

Musconetcong River News

Fall 2019

Published quarterly by The Musconetcong Watershed Association

Asbury, New Jersey

Musconetcong Island Park: Expanding Ecotourism in Warren County

By: Karen Doerfer, Communications and Administrative Coordinator

MWA reached another landmark on the road to creating Musconetcong Island Park this summer. We invited local municipal officials and reporters to join us as we took the first swings of a sledgehammer to the Asbury Carbon's former lab building. The event received good media coverage, including the Express-Times and WFMZ Channel 69 News.

The former graphite laboratory building was donated to the Association in 1999, along with the former bakery/ warehouse that became the River Resource Center headquarters and the historic Asbury Mill across the street. The lab building was not something we intended to restore. It lacked water, sanitation, and is located in a flood hazard zone. However, until recently, funds were not available to demolish the building.

With support from a new stewardship funding program at NJ Green Acres, and 50th Anniversary of the National Wild and Scenic River Act funds from the National Park Foundation, MWA was able to secure funds to remove the building and create Musconetcong Island Park. This small quarter acre park, located in the middle of the Musconetcong River, will be a great spot for fisherman and paddlers alike once the building is removed and the stairway access is repaired.

The "Golden Sledgehammer" event marked the contractor selection of Harrington and Sons following a public bid process and filing of permits with Hunterdon County for accessing the bridge during construction. However, additional permit requirements set us back from

our summer project start date. Based upon the contractor's availability, we anticipate the project will start late November or early December. During demolition, one lane on the bridge will be closed during weekdays for about two to three weeks. To show appreciation for the history of the site, MWA designed and ordered an interpretive sign, and conducted an oral history project of former Asbury Carbon employees who worked in the Graphite Laboratory, historic Asbury Mill, and other buildings. We plan to maintain the history of this significant donation to our organization while providing a new benefit to the public. We thank our volunteer team working on this project: Trustee Bill Gierke (project lead) and Trustee Mary Paist-Goldman. Trustee Emeritus Chuck Gullage and Trustee Bill Leavens conducted the oral history project.

Stay tuned for future updates on this site once removal begins. You can also check out our website in the meantime: musconetcong.org/musconetcong-island-park.



PICTURED (FROM LEFT TO RIGHT): Mary Paist-Goldman, MWA Board of Directors; Bill Gierke, MWA Board of Directors; Mayor Jeff DeAngelis, Franklin Township (Warren County); Brandee Chapman, NJ Green Acres Program; Alan Hunt, MWA Executive Director; Freeholder Susan Soloway, Hunterdon County; Mayor Paul Muir, Bethlehem Township (Hunterdon County)



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An Interview with Sonia Cordova

Sonia Cordova is a long-time member and volunteer of the MWA. She has done everything from monitoring water quality through our River Watchers program to becoming one of the lead coordinators for our annual Wine Tasting which is one of our largest annual fundraisers to date.

Q1: How did you first learn about the MWA?

I was an invited guest to one of the early wine tasting events. I met so many wonderful people and learned how much the MWA did to improve the watershed.

Q2: What were some of your favorite MWA projects or events to work on?

I am involved with water quality monitoring, the River Cleanup, the Native Plant Sale, and the Wine Tasting. I think the Wine Tasting may be my favorite. While volunteers do put many hours in to prepare, the day itself is a fun, social event that brings outside visitors to the MWA.



Sonia with MWA Treasurer, Erik Henriksen, during a winter season water quality sampling.

Q3: What advice would you give someone looking to volunteer in their community?

Do something you like or something you are good at doing. Ask a friend or family member to join you. Do not think you have to commit many hours of volunteer time. Organizations are grateful for whatever amount of time you are able to share.

For more information, or to get involved, please visit our website or join us at our upcoming Wine Tasting on the Musky on Sat., Oct. 12 from 2 to 5 pm at the Pavilion at the Warren County Rod and Gun Club. Tickets and more information are available at musconetcong.org/wine-tasting.

The Great Waters of New Jersey's Highlands

By: Alan R. Hunt, Ph.D., Executive Director

The William Penn Foundation recently awarded MWA a two-year grant through their 25,000 Miles of Safe Swimming and Great Fishing initiative. This new initiative aims to protect the existing recreational and drinking water uses of the Delaware River Watershed. Oftentimes, the designated uses of rivers and streams are slow to catch up to how people actually use those waters, including swimming, tubing, boating, and fishing. In fact, unlike many other states, New Jersey does not have the required process to identify rivers and streams for recreational uses. In this grant, MWA will

How to Camp? Go Outside.

