



Musconetcong River News

Fall/Winter 2015

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Asbury, New Jersey

MWA and LHF to Share \$10,000 Grant to Help Promote Residential Water Quality

By *Nancy Lawler*

Water is such a simple substance, but water quality data can be complicated and confusing. How can we help protect water quality if it's hard to understand the information we all need to make good decisions? MWA is pleased to announce that the Lake Hopatcong Foundation (LHF) and MWA will work together to solve that problem this year! The two non-profits secured a \$10,000 grant from the Watershed Institute to work collaboratively and develop a "watershed report card."

The goal is to engage and educate residents about water quality in our combined watersheds quickly and easily.

Working together, and with the help of Princeton Hydro LLC and a professional creative team, the two groups will develop an easy to understand, visually appealing format focusing on scientifically-based, but less technical explanations. The newly created format will include water quality data that LHF collects and MWA's River Watcher data, along with advice to residents on how they can help improve their

watershed health.

The grant awards were part of approximately \$42,500 in project money given by the Watershed Institute to nine organizations from across New Jersey, using funding from the Geraldine R. Dodge Foundation. Information about the Lake Hopatcong Foundation can be found at www.lakehopatcongfoundation.org. For more information about the Watershed Institute and its mission, visit www.thewatershedinstitute.org. ☺

Native American Artifact Donation to MWA

By *Val Thorpe*

Amateur archeologist and long-time MWA member Leonard Ziegler donated his "Plenge site" collection to the Smithsonian Institution in Washington, D.C., but not before presenting a sampling of these historic treasures to the MWA.

Len has spent the last nearly sixty years collecting and identifying these items, amassing over 14,500 pieces. These Native American artifacts include projectile points, tools, point fragments, hammer stones, and flint knapping waste. Some as old as 13,000 years, they date from Paleo-Indian to Mississippian times.

Fun-fact: the Plenge site is located within the Musconetcong Watershed, along the Musky in Asbury! It's considered the largest Paleo-Indian complex in the Northeastern US.



Beth Styler Barry accepts Plenge Collection from Len Ziegler on behalf of MWA

Many thanks to Len for this cherished gift to the MWA! ☺

MWA Annual Members Meeting

Please join us on
Friday, April 10, 6:30-9:00 pm

Hawk Pointe Golf Club
294 Route 31 South, Washington

5:00

Bird Walk

(for those interested in participating)

6:30

Light refreshments, cash bar

7:00

Annual Members Meeting
Celebrate 2014 accomplishments
Reveal plans for 2015.

RSVP by April 6

Call 908-537-7060 or
email val@musconetcong.org

What's New with the Asbury Mill Restoration?

By **Chuck Gullage**

Trustee Emeritus and Mill Project Manager

There's a lot of good news to report on the Asbury Mill Restoration Project. On December 3, 2014 we received approval from the Franklin Township Land Use Board to proceed with the restoration of our mill! We had to compromise on a couple of points, but we received essentially everything we needed at this stage in the project.

In the time remaining before winter set in, our contractor, All County Pipeline and Paving, was able to finish pouring the large concrete retaining wall and the tailrace deck and install the parking lot guardrail system. In addition, they



Photo by Chuck Gullage

graded the parking lot with a permeable crushed stone surface and began construction of the stairway down to the tailrace deck. Site work will continue as soon as the weather improves.

The permeable surface in the parking lot will absorb water rather than create runoff into the river as would a paved surface. The River Resource Center has the same type of parking lot surface. Any parking lot runoff may contain automotive drippings, as well as road salt, which is toxic to river biota.

In the meantime, on a separate contract, All County began cleaning the interior of the mill. This is one of the most difficult parts of the restoration because the mill is still loaded with tons of fine graphite powder accumulated over 80 years of milling. Every surface is coated with this black powder, which in some cases is 6 inches deep. There are several large wooden bins still filled

with graphite powder that need to be demolished and the powder disposed of properly. Several pieces of old machinery that remain must be removed to make room for office space on the second and third floors. When all of this cleaning is done it will be considered "paint ready."

One of the most important requirements on cleaning the mill interior is to ensure that no graphite-laden wastewater enters the river. To accomplish this, the contractor has installed barriers to catch the water, which will be suctioned out and disposed of properly.

Once the interior is cleaned, the next major step is to make structural repairs to the interior. MWA has a set of structural design plans and is currently putting that portion of the project out to bid.

Much more restoration work is in the planning stages. 🌀

MUSCONETCONG WATERSHED ASSOCIATION

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Asbury, NJ 08802

908-537-7060

www.musconetcong.org

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Pouring concrete slab for reconstruction of the tailrace island

The Impact of Road Salt on the Musky

By Beth Styler Barry

At this time of year MWA is frequently asked, "Does all of this salt hurt the river?" The answer is, in a word, "Yes." Various forms of deicers spread on roads and parking lots make their way into the stream.

While we don't have a lot of data on our own river, we recently did a literature search to better address the varying ways and degrees that these compounds can cause harm to the aquatic life, vegetation and insect life that live in or near our waterways.

