



Quarterly

NEWSLETTER



DATES TO REMEMBER



November:

- 19 - USC Bi-Monthly Meeting
- 24 - Online - The Emotional Front of Grazing
- 30 - Cover Crop Documentation Due



December:

- 13 - Riparian Buffer Planting Estimate Requests Due to Lydia



January:

- 7 - Water Quality Program Applications Due
- 28 - USC Bi-Monthly Meeting* tentative date



February:

- 18 - USC Buffer Steward Application Due

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THANK YOU!

The USC would like to thank all of the SWCD's that participated in BMP Verification and Data Collection for the 2021 Progress year. Together, across the 18 counties in NY, 191 farms including CAFO's were visited for whole farm verification, along with 10 wetland sites, 10 stream sites, and 1 urban buffer site. BMP Verification is essential to meeting NY's TMDL Watershed Implementation Plan Goals. Throughout the 2021 Progress year, 729 multi-year practices were verified, 215 new multi-year practices and 539 annual practices were documented in the USC's BMP Database.



Crocker Creek Tributary Riparian Restoration

By: Lydia Brinkley - Riparian Buffer Coordinator, Upper Susquehanna Coalition

Location: Broome County, NY

A small riparian restoration project along a tributary to Crocker Creek resulted in over 350' of berm removal and adjacent floodplain reconnection. Crocker Creek flows from Tioga County to Broome County, eventually entering the Nanticoke Creek in Union Center. As usual many partners were involved in making the entire project happen. Once the berm removal was completed by the USC, Broome SWCD coordinated a volunteer planting event using the Trees for Tributaries Program for plants and materials. Newark Valley Honor Society students volunteered their time on a Saturday morning to get 160 plants in rocky ground.

The project began when the landowner, who is a Master Gardener in Tioga County and member of the Finger Lakes Native Plant Society, began working with the Upper Susquehanna Coalition Wetland Team to install wetland potholes in higher locations on her property to reduce overland flow contributing to the instability of Crocker Creek streambanks. Besides reducing overland flow, the wetland pools have reportedly attracted an abundance of wildlife with many frogs and green herons observed. Having a positive experience with that project, the landowner expressed interest in other conservation opportunities on her property with a special interest in riparian tree and shrub planting for habitat. Upon reviewing her property, a tributary to Crocker Creek was identified as disconnected to the floodplain and lacking native riparian vegetation.

For years, the landowner reports, the town would "clean out" the tributary downstream of the road culvert, straightening the channel and building berms. With more education, the town is no longer completing these clean out activities and so it was a good time to address the berms and reconnect the floodplain.

The landowner was keen to have pollinator species planted, with special consideration for Lepidoptera, or moths and butterflies, as this will add to the overall wildlife habitat value of her already diverse property. Currently, the landowner has helped to breed the cecropia moth, caterpillar pictured above, which is the largest moth in the Northeast! Plants such as swamp white oak, river birch, chokeberry, viburnums, dogwoods, and buttonbush provide food and habitat for moths and butterflies. We have high hopes that this landowner will care for her riparian area for years to come!

photos from Bailey Park, Ranier Lucas, and Jeremy Waddell



Success with New Program Funding

By Emily Dekar - Ag Coordinator, Upper Susquehanna Coalition

The USC recently secured funding through NYS DEC to assist with the out-of-pocket costs associated with Agricultural Non-point Source Abatement and Control Program projects. To be eligible for this funding, the project was required to be located within the boundaries of the Upper Susquehanna Watershed in NY, and have a current Ag NonPoint Source contract through NYS Ag & Markets. With a very short timeline for projects to be completed, Delaware and Madison counties were able to complete 7 projects, totaling just under \$200,000.00 in funding assistance.

Implementation assistance completed with this program funding includes practices such as: Access Roads, Silage Leachate Collection, Fencing, Watering System, Covered Barnyard, Covered Manure Stacking Area, Concrete Waste Storage Facilities (Liquid), and Streambank Stabilization with Riparian Forest Buffer Establishment.



