

Bi-monthly

NEWSLETTER



DATES TO REMEMBER

👙 June:



25 - USC Call in Meeting

30 - Last Day For BMP Verifications



August:

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Add your event to our calendar by emailing Palmerm@co.tioga.ny.us

BMP Verification Reminder!

Submitted By: Emily Dekar **USC Ag Coordinator**

It's hard to believe it is that time of year already! 2020 Best Management Practice Progress submission is just around the corner, which can only mean one thing, BMP Verification is due! Each year the USC and NYS DEC submit best management practice information into the Chesapeake Bay Model for credit towards our Watershed Implementation Plan goals. BMP Verification includes not only the randomly selected farms that each county was assigned last fall, but also data collection and documentation of any and all new multi-year practices that have been implemented since July 1st of 2019. Verification also includes the documentation of annual practices such as nutrient management, cover crops, precision feed management, manure incorporation, and tillage practices. This information is due to be documented in the AEM Online Database Tool no later than June 30th. The submission of these practices is how the Chesapeake Bay Program tracks our progress towards meeting our nutrient and sediment load reduction targets. Remember that all identifying farm information remains confidential under AEM and is not shared. For any questions regarding BMP Verification please contact Emily Dekar at dekare@co.tioga.ny.us

USC Wins Arbor Day Foundation's Headwater Award

Submitted By: Lydia Brinkley USC Buffer Coordinator

This past Arbor Day (April 21st), the Upper Susquehanna Coalition (USC) received the Arbor Day Foundation's Headwaters Award for innovative programs "that support the improvement of water quality and quantity through forestry activities". The USC is a coalition of 22 Soil and Water Conservation Districts in NY and PA that geographically encompass the headwaters to the Chesapeake Bay. They were nominated for the development and use of programs that focus on the restoration and long-term functionality of riparian areas, and for the USC Buffer Team's planting of 10,000 native trees and shrubs within riparian areas in 2018. A year later, in 2019, the USC coordinated the planting of over 40,000 plants in riparian areas! Wendy Walsh, USC Watershed Coordinator stated that "it is an honor for the USC to be recognized by the Arbor Day Foundation as this year's Headwaters Award winner! The USC staff, members and partners work hard to develop and support innovative programming in the watershed to address both water quality and quantity needs. Being recognized at the national level for our effort is a tribute to our work and everyone that is involved in these efforts shares in our success."

The USC Buffer Team is made up of two dedicated USC staff members, several SWCD staff members, as well as seasonal interns from throughout the watershed. Most of the plants that are directly planted by the USC Buffer Team are provided through the NYS Department of Environmental Conservation's Trees for Tributaries Program and are planted on sites throughout the Upper Susquehanna Watershed as a group effort, often utilizing volunteers. While focusing on restoring riparian areas adjacent to agricultural land, the team facilitates riparian restoration on any type of land where there is a willing landowner and reasonable opportunity. Tree planting within wetland, riparian, or upland areas all benefit water quality through nutrient uptake therefore reduce the amount of nutrients reaching our waterways. Planting trees also has numerous other benefits such as habitat creation, streambank stabilization, and by reducing the timing and quantity of peak storm flows.

Physically planting trees is only one way that the USC contributes to reforestation. While the USC plans and coordinates riparian and wetland reforestation through federal, state, and other local programs, they also provide funding opportunities and programs focusing on riparian and wetland restoration. One example is the USC Buffer Steward program that aids in the establishment of riparian forests by providing funding and training for stewards throughout the watershed to steward these newly planted areas. Stewards monitor for tree and shrub survival and perform establishment activities such as addressing competing vegetation.

Connecting the USC's mission of protecting and enhancing water quality and natural resources to habitat restoration within the headwaters to the Chesapeake Bay has led to the implementation of many reforestation projects. The USC prioritizes funding for projects that provide habitat for brook trout, hellbenders, and pearly mussels through tree planting along with rotational grazing best management practices. With helpful funding from partners such as the National Fish and Wildlife Foundation, the US Forest Service, Natural Resource Conservation Services, NYS Department of Environmental Conservation, NYS Department of Agriculture and Markets, and One Tree Planted, the USC to plant thousands of native trees and shrubs throughout the headwaters to the Chesapeake Bay. Congratulations to all of the USC member SWCDs for their dedication to reforestation that lead to this award!



