the “best way to obtain products from the land in a sustainable way.”

Dr. Pam Lea moved to Otsego County in 1978 after graduating from Cornell Veterinary College. In 1981, she started the Exeter Veterinary Clinic, which she has operated for more than 30 years. In addition to the demanding rigors of a very successful practice, she has raised two children here, son Ashton, 25, and daughter Skyler, 23. As Dr. Lea puts it, she loves “the rural/small town atmosphere, the rolling hills, the abundant wildlife, the changing seasons, and the beautiful streams, ponds, and lakes.” Given her love of this beautiful land, she sees herself as an advocate for clean air, clean water and the conservation of our natural resources.

Dr. Lea serves on the Board of Directors of the Canadarago Lake Improvement Association and is resident veterinarian on Bassett Hospital’s Institutional Animal Care and Use Committee. For the past 22 years, she has been the ethics chairperson of the local Catskill Mountain Veterinary Medical Association. Despite what seems like an ineluctably heavy load, she is the health officer for the Town of Exeter and has initiated an effort to survey the town’s residents concerning one of the area’s hot button issues, gas drilling/fracking. Dr. Lea sees her OCCA Board membership as an opportunity to “bring representation from the northern part of our county to OCCA.”

Jim Hill, who resides in Middlefield, earned his BS in earth science from Stony Brook University and his MA in biology from SUNY-Oneonta. He recently retired from the Richfield Springs School District where, for the first 25 years, he taught AP biology, Regents biology, and electives in human genetics and astronomy. Five years ago he became the district technology director. Over the last 10 years, Hill has twice been named a recipient of Apple Inc’s “The Excellence in Teaching, Learning, and Technology” award. The Otsego Chamber of Commerce has also selected him twice for Scholar Recognition awards. In addition, Hill is a co-director of the Cooperstown Concert Series and a Town of Middlefield Historical Association board member.

Hill is particularly interested in renewable and alternative energy sources. He says that he “would like to see legislation which would provide a greater impetus for homeowners to install alternative energy systems to supplement their current systems.” In the long term, he envisions “increased manufacturing of alternative energy systems in the county.”
Why do kids need to experience nature?

By Lia Solensten

In the 21st century, many kids are playing video games, watching television, and spending lots of time online. Some kids might not even be aware of what is going on outdoors; much less what is even common in their own back yards! Living an outdoor lifestyle can create physical, emotional, social and educational benefits for young people. There are a lot of interesting wildlife concepts and views that can be enjoyable to kids and help develop these benefits. This is why it is important to be exposed to and experience nature and wildlife.

Instead of watching television, kids can go outside and get physical. They can walk to a pond and explore the environment. Exploring can use a lot of energy, so it would also be smart to pack a healthy snack. Learning to pack a healthy snack such as an apple, granola and nuts is good for physical health. A water bottle is also useful for keeping hydrated. Going to a different nature area every week can expand the stamina of how far the person can go. They can set personal goals for themselves to explore a little more each week.

Another physical benefit of living outdoor lifestyles is that strength comes with exercise. Staying healthy is important and what a great way to do that by being outdoors and with nature!

One emotional benefit of experiencing nature is that by spending time outdoors one can boost their self-confidence. Trying new things like canoeing and kayaking can be a positive way to do this. Kids can also have a greater appreciation of their environment and the quiet, peaceful moments of nature. It can be relaxing after a stressful day at school and that is a benefit. Being positive and happy can improve grades at school and just feeling good about oneself can make the day be so much more pleasing.

Getting together with friends to explore nature is a bonding time for them. Spending time with friends is a plus because laughing and having fun is a great way to be together. New friends can also be made through exploring nature. Nature hikes or canoe trips are a good way to meet people and make new friends, and then you will begin to bond with them. These are some of the social benefits of experiencing nature.

Besides the physical, emotional, and social benefits there are educational benefits too. Being physical can clear the mind on a stressful day, and emotionally prepare for the next day. Being upbeat and positive about one’s self can also help educationally and that can raise grades. Experiencing nature can also help with the understanding of the subjects Science and Math. Looking at plants, animals, and nature relate to the concepts of photosynthesis and cells in plants, the food chain in the animal kingdom, and how the geography is laid out in a certain area.