USC Receives Award from the New York Association of Conservation Districts

ASSOCIATE MEMBER AWARD

Recognizes a business that has worked with &/or provided service to NYS Soil & Water Conservation Districts &/or NYS Association of Conservation. For outstanding efforts or activity that promotes and advances District programs with financial support as well as business assistance. Awarded to a business that's heart is promoting conservation efforts at all levels.



New to the USC



We recently added a new USC member as the Riparian Buffer Technician at the beginning of October. Ranier Lucas grew up in Binghamton NY, and earned his Bachelor's Degree in Environmental Geoscience from SUNY University at Buffalo. Ranier previously served in Vermont for ECO AmeriCorps as an Assistant Coordinator for the Missisquoi River Basin Association (MRBA) and the Upper Missisquoi and Trout River Wild & Scenic Committee (UMATR). Ranier enjoys hiking, gardening, and being outside with his dog. He is excited to hit the ground running; coordinating the Trees for Tribs program and looks forward to meeting everyone.



Virgil Mountain Three

An aerial view of fields and forests now permanently protected by the Finger Lakes Land Trust. Credit: Bill Hecht

By Edie Jodz - Assistant Director of Development, Finger Lakes Land Trust

Location: Virgil, New York

The Finger Lakes Land Trust accepted the donation of three adjacent conservation easements protecting 250 acres in the town of Virgil, Cortland County, and in close proximity to Greek Peak Mountain Ski Resort. The easements were granted by a group of landowners and friends who manage the lands collectively: Ed Robinson, Scott and Lisa Snyder, and Jim, Carole, and Dale Lathrop.

Located within the Susquehanna River watershed and adjacent to James Kennedy State Forest, the properties are primarily forested with smaller areas of fields and meadows. Over the years, the three neighbors have worked with the Upper Susquehanna Coalition, U.S. Fish & Wildlife Service, and the New York State Department of Environmental Conservation to manage the property as wildlife habitat, creating vernal pools, forest clearings, and small orchards. They have also used the land for maple syrup production, hunting, and recreation.

Protection of the three properties creates a buffer to the publicly accessible state forest as well as a section of the Finger Lakes Trail which runs to the south. Conservation of these lands also provides a forested buffer for streams on the properties—source waters of Owego Creek, which drains into the Susquehanna River and, eventually, the Chesapeake Bay.

“From a macro perspective, our world is changing rapidly and will continue to do so for the foreseeable future,” said landowner Ed Robinson. “Large expanses of healthy green space are vital and will only become more important in the long-term future.”

“By working together, these neighbors have ensured the future of properties that provide significant habitat for a diversity of wildlife,” said Finger Lakes Land Trust Executive Director Andrew Zepp. “The easements will provide for traditional hunting and forestry while preventing development that would harm the site’s natural resources.”

New to the USC

Thomas Flynn worked for the USC as a Riparian Buffer Steward during the Summer of 2021 and assumed a role as a Wetland Technician this past September. He studied Environmental Sustainability and Geographic Information Systems while at Binghamton University. His research included migratory pest dispersal, land-use changes, floodplain connectivity, and the geomorphology of streams. He performs site assessments, manages sediment control operations, operates machinery as well as collects geospatial data of constructed wetlands. His passion for natural ecosystems renews every time he learns something new about how all can become better stewards of the places we live and love to experience.



Dewitt Wetland Project

A note from our partnering landowners

We moved to Speed Hill Rd almost 20 years ago. We purchased the house and 5 acres because it had a barn and land for our horses. It also had the original pond, which we considered a bonus.

Over the years, we've had a growing awareness of the land, the vegetation, and the soil conditions. We purchased the additional 17-acre parcel behind us because we wanted to be sure it was not developed. We knew that much of that land was very wet too.

That started us on a journey to learn more about Wetlands. We came to realize how important they are for the environment. And in conversations with Paul (Gier), Jeremy Waddell, and Kevin (VanHine) we learned about the possibilities of enhancing our Wetlands, by putting in these vernal pools.

We are very excited to have these pools installed! So much Wetland has been lost around the globe because of development. It feels like an opportunity to "give back," and make a tiny improvement in the Climate Change battle, no matter how small.

Our goals for the future are to plant native species and create more biodiversity on the land. It will be exciting to watch the plants evolve over time and to see what amphibians, birds, and mammals are attracted to these pools.