Road salt typically has two commonly used compounds, calcium chloride and sodium chloride. Once the chloride ion is set free from either compound it remains in the stream forever.

The *U.S. Geological Survey* is a study done by the U.S. Department of the Interior where scientists analyzed water-quality data from 30 monitoring sites on 19 Northeastern and Mid Atlantic streams. They found that samples from 55% of streams in the study had chloride levels exceeding USEPA water-quality criteria. Samples from 25% of the streams exceeded acute water-quality criteria.¹

Scientists found that in 13 of the streams chloride concentrations increased over the study period during non-deicing periods such as summer, suggesting that chloride infiltrates the groundwater system in

winter and is slowly released into the streams throughout the year. This is a concern for the Musconetcong watershed where there is extensive ground and surface water interaction.

Amphibians are particularly affected, as their permeable skin allows for passage of ions, such as chloride, into the organism. Multiple studies (both laboratory and field) have clearly linked salt concentration to harmful effects on the survival and/or reproduction of frogs and salamanders.²

What can we do? As with most environmental harm, we can lessen our impact by thinking outside of the box. What has kept us "inside the box" for the past 50+ years is the cheap and easy availability of road salt. With the past few severe winters throughout the Northeast and Midwest, road salt has become harder and more expensive to acquire. There are alternatives, some being tried right in our own watershed.

Sugar Beet Juice mixed with salt creates a "goo" to which salt sticks, minimizing its tendency to run off into nearby streams. (You can substitute sugar beet juice with molasses or beer.)

New Jersey and other states are experimenting with **Pickle Brine**. Similar to traditional rock salt, brine melts ice and prevents snow and ice from bonding with pavement, making the ice

easier to chip while reducing the amount of chloride released into the **Cheese Brine** (the salty water in which soft cheeses float) melts ice and works in lower temperatures than regular salt brine. However, it has "stinky cheese" odor.³

Try it yourself! Combine salt with molasses or beet juice from the grocery store, or the green liquid in pickle jars. Mix it all up, pour it into a spray bottle and give it a spray. Hopefully you will achieve maximum meltage with minimal salt. Let us know if it works! Email val@musconetcong.org.

¹**Urban Stream Contamination Increasing Rapidly Due to Road Salt Released:** 12/15/2014 3:04:26 PM
Contact Information: U.S. Department of the Interior, U.S. Geological Survey, Marisa Lubeck Steve Corsi

²Road Salt and Its Effects on Amphibians: A Concern for North Carolina? R. J. Winston¹, W. F. Hunt², and W.T. Puer³, Department of Biological and Agricultural Engineering, North Carolina State University

³**Why Pickle Brine Is a Secret Weapon Against Ice: In the effort to melt ice and snow, salt and calcium chloride have strange—and eco-friendly—company.** Rena Silverman, <http://news.nationalgeographic.com/news/2014/02/140204-melt-snow-ice-salt-beet-juice-pickle-brine/>

We're Social!

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Meetup

Musconetcong River Area Outdoor Activities

Become a River Watcher!

Love the Musky and want help protect its health? Are you a student interested in the environmental sciences and looking for experience? Become a **River Watcher**! The MWA Water Quality Program offers Paraprofessional Stream Monitoring Certification training. Participants must be 16+ years and enjoy working outdoors. Data collected will help MWA provide communities with a better understanding of how the water we drink, and fish/swim/boat in is directly affected by what we do on the land, and what we can do to help. All are Saturday sessions that include field, classroom and lab work.



River Watchers Lauren De Palma and Rich Cervino monitor the health of the river at the Point Mountain Bridge.

Training Session Dates:

- **Sat., March 14**, 9am-1pm River Watcher Chemical Monitoring
– MWA River Resource Center, 10 Maple Ave., Asbury
- **Sat., March 21**, 9am-1pm Habitat Assessment
– MWA River Resource Center, 10 Maple Ave., Asbury
- **Sat., March 28**, 9am-1pm Biological Monitoring (Advanced)
– Warren County Community College, 475 Rt. 57W, Washington
- **Sat., April 18**, 10am-2pm Biological Monitoring (Beginner)
– Warren County Community College, 475 Rt. 57W, Washington

Trainees will be assigned to a team site and will monitor these sites on a weekend day (to be announced at the trainings) in April, July, October, and January. Call 908-537-7060 or email nancy@musconetcong.org to reserve your seat or for more info.



Photo by Nancy Lawler

River Watcher Jule Girman of Hopatcong Boro measuring dissolved oxygen at Willow St.

Spring will Spring! (it has to...)

We're gearing up for some of our biggest spring events. Mark your calendar:

Spring cleaning! April 11 marks our 23rd Annual River Clean-up, 9am-12pm. From Lake Hopatcong to the Delaware River, pick your location to pick up the trash. We will provide trash bags, work gloves, water, snacks and a souvenir t-shirt. Then join us at the RRC for a BBQ on the house!

Go Native! The MWA Native Plant Sale is April 25, 9am-2pm at the RRC. Purchase beautiful native species that will provide lasting enjoyment and save you money, water and time. Native plants provide food and habitat for our wildlife and are economical for the homeowner since they do not require fertilizers or pesticides. Experts will be on hand at the sale to help you choose the best plants for your needs and location.