Spending time outdoors, or with nature can improve or create physical, emotional, social, and educational benefits. Many kids today are spending time on computers, watching television, or playing video games, when they should be exploring nature! Kids should spend a fair amount of time outside trying new activities, making new friends, and just getting to know themselves a little better. Spending time outside can have many benefits in many ways, and that is why kids need to experience nature.

Lia Solensten receives a certificate of recognition from OCCA Board member Eamonn Hinchey at the OCCA Open House on July 28 in recognition of her winning submission to OCCA’s Campership Sponsor Program Essay Contest. Solensten is one of seven Otsego County students to win DEC Environmental Education Camp scholarships through OCCA this summer.

Lia Solensten is a seventh grader at Milford Central School.

Portlandville Access Cleanup

Members of the Goodyear Lake Association, Headwaters Youth Conservation Corps, DEC Fisheries and OCCA Program Director Travis Sauerwald converged on the car top boat launch located on Route 28 in Portlandville to lay the groundwork for improvements to the site. On July 20, the group was able to clear a new parking area for vehicles and open a new put-in for canoes and kayaks by trimming back overgrown trees and ground cover. DOT employees followed up with an application of crushed stone in the parking area, filling a pothole along the access road and removing a section of guard rail along Route 28 to create an entrance/exit directly to the parking area. Future plans for the site include a dock that will allow direct access to deeper water. This addition, along with proposed educational signage, should greatly enhance the visitor’s enjoyment of the resource.
**OCCA Circuit Rider Planner Program hitting its stride**

By employing a full-time planner to address immediate land-use and environmental concerns in the Upper Susquehanna Watershed through our Circuit Rider Planner Program, OCCA has been able to offer both general and project-specific support to contracted municipalities. At the same time, we continue to provide planning assistance to other municipalities as needed and as time allows. The planning expertise available through the CRP Program is not necessarily limited to land use and/or environmental concerns. We recognize that working with municipalities on multiple levels helps us meet their existing needs, build relationships, and provide education, in order that municipal officials may over time be more receptive to and understanding of the holistic importance of land-use and environmental planning relative to their communities.

**Circuit Rider Planner Program**

OCCA Environmental Planner Rima Shamieh continues to serve the communities in the Village of Milford and the Town of New Lisbon through CRP Program contracts. Her work with the Village of Milford has involved writing a grant on behalf of the Milford Fire Department to replace obsolete and damaged personal protective equipment, and communicating with the regional New York State Department of Transportation office regarding the repaving of State Route 28 and how that capital project affects Village goals as outlined in its comprehensive plan. Efforts to locate appropriate grant funding for sidewalk infrastructure improvements are ongoing. Shamieh is also currently exploring possible community initiatives to improve the economic climate in the Village of Milford by reaching out to Village leaders and the Otsego County Department of Economic Development.

In the Town of New Lisbon, Shamieh’s work has focused on comprehensive plan implementation, streamlining the site plan and subdivision review processes, and providing resources and trainings to the Planning Board. In 2011 the Town created the Comprehensive Plan Implementation Committee to review the comprehensive plan and make recommendations to the Town Board on how the plan should be implemented. Through her work with this committee, the Town identified a reconnaissance level historic resources survey as a high community priority. Shamieh wrote a grant application to partially fund the initiative. She organized a conference call and a guest speaker to help inform CPIC members about historic preservation during the application process, photographed the town for the grant application, and solicited letters of support for the project from community members, thus setting the stage for the Town to proceed with the project with the assistance of historic preservation professionals. New Lisbon received word that its application was approved in August.

New Lisbon recently adopted new site plan review and subdivision review regulations. Shamieh is spearheading revisions to the subdivision and site plan review application materials and is working closely with Town officials to streamline the application process to make it more user-friendly for both applicants and the Planning Board. Meanwhile, she has provided input on two subdivision review applications and one site plan review application brought before the Town.