Becky and Steve DeWitt





Above: Farmers discuss dairy grazing strategies with a heavy fescue sward.
Right: Meghan Webster leads the soil health discussion at pasture level.
Credit: Troy Bishopp



Capturing Rain is a Full-time Job for Grazing Dairies

By Troy Bishopp - Grass Whisperer, Madison County SWCD

Penn Yan, NY---After the 2020 historic drought in the Finger Lakes, area grazing dairy farmers are enjoying 2021's robust growing season with plentiful moisture, heat and a return to pasture walks with an emphasis on biology.

However, this summer's deluges of frequent rain have tested a farmer's resolve to keep it sequestered on the land and away from impacting local waterbodies that welcome thousands of hungry visitors to the region. In Genesis 9:3, a reverie ensues: "Every moving thing that lives shall be food for you. And as I gave you the green plants, I give you everything."

To facilitate the important work green plants provide, Ontario and Yates County Soil and Water Conservation Districts recently led a large grazing workshop partnering with 2 local organic grazing dairies, Fay Benson, Small Dairy Educator for Cornell's South Central NY Dairy Team and USC Grazing Specialist, Troy Bishopp for a day of learning and fellowship.

The morning session held at Leon Brubacher's Dairy Farm in Himrod, NY featured a presentation on soil health and soil structure principles as it pertained to pastures by Fay Benson. Leon led the eager group out to his certified-organic, 40 cow, 14 paddock grazing system where he discussed his forage management style, "as taking proper care of the plants" for profitability and soil health. With the "overly" abundant rain, swards were growing an inch per day and were fully recovered in 22 days, a feat usually witnessed in the spring. It showed how intensive management and fertility played a large part in the farm's resiliency.

In a group exercise, the farmers measured, bantered and predicted pasture production, much to the delight of everyone, because most practitioners have a different context and "grazier's eye". "It felt really good to laugh", said one farmer. Because farmers like tools, they squeezed grass plants and measured brix levels using a refractometer. Levels were between 7 and 10 which indicated the effect of the rain on lowering forage energy for the cows. Mr. Brubacher was using this premise and giving his cows a pasture ration where the cows only grazed the very tops of plants which also contributed to a high residual that armored his soil against the frequent rain events.

Folks also got to see a dung beetle trap for the first time as Mr. Benson, "delicately", pulled the simple device out of the manure to measure activity of the beneficial insects. With good grazing techniques, the insects were doing yeoman's work for the surrounding soil. As the tour ended, Yates County's Soil and Water Conservation District

Continued on page 8

... Capturing Rain, continued from page 7

Senior Technician, Tom Eskildsen, described the benefits of sod for the Keuka Lake Watershed and gave advice on diverting water into grass catch basins and offering to help anyone design a more resilient farming operation.

The afternoon gathering held at Andrew Hoover's Farm in nearby Stanley, NY highlighted some different approaches to grazing for the larger herd of 100 cows. To lead off the fine day, Fay Benson taught a large contingent of farmers about soil management using the tools from the NY Grazing Coalition Soil Health Trailer. "Soil aggregate structure is really key," emphasized Benson. "Soil needs to have good aggregate structure and stability to keep improving biology. Structure is caused by the bacteria eating process. By stimulating organic matter to do its job, we get really healthy soil." "In pastures, we need to be careful of compaction, said Benson. It's slow to show up and slow to get rid of. The more organic matter, the more resilient soil is to compaction". He cited his research on this topic at (<https://projects.sare.org/wp-content/uploads/Compaction-Fact-Sheet-Final-1.pdf>)

Andrew led the group out to see his "summer seasonal" certified-organic 100% grass-fed dairy herd. "Being seasonal in the summer allows us to efficiently harvest our forage crops, graze for maintenance not intense production, have time-off with our children and capture a higher milk price in the fall from Maple Hill Creamery. It works well for us," said Hoover. The Ontario County farm sits higher up in the landscape and has had half the rain of the Brubachers.

The series of 5-acre rectangular paddocks are managed with rain capture in mind. "Managing mostly dry cows, allows us to trample more forage and improve soil biology with more mature plants and a diverse mix of root systems, said Mr. Hoover. The pasture system has an extensive above-ground municipal water system to each paddock which allows for improved fertility management and keeps animals out of the laneways. Most of the pastures had over 40 days of recovery to meet Andrew's goals.