By: Tish Lascelle, MWA Board President

It's true... we're all outdoor 'geeks' at the MWA. It is where we work and where we choose to play. Sharing this passion and spreading the benefits of nature is part of our mission. When we run camps, they all begin outside, where campers will experience nature first-hand. Consider:

- 1. When photographing a sunset, don't put the horizon in the center of your image; aim your camera lower or higher for a more pleasing result.
- 2. If you get stung by a bee while enjoying nature, mash up the leaves of a common weed—plantain and rub them on the sting to immediately reduce the pain, itching and swelling.
- 3. A river with stoneflies is a sign of a healthy river.
- 4. A great green for nature paintings is achieved by combining cadmium yellow and viridian.

These were just some of the things our campers learned this summer in MWA's first-ever environmental camp program designed for adults. We wound up calling it 'Adult Camp Musky' because we leveraged the success of our long-running kid's Camp Musky program when building it. One camper learned a little bit about how to tip a kayak (or perhaps more precisely, how to recover after tipping a kayak); another became one with some mud and we heard his wife wouldn't let him back in the house that way. But everyone had a lot of fun.

This winter, we'll think about which programs were most successful and puzzle over those that weren't... was it the day? The price? The topic? "Year One" of any new offering is always a learning year. If you have any feedback for us or new ideas, please let us know at kyle@musconetcong.org. We'll re-formulate and see you in the Spring!



Kyle Richter, Watershed Programs Coordinator, demonstrating macroinvertebrate sampling to adult campers.



Adult campers getting ready to kayak the Musky from Hampton Park to the River Resource Center.

Camp Musky Celebrates 10 Years of Summer Exploration

By: Kyle Richter, Watershed Programs Coordinator

July and August are always an exciting time here at the MWA as the River Resource Center plays host to Camp Musky, and this year was no exception. To kick off our tenth summer we welcomed 59 campers over the course of five weeks. Each day, campers embarked on a new day of learning, adventure, teamwork and fun with our Environmental Educator, Tomas Gonzales. Days began with a morning hike to explore different habitats like meadows, woods, wetlands, and river to discover who calls these areas home. Afternoons were spent building bamboo forts, playing games, and splashing in the river.

Overall, it was a great summer and together, we accomplished a lot! MWA would like to extend a huge 'Thank You' to our amazing educator, Tomas, as well as our fantastic volunteers Brian Butler, Gage Poltrack, Sara Rasmussen, Tesher Andres, Tyler Caio, and Alyssa Thai for their part in making Camp Musky such a great success this summer. Be on the lookout for Camp Musky 2020 information to be released in early spring!



A comic strip created and drawn by Jonah Duckworth, a seasoned Camp Musky camper.

North Jersey RC&D Intern Works with Farmers to Improve Watershed Health

By: Vicki Behm, NJRCD Intern

North Jersey RC&D (NJ RC&D) has been busy this summer! We were awarded a 2018 National Fish and Wildlife (NFWF) Delaware River Restoration Grant to improve water quality in the Musconetcong focus area of the Delaware River Watershed Initiative (DRWI). The grant established a free soil sampling initiative to help educate farmers on their soil health. Soil sampling was offered to all agriculture producers in the focus area and included formal results and recommendations for fertilizing, liming, building organic matter, and other conservation best management practices.

Vicki Behm, NJ RC&D summer intern, assisted 20 farmers, assessing close to 3,000 acres and 150 soil samples along with Bridgett Hilshey, NJRCD Agricultural Specialist. Vicki is a 2019 graduate of Delaware Valley University with an Environmental Science degree focusing on Soils and Land Use along with a minor in Equine Business.

While visiting farms in the Musconetcong watershed, Vicki discussed the current agricultural operation, crop rotations, and any land management or resource concerns. She also collected representative soil samples. Once the sampling was assessed, Vicki would return and discuss the results with the producer. Conversations focused on the fertility of the soil while giving recommendations that would improve soil health and the producer's economic bottom line. These best practice recommendations have the



dual benefit of being good for water quality by reducing pollutants and keeping soil in place by reducing erosion.