Shamieh has conducted a one-hour training session on federal and state wetlands to the New Lisbon Planning Board and a 1.5-hour training on the State Environmental Quality Review Act. An informational session is being planned for late 2012 where revised site plan and subdivision review application materials can be examined in the context of the new regulations. Such a session would also include

**A Team Effort**

On June 15, participants of the Susquehanna Sojourn provided the service of handpulling water chestnuts on Goodyear Lake. After a brief presentation on the invasive species by OCCA Program Director Travis Sauerwald, Sojourners took to the water in search of *trapa natans*. The Goodyear Lake Association hosted a cookout for the hungry paddlers as a thank you for their efforts. The day’s event marked the first jointly sponsored OCCA/GLA water chestnut pulling of the year. The Susquehanna Sojourn, held annually, is an educational and awareness-raising event that involves a group of canoeists and kayakers paddling a segment of the Susquehanna River, camping on her shores, and interacting with local towns and villages.
Fossil fuels are a finite resource – once used, they can never be used again. By definition, renewable energy resources do not burn or deplete fossil fuels.

associated with coal burning are credited for endangering human health and are especially harmful to people with asthma and other lung diseases. Conventional electricity also usually leads to the creation of sulfur dioxide, or SO2, one of the main ingredients of acid rain. Fossil-fueled electricity creates carbon dioxide gas, or CO2, a greenhouse gas that contributes to global climate change, while conventional nuclear power creates dangerous radioactive wastes that will remain in the environment for thousands of years.

By definition, renewable energy resources do not burn or deplete fossil fuels. The renewable electricity offered through ECA's Green Power program is 44 percent hydropower, 29 percent biomass energy and 27 percent wind power. As outlined on the ECA website, hydropower facilities in the United States can generate enough power to supply 28 million households with electricity, the equivalent of nearly 500 million barrels of oil. Mechanical energy is derived by directing, harnessing or channeling moving water. The amount of available energy in moving water is determined from its flow or fall. Hydropower produces no waste products, and it does not pollute the water or the air.

The biomass energy in ECA's Green Power program is landfill methane fired electricity. Landfill fired electricity takes methane, an unavoidable byproduct of landfill decomposition 21 times more potent than CO2, burns it in a turbine to generate electricity and converts the methane into CO2. Each unit of methane burned removes the equivalent of 20 units of CO2 from the environment. At the same time, each unit of electricity created from landfill methane replaces a unit of fossil fueled electricity and the CO2 that would have been created by that fossil fueled energy.

The wind power is generated at commercial wind farms in New York State. ECA is the first energy service company, or ESCO, to offer a Green Power option to residential customers in this utility territory. “This is the first 100 percent renewable program that residential and commercial customers can sign up for in New York State,” said Jamie Lawrence, ECA director of marketing.

The program gives customers the opportunity to combine the cost savings of deregulation with an environmentally clean source of electricity. The cost, per day, to the average customer would only be 10-15 cents above what is paid for conventional electricity. ECA points out that renewable energy is slightly more expensive due in large part to the fact that most of the facilities are relatively new and thereby fees must cover construction costs, while most conventional electrical generation facilities are older and construction costs have already been recouped.

This program works the same way your current utility supplier works. Existing wires bring electricity to your home or business, and the utility will still provide emergency and meter reading services. When one signs on to ECA’s Green Power program, for every unit of electricity used, the Cooperative is required to purchase an equal number of renewable units and place them into the utilities system. The “green electrons” don’t necessarily go directly to your house. However, if you or someone else is not buying them, there is no reason for the Cooperative to buy them and no reason for generators to produce them. The New York State Public Service Commission audits the total amount of renewable energy bought by ECA members, purchased by the Cooperative and placed into the utilities system by renewable energy generators to make sure customers are getting the renewable power they are paying for.

For more information on the Green Power program, visit ECA’s website at http://www.ecny.org/greenpower/index.html or call (716) 842-1697 to speak to a representative. By casting your “consumer vote” in support of renewable energy, you will be creating a market demand for cleaner energy and encouraging developers to build more renewable generation facilities in New York State.

Martha Clavoe is OCCA’s special projects manager.