"Well managed pastures like these, help protect our local watersheds, said Meghan Webster, Ontario County's Soil and Water Conservation District Manager. The merging of environmental and economic benefits through healthy soils and productive, profitable farms are priorities for us. We're happy to promote and support such positive practices."



The group ended their enlightened tour under a shade tree enjoying fellowship and Mrs. Hoover's homemade, molasses moon-pies and the farm's own delectable "full-fat", chocolate milk. The day reminds one of Isaiah 55:2b: "Listen to me, and eat what is good, and you will delight in the richest of fare."

**A group of farmers investigate the merits of chickory on soil health
Credit: Troy Bishopp**

Dairy Grazier Showcases Resiliency when Fred Arrives

By Troy Bishopp - *Grass Whisperer, Madison County SWCD*

If you want to learn about the attributes of good grazing management, go on a pasture walk with a herd of farmers. But if you want to see real resiliency on the land, visit a grass farm when “Fred the Hurricane” blows into town and dumps seven inches of rain on the landscape. It’s an opportunity to appreciate and study how dairy graziers are building soil health, producing high quality organic milk and providing ecosystem services for their community in the face of weather events.

Quoting Proverb 4:11: “I instruct you in the way of wisdom and lead you along straight paths.” That path to wisdom for over 50 farmers and agency professionals just happened to coincide with the remnants of a hurricane but hardly dampened the group spirit.

Dairy farmer Isaac Troyer of Candor, NY, teamed up with Cornell Cooperative Extension’s South Central New York Dairy and Field Crops staff and the Tioga County Soil & Water Conservation District to host a two-hour tour that focused on his family’s 40-cow, certified organic dairy grazing operation. Troyer said he’s been in the farming world since he was a small child, first watching his dad work with cows and now working with them himself. Due to his experience, a lot of the decisions he makes are based on estimation and long-term knowledge and the notion that “ballpark is good enough.”

He was concerned about inheriting Kora Tall Fescue when he bought the farm and saw the cows didn’t like grazing it, even though it’s an endophyte-free variety. “The cows like fescue for hay, but not as a grazing grass,” said Troyer. The group of farmers helped him vet some scenarios to manage his fescue-heavy swards, from re-seeding and inter-seeding strategies to pre-clipping before grazing or using a different class of livestock to utilize it. On a positive note, it’s great for autumn and winter grazing.

Troyer showed how he trampled tall grass using his dairy heifers and planned grazing, resulting in improved biological life, armoring the soil against the elements and creating a high-quality, diverse sward which kept animal performance high. It was noted that the forage was regrowing an inch per day from the rain and heat and humidity.

With all the moisture, guests saw a successful farmer-made bridge constructed of interlocking concrete blocks on stone piers. During times of low flow, the stream flows under the bridge; in times of high flow it easily goes over the bridge and self-cleans debris. The previous farm owner, Rob Howland, said he installed the practical bridge 15 to 20 years ago using about \$5,000 of his own money and a friend as an unofficial engineer for the design. “It’s been tested many times and has held up well,” said Howland.

The group, undeterred by sporadic rain showers, discussed dry cow grazing regimes, petted the draft horses, took soil compaction readings with a furnished penetrometer, studied manure pats for signs of beneficial dung beetles, did some pasture stocking math and talked about the attributes of having a grazing chart to keep track of daily decisions and simplifying recordkeeping for organic compliance. Troyer showed farmers his spotless milking parlor he built from scratch and how he manages his herd during the non-grazing season.

As the showers continued, guests convened under the barn roof for fellowship and reacquainting with friends with snacks provided by the Troyer family, including plenty of ice cream from the Tioga County Agricultural Resource Group and the Tioga County SWCD. Fred couldn’t dampen the resilience of a group of committed farmers.