While conducting site visits, resource concerns mentioned by farmers included soil erosion and gullies, and Vicki recommended fixes for over-grazed pastures or expanding vegetation buffers near streams. This year, farmers have faced extreme rainstorms and are dealing with the repercussions of soil, nutrient, and crop loss. Best management practices NJRCD recommended included cover crops, pasture reseeding, animal trails and walkways, compost facilities, and riparian buffers. Producers were encouraged to sign up for the Environmental Quality Incentive Program (EQIP) through NRCS to implement new practices with financial assistance. NJRCD also used implementation grant funds to assist with practice implementation.

Based on the success in the Musconetcong, NJRCD expanded the soil sampling to other watersheds with NJDEP 319(h) grant funding. Vicki travelled to Readington Township and the Neshanic watershed to soil sample an additional 11 farms. In Readington, NJRCD focused on pasture assessments along with soil tests to connect how soil health can improve forages while buffering nutrients before they reach waterways.

Through both NFWF and NJDEP funding, NJRCD has been able to assist large-scale crop and hay operations, organic producers, livestock farmers, horse stables, and small, diversified hobby farms. NJRCD was proud to work with landowners of rented farmland and farmers on farmer-owned properties alike to help all better understand their soil, how to make lasting improvements, and how to best protect the quality of our local waterways.

Photo credit: Alan R. Hunt, Ph.D., MWA Executive Director

(left to right): Vicki Behm, NJRCD Intern, and Bridgett Hilshey, NJRCD Agricultural Specialist sampling a local hay field.

'Great Waters'

Continued from page 2

serve as a facilitator of a six-organization project to promote recreational access, protect groundwater in sensitive limestone aquifers, and ensure that National Wild and Scenic River status is taken into account in state permitting decisions.

We are pleased that the William Penn Foundation and several partner organizations share these values. Our partners include: Trout Unlimited, which will conduct outreach and trips to rivers outside the Musconetcong watershed, working with local chapters; the Association of NJ Environmental Commissions, which will encourage local municipal officials to participate in boating, hiking, and fishing trips to see and enjoy our region's great waters; The Watershed Institute, which will develop policy briefs on how state and federal regulations protect our water resources; the New Jersey Highlands Coalition, which will address drinking water issues in the Highlands region; and the Delaware River Greenway Partnership, which implements the Lower Delaware National Wild and Scenic River.

For the MWA, we will be able to increase our recreational offerings next year with expanded recreational programming. This includes a seasonal recreational staff position who will continue on the redevelopment and expansion of the Musconetcong Education Trail, place new signs at the river's public access points, and introduce new interpretive signage in the watershed. We will be focusing on our strength in our watershed, and our partners will be utilizing their strengths to in working in other watersheds, and at the state and regional levels. It is quite a sign of respect and recognition of MWA's ability to take on big projects and bring them to completion that both the both the William Penn Foundation and our partners put their trust in us to be the fiscal sponsor of the project, which includes the overall project facilitation.

We hope at the conclusion of this twoyear grant, our community will be fully aware of the importance and vulnerability of its natural resources is a community that will actively support efforts to ensure environmental quality. That's right from our mission statement and reflects the work we've been doing to promote and protect the Musconetcong watershed through almost three decades of our history.

The Prehistoric Creatures in the Musky

By: Nancy Lawler, Water Quality Program Coordinator

The American brook lamprey are not common in our local streams—we see maybe one or two each year in one or another of our studies. Small and eel-like, they are one of the strangest organisms to grace the Musconetcong River. They have survived nearly unchanged since before the dinosaurs, through eons of drastic climate change.

Around 530 million years ago, give or take a million, some aquatic vertebrates on our planet developed an amazing trait—mineralized structures that helped those ancient vertebrates to survive and reproduce. These structures changed over millions of years and became bones, jaws, scales and teeth. If you take a look at modern fish and other aquatic creatures with backbones, you can tell how helpful these traits are; almost all of them have bones and jaws, and many have scales and teeth. Only a few vertebrates don't—like lampreys.

Lampreys are elongated, eel-like creatures without any bony structures, including fins or covers for their gills like fish have. The ancestor of the modern lampreys were parasites. About half of lampreys have retained that lifestyle they drill holes into the sides of fish to feed on their blood. The most notable trait of a lamprey is its mouth, which is an unattractive, disc-like, toothy, sucking apparatus. Some of these have complex life cycles where they move from saltwater to freshwater, and some live exclusively in freshwater.