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**Planting Trees for Tribs**

This year, OCCA gave $5,000 toward Otsego Trees & Tribs, a new riparian buffer program instituted by the Otsego County Soil and Water Conservation District. SWCD worked with landowners countywide to address erosion problems resulting from downed trees in streams as well as with landowners interested in planting trees along stream banks. According to SWCD, these efforts will lead to less erosion of our soils as well as less turbidity in our local water, and will provide valuable habitat to wildlife. In sum, the program hired nine temporary employees to work approximately six weeks, planting 7,000+ tree seedlings on approximately 10-20 acres of stream bank on 32 properties.
The Lookout Page 9

The Effectiveness of OCCA-funded Otsego Lake Programs

The concerns that prompted OCCA’s programs to protect and preserve Otsego Lake still exist today, though they may vary in prevalence and/or severity: failed septic systems, leaking untreated sewage and algae-growing phosphorus; deposits of sediment, manure and fertilizers from farm runoff; the introduction of invasive species, such as zebra mussels; and internal phosphorus-loading are an example of ongoing threats posed to Otsego Lake.

With regard to the importance of these programs – including funding of the septic system management plan, zebra mussel control, boat inspections, interns for lake research, riparian buffers, walleye stocking to control the invasive alewife, barnyard water management projects, lake monitoring, and public education – I am pleased to be able to report on the overall effectiveness of our efforts to date. Conversations with Dr. Willard N. Harman of the SUNY-Oneonta Biological Field Station and review of “The State of Otsego Lake, 1936-1996” versus the BFS “43rd Annual Report, 2012” bear out the success of these programs.

As explained to me by Dr. Harman, there are two major concerns with regard to the health of the lake. One is cultural eutrophication:

Cultural eutrophication is the process that speeds up natural eutrophication (the environment becomes enriched with nutrients) because of human activity. Due to clearing of land and building of towns and cities, land runoff is accelerated and more nutrients such as phosphates and nitrates are supplied to lakes and rivers, and then to coastal estuaries and bays. Extra nutrients are also supplied by treatment plants, golf courses, fertilizers, and farms.

These nutrients result in an excessive growth of plant life, both weeds and algae. This can change a lake’s natural food web, and also reduce the amount of dissolved oxygen in the water for organisms. Both these things cause animal and plant death rates to increase. This contaminates water, making it undrinkable, and sediment quickly fills the lake. Cultural eutrophication is a form of water pollution.

Also of concern, particularly to Otsego Lake, is the introduction of exotic species:

A leading cause of biodiversity loss in many aquatic ecosystems is the introduction of exotic species. An exotic species is a non-native plant or animal deliberately or accidentally introduced into a new habitat. Such species include plants, fishes, algae, mollusks, crustaceans and bacteria. Such species that are able to reproduce and survive outside of the habitats where they evolved are also referred to as alien, introduced, invasive, non-native, or non-indigenous.

There are many ways that exotic species are introduced into freshwater areas including the release of aquarium fish or foreign species brought in for entertainment in public or commercial aquariums or for education. In addition, the demand for bait fish, the captive rearing of fish and the unintentional transfer of species by ship ballast water all contribute to the introduction of exotic species in freshwater areas.

Exotic species can have many negative impacts on the environment, the economy and human health. When species are introduced into an area, they may cause increased predation and competition, disease, habitat destruction, genetic stock alterations, and even extinction. Approximately 68 percent of fish species lost in North America over the last century were caused by an invasion of exotic species. The invasion of exotic species has also caused the economy to suffer through the obstruction of industrial and municipal water pipes and the displacement or elimination of important commercial and sport fishing species. Public health may also be negatively impacted. The BFS has documented the introduction of 23 exotics into Otsego Lake since 1900. During the same period, twice that number of natives have been lost or decimated.