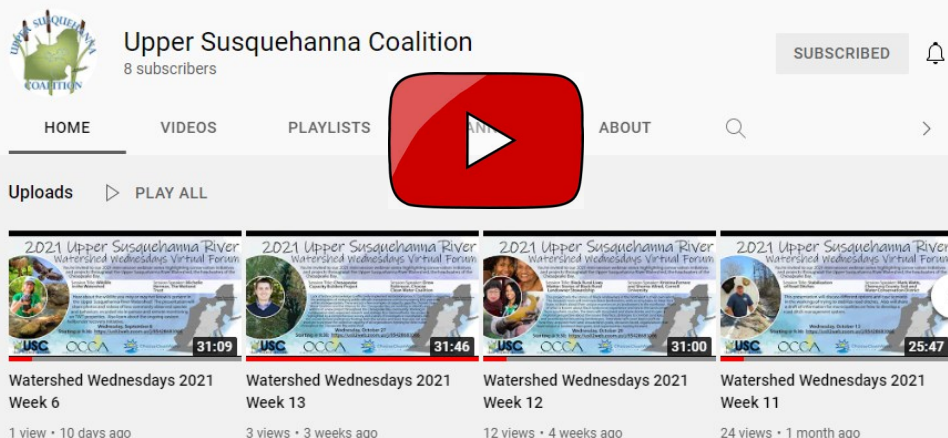
Danielle Singer from Tioga SWCD scoops the ice cream after a recent pasture walk.
Credit: Troy Bishopp

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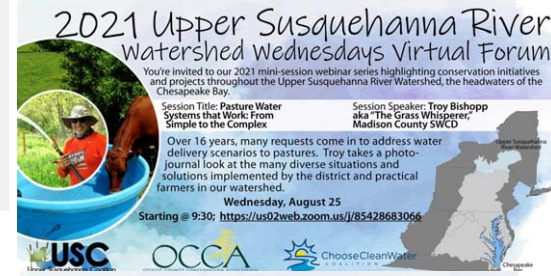
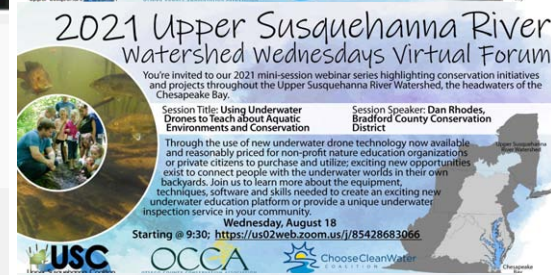
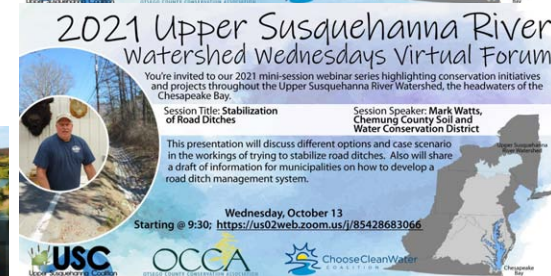
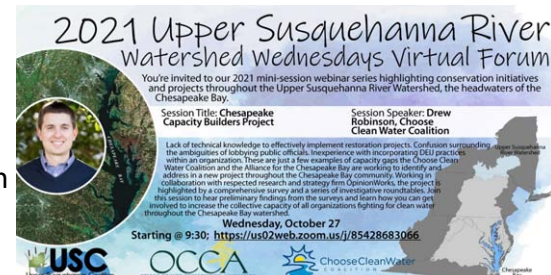
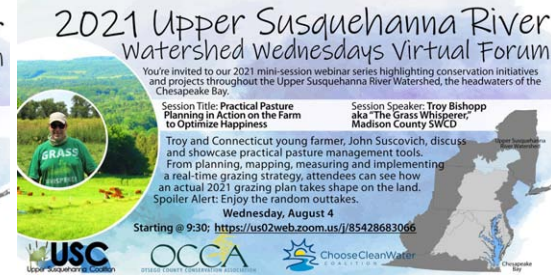
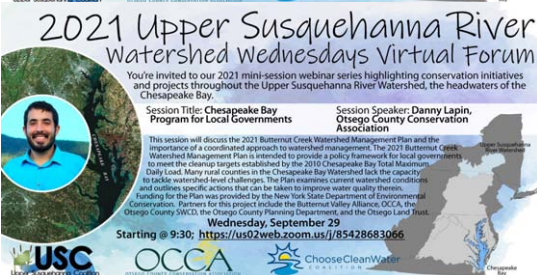
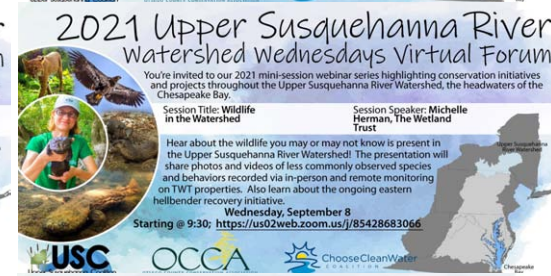
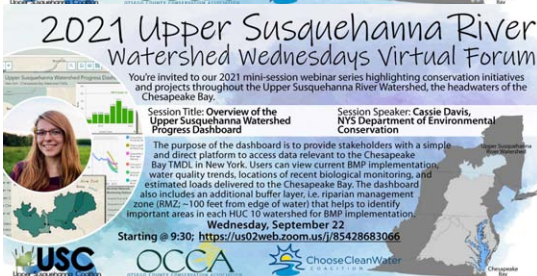
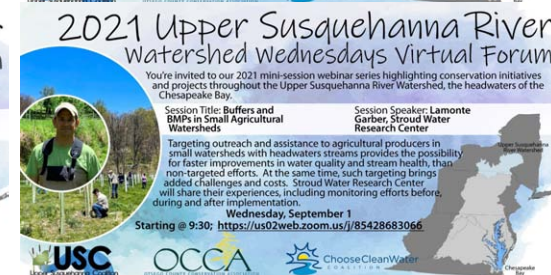
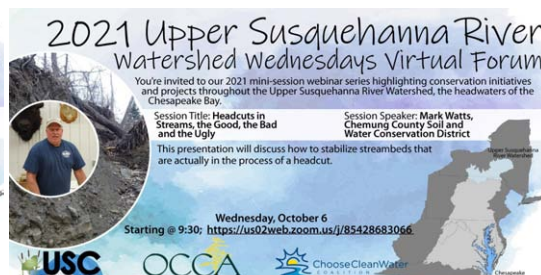
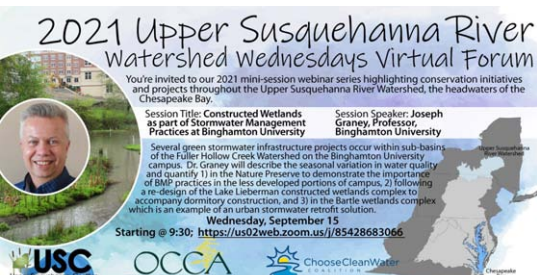
Watershed Wednesdays of 2021