Grab your sneakers! It's our 15th Annual Run for the River and we invite you to treat yourself to a relaxing local run on Sunday, May 3. Or get the family outdoors to walk the scenic 4-mile (mostly flat) loop in Asbury (Warren County). This family-friendly day will include awards, prizes, participant t-shirts, music and snacks. Register today at www.musconetcong.org (click "Run for the River"). 🍷



SAVE THESE DATES!

2015

- Sun, 3/29 **Paddle** the Hampton to Bloomsbury section of the Musky 10:00 am – 2:00 pm
The first trip of 2015. We will stop at the River Resource Center for lunch. Dress appropriately for cold water paddling. Contact John Brunner at riverhealer@gmail.com with questions.
- Fri, 4/10 MWA Annual Meeting 6:30 pm at Hawk Pointe Country Club (See page 1 for details)
- Sat, 4/11 23rd Annual **River Clean-up** 9 am-12 pm (See page 4 for details)
- Tue, 4/14 **River Talk** “Beekeeping” 7:00 – 8:30 pm at the RRC
- Wed, 4/22 Native Plant **Hike** at Musconetcong Gorge 5:00 pm – 7:45 pm
- Sat, 4/25 **Native Plant Sale** at the RRC (See page 4 for details)
- Sun, 5/3 MWA 15th Annual **Run for the River**
- Sun, 5/10 Mother’s Day **Paddle** on the Musky! 1:00-3:00 pm, Location TBD
- Wed, 5/13 Camp Musky Open House – Learn about Summer Camp Musky
- Tue, 5/19 **River Talk** “Amphibians & Reptiles of NJ”
- Sat, 6/13 Summer **Hike** at Point Mountain 10:00 am – 12:00 pm
- Sun, 6/21 Father’s Day **Paddle** on the Musky! 10:00 am – 2:00 pm, Location TBD
- 7/6-7/31 **Camp Musky** – 4 one-week Summer Camp sessions
- Tue, 7/14 **River Talk** “Moth Night” 8:00 pm – 10:00 pm at the RRC
- Wed, 8/15 Night **Hike** at the River Resource Center 9:30 pm – 10:30 pm
- Tue, 8/25 **River Talk** – Book signing "The Puddle Garden" by Jared Rosenbaum 7:00 – 8:30 pm, RRC
- July & Aug **Meet the River Programs** 10:00 am – 12:00 pm. Wed, 7/8 & Sat, 7/11 - Point Mountain, Sat, 7/25 -Location TBD, Sat, 8/1 & Wed, 8/5 - Bloomsbury Fishing Access
- Tue, 9/15 **River Talk** “Bobcats and Other Wildlife of NJ” 7:00 pm – 8:30 pm at the RRC
- Sat, 9/19 Fall **Hike** at Allamuchy Mountain 10:00 am – 12:00 pm
- Sat, 10/3 (Tentative Date) 13th Annual **Wine Tasting** 2:00 pm – 5:00 pm
- Tue, 11/3 **River Talk** “Fly Tying – The Basics” 7:00 pm – 8:30 pm at the RRC
- Sat, 11/29 Post-Thanksgiving **Hike** at Point Mountain 10:00 am – 12:00 pm

Additional events will be added throughout the year – please continue to check the MWA website

To Register, or learn more information on any of these events, please email kyle@musconetcong.org or call 908- 537-7060, unless otherwise noted.
MWA River Resource Center (RRC) is located at 10 Maple Ave., Asbury, NJ

The Musconetcong Watershed Association

The Musconetcong River Valley is rich in scenery, history, natural resources, and recreational opportunities. The river rises up in Lake Hopatcong - New Jersey's largest spring-fed lake - and is shadowed by 1,000-foot Highland ridges and slices through a deep, limestone river valley, flowing swiftly to the Delaware River. Along the way the "Musky" passes by state and county parks, bustling towns, vital industries, historic villages, and some of the most productive farmland in the state.

The Musconetcong Watershed Association (MWA) is a non-profit organization formed in 1991 to protect and enhance the Musconetcong River and its related resources through advocacy and environmental education programs, scientific research and river restoration projects. The MWA scope spans the 158 square-mile Musconetcong River Watershed, and includes portions of four counties, and all or portions of 25 municipalities. The Musconetcong River became part of the National Wild and Scenic River System in 2006.

MWA members are part of a network of individuals, families and organizations who care about the Musconetcong River and its watershed. They are kept informed about issues concerning the river and its related resources by receiving quarterly issues of the *Musconetcong River News*.



PO Box 113
Asbury, NJ 08802

MWA Membership Application

Please enroll me as a member of the Musconetcong Watershed Association in which I will receive membership benefits and publications. I have enclosed a check payable to **MWA** for the membership category listed below:

- \$20 Student
- \$30 Family
- \$50 Supporter
- \$100 Sustainer
- \$250 Steward
- \$500 Champion
- \$1,000 + Life Member

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____

E-mail: _____

Mail to:

Musconetcong Watershed Association

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Musconetcong River News

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