Annual monitoring performed by the BFS staff and OCCA-supported interns shows vast improvements from 1996 in zooplankton size, areal hypolimnetic oxygen deficit (AHOD), chlorophyll a and Secchi disc transparency, all of which are indicators of a reduction in both Otsego Lake nutrient loading and algal populations:

• The filtering activity of zooplankton is what cleans algae from the water, and the size of the zooplankton is significant in that filtration rate increases proportionate to dimension. Research shows that cladocerans

State of the Lake

continued from page 4

The most recent issue is related to the zebra mussel, first documented here in 2007, and becoming abundant by spring 2010. The last few years, Otsego has typically displayed transparencies rarely before encountered (this summer averaging about 10 m (30+ ft)). That is undoubtedly due to filtering by the mussels, as well as grazing by very abundant and huge daphnia zooplankton (some over 1/10 inches).

Some people like the zebra mussels, since clear water is popular. But, there are drawbacks. Some rooted plants, especially curly leaved pondweed, thrive in clear water and as such grew in Otsego Lake this year thicker than I had ever seen it. Luckily, that plant dies back in early summer, so it’s a temporary problem. Starry stonewort, another newly introduced plant (technically, a macroalgae) is starting to come on strong, and I expect that the clearer water will compound problems associated with it in coming years. Another cause for concern is the shifting algal community, which often changes from “good” types to cyanobacteria (blue-green algae), which are not a useful food source to animals, and in fact many types of which contain toxins. Zebra mussels seem to be able to avoid ingesting cyanobacteria, which promotes their growth. Otsego Lake has followed this trend seen in other lakes. Late last summer a modest “bloom” of microcystis was noted. Then this mid July, over the course of just a few days, microcystis bloomed again and the zooplankton immediately crushed. We will continue to monitor to evaluate the extent of this situation. It might become part of Otsego’s annual cycle. (Microcystis, and other cyanophytes, are getting more press attention as they are linked to human (and pet/livestock) health issues – beaches are now closed more often due to these than by fecal bacteria. The extent of microcystis in Otsego is well below levels of health concern).

The state of Otsego Lake is currently a state of flux. Efforts to reduce phosphorus and control alewife have proven successful. We are experiencing high transparency, oxygen levels are high and stable, and fishermen have been successfully catching lake trout and walleye. Zebra mussels, though, are complicating things and I don’t think the lake has yet come to equilibrium with them.

Matthew F. Albright is the assistant to the Director, SUNY-Oneonta Biological Field Station. This report was written for the Otsego County Conservation Association Open House, July 28, 2012.
Lake programs

have more than doubled in size from 1999 to 2010 and crustacean zooplankton (considered best quality fish food) are increasing in size after a significant decline.

- AHOD, or areal hypolimnetic oxygen deficit, is a measure of how much oxygen is being used up. AHOD today is half the amount that it was in the 1990s – a big indicator that situations are much improved.

- The presence of Chlorophyll a, used as a proxy for measuring algae, more than tripled in the 1990s and has now dipped below even levels recorded from 1970-1988.

- The depth at which a disc dropped into the lake can be seen from the surface (Secchi disc transparency) has more than doubled since the 1990s and readings at 15 feet are now much improved. Transparency of the water translates to the depth that light will penetrate the water. A record high Secchi reading in June of 2010 (readings date back to the 1960s) substantiates the decrease in algae indicated by the reduced chlorophyll a readings.

Across the board, tests prove that oxygen levels are up, algae is down and lake transparency is much improved. In addition, BFS monitoring shows that phosphorous and chloride levels have also decreased.

While it is true that dense populations of zebra mussel have been demonstrated to cause major changes in common measures of water quality, it is important to note that the above-mentioned reductions in nutrient loading and algal populations show a direct corollary to the increase in Otsego Lake programs in the years prior to the arrival of the zebra mussel.

CRP Program

training exercises for the Planning Board to familiarize the group with applying these new regulations to the types of applications most likely to be submitted. These trainings, developed in-house, form the beginning of a collection of trainings that can be adapted to any municipality in the county, thus building the capacity of the CRP Program over time.

In May, Shamieh established a working relationship with the Town of Laurens. The primary service being provided to Laurens is work toward the creation of the Town’s comprehensive plan. The Comprehensive Planning Board was tasked with data collection and analysis and with creating the plan itself. Much of Shamieh’s work on this project has been to develop a work plan and guide the group in its efforts, creating a truly collaborative effort between the CPB and OCCA. Shamieh facilitates CPB meetings and public workshops, advises on plan content, gathers and analyzes technical data, and is drafting the document for group review.