Location: Virtual!

We want to thank our partners who helped make our 2021 Watershed Wednesdays a success. With 13 mini-webinars, 15 speakers, 309 participants and 352 minutes of content added to our YouTube channel, we're thrilled with the outcome of this year's Watershed Forum. Don't forget to visit our youtube page www.u-s-c.org/youtube, or our watershed Wednesday's webpage: www.u-s-c.org/watershedwednesdays if you missed a video. We have them posted and ready to share.



USC's youtube page www.u-s-c.org/youtube with a Watershed Wednesdays Playlist



WETLAND RESTORATION BENEFITS OUR WATERSHED

Wetlands, those transition areas between deep water and dry land, are important parts of our landscape. They come in many forms, and occur throughout our watershed, providing a variety of benefits.

Wetland benefits range, from absorbing flooding river flows, to holding rain in headwater areas, decreasing flooding downstream; from providing habitat to animals and recreational opportunities to people, to slowly releasing water into the ground, maintaining groundwater levels for streams during low flow periods; from cleaning surface water, to fixing carbon and mitigating climate change, and many more.

Unfortunately, wetlands often occur in areas that appear suitable for other landuses, areas along rivers and in flats where development is desirable. This conflict between wetlands and other uses has resulted in the removal of thousands of acres of wetlands from our watershed, resulting in the loss of all of the benefits those wetlands provided.

Researchers believe New York has lost more than 60% of our wetlands since the 1800s.