Half of the lampreys, including the small, native American brook lamprey, took it one step further and evolved non-carnivorous feeding habits. Their blind larva burrow in soft bottomed areas of healthy rivers, and tend to stick to a bland diet of algae, diatoms and detritus there. In the fall, they develop into adults with eyes, but lose their stomachs, and don't eat at all. They migrate from large streams into smaller, fast, gravelly tributaries to spawn and die.

Dams and culverts prevent American brook lamprey from moving between streams and completing their life cycle; this severely limits reproduction in rivers like the Musconetcong. In 2018, our team found only one American brook lamprey during the sampling season, just downstream of the Warren Glen dam.

If you would like more information on the creatures we find in the Musconetcong River, follow our #MinnowOfTheMonth hashtag on Facebook and Twitter.

AMERICAN BROOK LAMPREY

Learn about MWA's latest #MinnowOfTheMonth each month on Facebook and Twitter by following @MuskyWatershed.



The American Brook Lamprey is an ancient, aquatic vertebrate that is not a minnow, and not really a true fish! They have no jaws, no scales, no side fins, and no bones - just cartilage.



Elongated, eel-like shape, but not an eel!



1 found duringSpring 2018 survey



Survived, nearly unchanged, since before the dinosaurs!

#MinnowOfTheMonth

Top photo provided in partnership with U.S. Fish & Wildlife Service and Princeton Hydro



Hughesville Revisited

By: Bill Leavens and Mary Paist-Goldman, MWA Board of Directors

You may be aware that the average rainfall over the past year and a half has been double the state average. High water levels have wreaked havoc with any scheduled recreational activity in the river (and ruined a lot of other activities, too). However, one very unfortunate consequence is the impact that high water levels have had on the riparian restoration work that was completed at the Hughesville dam removal site on the Musconetcong below County Route 519.

We were alerted by a report that a very mature willow tree had fallen across the river after a particularly bad high water event. Normally, the flow is about 200 feet per second measured at the Bloomsbury USGS gauge. During the past year, the gauge has peaked at 2,000 gallons per second on five different occasions—ten times the normal base flow. Much of the eastern bank of the river was composed of unincorporated sediment, deposited over the past few thousand years. We were dismayed to learn that a 300-footlong section of the riverbank on the Hunterdon County side had been peeled away by floodwaters. An island had been created in the river as water coursed to the left.

Because this was MWA's project, we were determined to fix the underlying conditions that continued to rip away additional riverbank. We are fortunate that the engineer on the project, Princeton Hydro, donated much of their labor to redesign and oversee the work. We were able to contract with RiverLogic Solutions, the firm that originally removed the dam, to complete the work. The only problem they had was timing. Because the river remained at such high levels, it was unsafe to undertake the work until this past September.

The restoration work involved removing a mandatory stone structure that had been installed in the river below the Route 519 bridge. That feature had been directing the high water flow directly at the Hunterdon bank. Once we received permission to remove that structure, rock was pulled back to the west bank to protect the Hunterdon side. We were able to secure a donation of 400 tons of large stones by Grade Construction who was engaged in a Route 519 road widening project immediately uphill from the repair area. A pair of large trackhoes and a giant dump truck were then employed to cart stone across the river to fill the impaired area. A total of 1,300 tons of stone and more than 30 logs were used to fill the enormous hole that had been gouged into the east bank. The filled area was then covered with soil to provide for vegetation along the stretch.

What appeared to be an industrial ditch will be finished over the next months with replacement planting. We secured a donation of 20 large trees and 250 smaller trees and bushes that will be planted on the west bank.

This was an expensive undertaking, but in the end, we know much more about how the river works. We plan to apply this knowledge when we begin work on the Warren Glen dam removal in the coming years.



Restoring the Asbury Mill

For the first time in decades, the Asbury Mill is weather-tight. Late this summer, our experts completed the restoration and stucco of the final exterior wall.

MWA recently hosted the Society for the Preservation of Old Mills (SPOOM) to see the progress. We plan to make this the first of many public tours to come as we lead up to planning for the Mill's adaptive reuse. Stay tuned as we turn this historic structure into an interpretive learning center and much needed office space.