Natural Resources Inventory

Shamieh completed the Town of Oneonta Natural Resources Inventory project and presented it to the Oneonta Town Board at its August meeting. The final product consisted of 17 maps that showed the location and character of the Town’s most significant natural resources. This inventory will be useful as the Town launches a revision of its comprehensive plan. This NRI will also serve as a showpiece for OCCA to demonstrate its technical mapping services to other communities and as a teaching tool for municipalities.

Countywide Initiatives

OCCA recently completed data collection to update its gas lease map for the county. The current map was revised in December of 2010. Since then, significant numbers of leases have been released or terminated. Our goal is to complete an updated map by October.

We are also researching the newly enacted Article X of the Public Service Law of New York State. Article X provides for the siting review of new, repowered or modified major electric generating facilities under a unified state process that no longer requires developers to be subjected to local review. Local concerns over this new regulation primarily center on wind project developments. Our goals are to identify state resources that local municipalities can access for guidance, provide educational opportunities to municipal leaders and the general public regarding the local implications of the new regulations, and provide model wind development ordinances that municipalities can refer to when considering land-use law changes that may protect their communities while complying with the new state law. We are actively working with the Otsego County Planning Department on this research.

- D. Youngs and R. Shamieh

The Town of Oneonta Natural Resources Inventory includes 17 maps, including the “Farm Soils” map shown above. The project was begun in 2011 by Susan Pastor, with technical assistance provided by the Otsego County Planning Department. The final document has value as a planning and reference tool for the Town of Oneonta and, as a teaching tool, could help get the ball rolling in terms of other Otsego County municipalities investing in their own natural resources surveys to protect important environmental and historic resources, facilitate better land-use planning, and ensure a sustainable future.
President’s Message

Congratulations to the winners of this year’s first ever OCCA Campership Sponsor Program Essay Contest. Seven Otsego County students wrote winning essays answering the question, “Why do kids need to experience nature?” The reward for their efforts was a week-long stay at DEC Environmental Education Camp this summer, compliments of OCCA. Winning essayists were: Avalon Kubis, sixth grade, Cherry Valley-Springfield Central School; Regina Lassiter, seventh grade, Cooperstown Central School; Zachary Laymon, seventh grade, Edmeston Central School; Fiona McGoldrick, sixth grade, Cooperstown Central School; Veronica Sanchez, seventh grade, Milford Central School; Margaret Schuermann, sixth grade, Cooperstown Central School; and Lia Solensten, seventh grade, Milford Central School. Winning essayists were: Avalon Kubis, sixth grade, Cherry Valley-Springfield Central School; Regina Lassiter, seventh grade, Cooperstown Central School; Zachary Laymon, seventh grade, Edmeston Central School; Fiona McGoldrick, sixth grade, Cooperstown Central School; Veronica Sanchez, seventh grade, Milford Central School; Margaret Schuermann, sixth grade, Cooperstown Central School; and Lia Solensten, seventh grade, Milford Central School. Lia’s essay appears in this issue of “The Lookout.” Watch for the others in future newsletters and on the OCCA website. This program was made possible thanks to support from Stewart’s Foundation and The Tianaderrah Foundation. Contest details for 2013 will be announced soon.

Welcome to our first EcoTeam members! OCCA’s EcoTeam goal is for our kids to: develop a greater understanding and respect for animals, plants, water, soil, air and energy systems; comprehend the positive and negative environmental effects of our actions; acquire a knowledge of practical, sustainable living strategies which consciously and carefully utilize our natural resources; and obtain information on nature programs, centers and organizations. Student, adult and family EcoTeam members from Cooperstown Central School are: Elizabeth, Stratton, Emma, George and William Danes, James, Susanna, Joseph and Emilia Longhi; Natalie Shieber, Liane Hirabayashi and Tom Shieber; Amy Stack and Kara Gildia; Brian, Susan, Brayden and Declan White; and John Darcy Youngs. EcoTeam membership proceeds go to OCCA programs to protect and preserve the environment and also support, in part, the Cooperstown PTA. The EcoTeam program is new and still developing – to learn more, visit http://www.occainfo.org/EcoTeam.htm. Special programs are being planned for EcoTeam members, including outdoor adventures and in-school programs. If your school or community group is interested in developing an EcoTeam for your area, please contact OCCA Executive Director Darla M. Youngs at (607) 547-4488.