The Upper Susquehanna Coalition's Wetland Program is actively searching for opportunities to restore wetlands of all shapes and sizes, to return those benefits and to improve water quality, both locally and downstream in the Chesapeake Bay.

Wetlands can be restored through the plugging of drainage ditches, the removal of drain tile line, the construction of low berms, or the excavation of potholes, all of which serve to keep water on the land longer, slowing the pace by which it reaches our streams and rivers.

The highest priority wetland restoration sites are large, flat fields, with ditching throughout and heavy soils. But wetlands can be restored in many areas. If you are interested in being a wetland steward, and in having wetlands restored on your property contact our team at wetlandteam@u-s-c.org or visit our website for more information www.u-s-c.org/Wetlands.

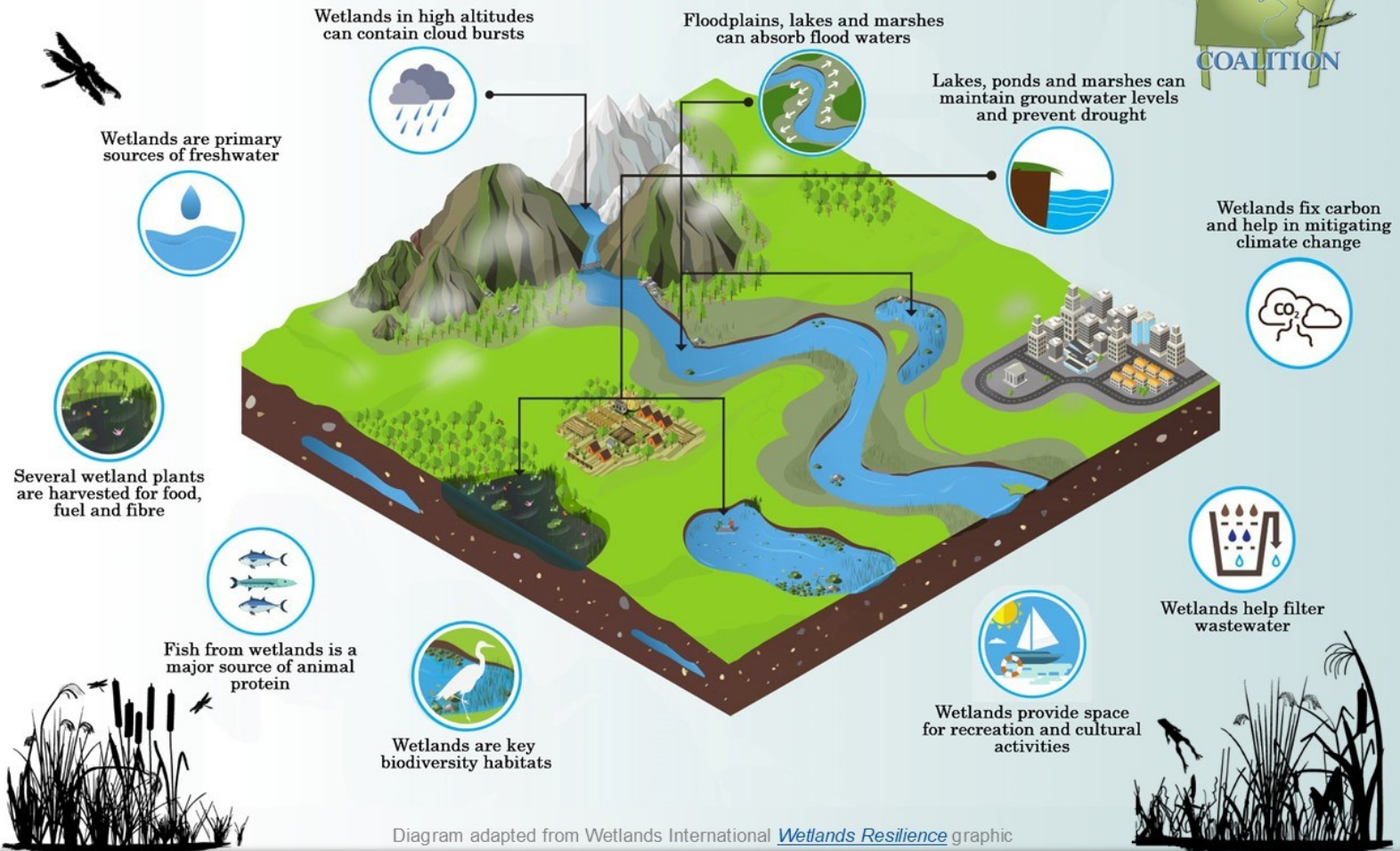


Diagram adapted from Wetlands International [Wetlands Resilience](#) graphic

Town of Big Flats Conservation Easement

*By Edie Jodz - Assistant Director of
Development, Finger Lakes Land Trust*

Location: Big Flats, NY

The Finger Lakes Land Trust (FLLT) and the Town of Big Flats permanently protected 1,000 feet of frontage on the Chemung River along with six acres of adjacent floodplain forest. The parcel borders State Route 352 in Big Flats and provides important wildlife habitat for a diversity of songbirds, raptors, and waterfowl.

Thanks to an anonymous donor, the property was originally acquired in 2017 by the FLLT and protected with a perpetual conservation easement.

In July 2021, the parcel was conveyed to the Town of Big Flats who will manage it as a public conservation area. The easement will ensure the integrity of forests bordering the river and also allow public access for kayaking and canoeing.

The property joins a growing network of lands protected by the FLLT in the Chemung River watershed, including the Steege Hill and Plymouth Woods nature preserves, also in Big Flats.

“We are delighted to have the opportunity to work with the Town of Big Flats again to conserve this area’s impressive natural resources while making them accessible to the public,” said Finger Lakes Land Trust Executive Director Andrew Zepp. “This is a win-win for everyone.”

“We’re thrilled to work with the Finger Lakes Land Trust,” said Town of Big Flats Supervisor Ed Fairbrother. “This project will secure public access on the river for many generations to come.”



The Finger Lakes Land Trust and the Town of Big Flats recently partnered to protect 1,000 feet of frontage on the Chemung River. Credit: Andy Zepp