For more information on the Asbury Mill, visit musconetcong. org/restoring-the-asbury-mill, and join us Thurs., Dec. 5 at Hawk Pointe Golf Club as we host a Mill Dinner. There will be dinner, presentations, a special 'Thank You' to Asbury Carbons' Steve Riddle, and a silent auction. All proceeds from this dinner will benefit the continued restoration of the Mill. Information on this event can be found on page seven of our newsletter or on our website.

Coming up later this month, on Sat., Oct. 19, Chuck Gullage and Rudy DiGilio will be giving a presentation on the history of the Asbury Mill at the Asbury Coffee Mill, 432 Old Main Street, Asbury, NJ 08802. This presentation will be followed by a walking tour of the Mill. This event is free to attend, but please RSVP by calling Malia, Owner, Asbury Coffee Mill at (908) 574-2147 by October 16.

SAVE THESE DATES!

Saturday, October 12 - *Wine Tasting on the Musky*. (Rain date October 13). 2 – 5 pm. The Pavilion at Warren County Rod and Gun Club, 279 Asbury Bloomsbury Road, Asbury. Join us for a scenic afternoon and sample fine wines, craft beers and local ciders while enjoying live music provided by local band, the Caren Kennedy Trio. Attendees will also have a chance to enter our annual rubber duck race on the Musky! A complementary wine glass will be given to the first 100 registered. Tickets are available at musconetcong. org/wine-tasting.

Saturday, November 30 - *Point Mountain Hike*. Meet at 10 am. Join MWA as we hike the Ridge Trail of Point Mountain Reserve. This is a good hike for beginners and expert hikers. The trail is diverse and challenging at times and includes a steep and rocky incline. Bring a snack and water to the gravel parking lot on Point Mountain Road, 0.3 miles from Route 57. MWA members are free! Non-members are asked to donate \$3 per person (Not more than \$10/family). For more information or to register, email kyle@ musconetcong.org.

Thursday, December 5 - Asbury Mill Dinner. 6 - 9 pm. Hawk Pointe Golf Club,

4 Clubhouse Drive, Washington. MWA has made many strides in the exterior restoration of the Mill this past year. Be the first to learn what we've accomplished and where we're going. The evening's events will also feature a Silent Auction and a thank you presentation featuring honored guest Steve Riddle, Asbury Carbons. For tickets, please visit musconetcong.org/asbury-mill-dinner.

SAVE THE DATE!

Last year was MWA's biggest Giving Tuesday yet! We honored the life of an old friend of the organization, raised a record breaking number of donations, and provided much needed funding to our water quality monitoring and educational outreach programs.

Join us on **Tuesday, December 3** for this global day of giving. Giving Tuesday is a social media movement that was created as a way to give back this holiday season after the post-Thanksgiving shopping holidays Black Friday, Small Business Saturday/Sunday, and Cyber Monday.

This year, MWA hopes to build on the momentum we have created during our recent Giving Tuesday successes and raise money to further our water quality monitoring program. With threats like the New Zealand Mudsnail in our lower watershed and the harmful algal blooms in our headwaters, having the latest water quality technology and the funding to communicate updates is more important than ever.

Your support helps us to continue to grow as an organization and keep informing the public on how we can keep our water safe for recreational use like fishing and boating. For more information or to make a donation, please visit musconetcong.org/givingtuesday, and enjoy the upcoming holiday season!



We're Social! Follow us on:



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Instagram @MuskyWatershed



Meetup

<u>Meetup</u> Musconetcong River Area Outdoor Activities

For more information or to register for any of these events, please email info@musconetcong.org or call (908) 537-7060, unless otherwise noted. MWA River Resource Center (RRC) is located at 10 Maple Avenue, Asbury, NJ.



E-mail:

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 nonprofit organization formed in 1992 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 squaremile Musconetcong River Watershed, and includes portions of four counties, and all or portions of 26 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.

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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	□ \$100 Sustainer		
	\$30 Family	□ \$250 Steward		
	\$50 Supporter	□ \$500 Champion		
□ \$1,000 + Life Member				
Name:				
Address:				

Address:		
City:	State:	_Zip:
Phone:		

Mail to: Musconetcong Watershed Association PO Box 113, Asbury, NJ 08802

Improve Watershed Health

How to Camp? Go Outside.

Musconetcong Island Park:

Asbury, NJ 08802 PO Box 113 NOLLVIDOSSV ATERSHE

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◆ The Great Waters of New Jersey's Highlands

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