Thanks to volunteers who pulled water chestnut on Goodyear Lake and in the Oneonta swamp this year: Kurtis Breed, Brandon Buda, Edward Bugel, Ari Epstein, S. Tier French, Pam Lea, Maureen Murray, Alexander Panayi, Tom and Sharon Pickard, Dave Riva, Rima Shamieh, Bruce Shultis, Nadia Sennes Spidahl, Vince Stayter, Ericka Sommers Wilson, Julie Wilson, and Linda Drake’s Freshman Service Day group from SUNY-Oneonta. On the final Goodyear Lake pulling of the season last month, only three water chestnut plants were found in the stump lot and surrounding area. Who would have thought it possible when, several years ago in one outing alone, 10,000 pounds of water chestnut were removed! Many thanks also to the Goodyear Lake residents who “patrol” the waters to help prevent spreading of this invasive plant, and to the Goodyear Lake Association with whom we partner and whose members support our efforts each year.

Dates to remember – Earth Festival 2013: Saturday, April 13; OCCA Reduce, Reuse, Recycle Garage Sale: Saturday and Sunday, April 27 and 28, 2013.

Hard at Work

OCCA is the official trail steward of Basswood Pond State Forest, in the towns of Burlington and Exeter, through DEC’s Adopt-a-Resource Program. This year Basswood figured prominently in our Nature Walk Series – the site of two hikes over the course of the year. On August 13, OCCA Program Director Travis Sauerwald and members of the Headwaters Youth Conservation Corps, an AmeriCorps program, performed trail maintenance on the Blue Trail, or Lower Trail as it is also known. There are plans to return to the forest this fall to remove fallen trees on the Yellow (or Upper) Trail in preparation for snowshoeing and cross country skiing season.

Helping Hands

The Fourth Annual Bike to Work Day for Otsego County was held on May 16. Bike to Work Day check-in location banners were created by Woodside Hall residents under the direction of Julie Barnes. Materials were donated by OCCA members Dottie Hudson and Jean Finch. Pictured from left are: Leah Waits, Bessie Dumond, William Armstrong, Genevieve Licci, Marion Green and Terry McQuillan. Bike to Work Day is sponsored by Otsego Regional Cycling Advocates, a subcommittee of OCCA.
OCCA launches ‘What’s In Our Water?’

Groundwater is one of our most valuable resources. Half of America drinks groundwater every day. More than 17 million households in the United States use individual wells to supply water for their families. Wells are used to extract groundwater from aquifers.

- Heavy industrial activity, including high volume hydraulic fracturing—or hydrofracking—for natural gas, may put our groundwater at risk.
- Most homeowners do not know the quality of their well water and, as such, would not be able to prove water contamination if it were to occur.

With this in mind, the Otsego County Conservation Association is launching a groundwater testing program – “What’s In Our Water” – that will provide certified baseline testing of private drinking water wells in pre-targeted areas countywide. These data will provide:

1) a baseline for, and fingerprinting of, well water chemistry by which changes to the wells will be detectable, and
2) a better understanding of groundwater flow systems and subsequent mapping of aquifers.

Both water sampling and analysis will be conducted by New York State Department of Health Environmental Laboratory Approval Program-certified laboratory staff, after the appropriate test sites have been identified by hydrology professionals using previously collected water quality data. This battery of third-party testing will identify the baseline concentrations of signature chemicals typically associated with hydrofracking or other heavy industrial activity which may or may not already be present in the groundwater.

Apart from gas drilling concerns, the importance of understanding the characteristics of our drinking water – and of fingerprinting well water and the aquifers from which it flows – is paramount to protection of this resource without which we cannot survive.

For a complete description of OCCA’s groundwater monitoring program, including information on baseline well water testing, visit the OCCA website home page, www.occainfo.org