New Funding

Recently the USC was awarded \$150,000 through the Arbor Day Foundation for 30,000 plantings in 2022. The funding is to be used for containerized stock that should increase survival rates in our planted buffers. This can be used for on all project types, such as riparian, wetland or upland areas, and for stock on projects funded by any program, such as CREP or AgNPS. While this may look like a heavy lift for 2022, the USC Buffer Team planted over 45,000 planted in 2021! Look for more details coming soon at the USC Bi-monthly meeting and at team meetings, or contact Lydia Brinkley at: lbrinkley@u-s-c.org.



Madison County Farms and Conservation District Host NYACD Tour

By Troy Bishopp - *The Grass Whisperer*, Madison County SWCD

On a picturesque fall afternoon, Madison County Soil and Water Conservation District Manager, Steve Lorraine led a tour of district directors and guests on a 2 hour tour of 3 dairy farms who are implementing water quality practices with a glimpse of cover crops growing and a history of the area reservoirs that feed New York's canal system.

The first stop highlighted an ongoing lined-earthen manure storage and transfer system project for a 200-cow dairy farm. The farm also utilized robots to milk the cows so they have more time for crop production and family. The 2nd farm was an organic 100% grass-fed operation nestled above the pristine Nelson Swamp which rotationally grazes 50 cows on 80 acres. Directors witnessed a covered barnyard project being built because of the barn's close proximity to a watercourse. The district was also installing a grass waterway leading into a water and sediment control basin.

The last farm was a CAFO dairy facility where Steve showed guests an elaborate silage leachate collection system with associated wetland cell treatment area. A newly built manure storage facility for holding solids during inclement weather was also discussed. Finally, the directors learned about the county's cover crop planting efforts that saw 17 farmers utilize the equipment and staff to plant over 700 acres of rye and triticale on corn silage fields within the Upper Susquehanna River Watershed.

Guests enjoyed the relaxed, informative look at what happens on the land and the conservation decision-making and diverse funding that guide the water quality projects. It also didn't hurt, that the tour featured plenty of cold, delectable, chocolate milk for everyone to enjoy. For any questions about the practices featured contact Madison County SWCD at: (315) 824 - 9849