Taylor Held, USC Buffer Technician, and Madison County SWCD Staff planting trees



Wendy Walsh, USC Watershed Coordinator, and her daughters planting trees via their clubs 4H volunteer activity





Precision Feed Management, Nutrient Excretion and Economics

Submitted By: Dr. Larry Chase (Cornell University), April Wright Lucas (Delaware Cooperative Extension), and Mariane Kiraly (Delaware Cooperative Extension).

Delaware County Cooperative Extension received a grant from the NYS Environmental Protection Fund to conduct a Precision Feed Management (PFM) project on dairy farms in the Upper Susquehanna Watershed. Eight dairy herds in Broome, Delaware and Tioga counties cooperated in this 3-year project. Herds were selected to represent the number of cows, feeding systems, housing systems and milk production levels representative of herds in the watershed. Herds were selected by Delaware County PFM staff in cooperation with dairy producers and the feed industry professionals working with the herds. This was a cost sharing grant program and the participating dairy producers had to provide a portion of the total project costs. The herds ranged from 30 to 565 milking cows and 53 to 88 pounds of milk per cow per day at the initiation of the study.

An initial farm visit was made to assess the farm and discuss herd goals and objectives as a base for develop a PFM plan. The participation of the feed industry professional was critical since they continued to formulate the herd rations in cooperation with the PFM planner and the dairy producer. A second visit was made to obtain forage samples, animal production information feed inventories, feeding management practices and ration information. This information was used to develop a farm PFM plan that met the NRCS 592 Feed Management Standard. A draft PFM plan was prepared for comments and suggested changes by the dairy producer and the feed industry professional. The final PFM plan was submitted to NRCS for approval. Farm visits (2 – 4 times/year) were made to collect forage and ration samples and update herd and milk production data. Rations were evaluated for nitrogen and phosphorus intake and excretion using a PFM spreadsheet. The Cornell Net Carbohydrate and Protein System (CNCPS) model was also used to evaluate the rations. The economic evaluation used milk and feed prices from January 2017 were used.

What were the results from this study? At the initiation of the study 7 of the herds had ration P levels at or below the PFM benchmark standards. However, they were still able to lower manure P excretion by 6.6%. This was a decrease of 26 pounds per cow per year.

The key results for N were:

- Ration crude protein went from 17.5 to 15.8%. This is a 10% decrease.
- Manure N excretion decreased for all herds by 14% with a range of 5 to 29% for individual herds.
- Manure N excretion for all herds decreased by 49 pounds per cow per year with a range of 18 to 119 pounds for individual herds.
- Milk protein content increased by 9% which indicates an improvement in the utilization of ration protein.

How did feed costs and income over feed change?



Total and purchased feed costs decreased in all herds due to less protein being used from purchased feed. Income over total feed costs increased by \$138 per cow. Income over purchased feed costs increased by \$157 per cow with a range of 18 to 361 dollars per cow.

What does this mean for a 100-cow herd? The amount of nitrogen excreted in the manure was 4900 pounds less per year on a whole herd basis. Manure phosphorus decreased by 2600 pounds per year. Income over purchased feed cost increased by \$15,700.

The results of this project are like other herds enrolled in PFM projects in New York. These results are a win-win for dairy producers and society. Dairy producers benefit by having lower purchased feed cost and improving income over feed cost. Society benefits by have less N and P in the manure produced which lowers the potential impact of dairy farms on air and water quality.





Does Your Lake Have Starry Stonewort?

Submitted by: David Carr Starry Stonewort Collaborative

Starry Stonewort (Nitellopsis obtusa, SSW) is an invasive aquatic macroalgae from Eurasia that closely resembles a vascular plant. It invades lakes, ponds, and slow-moving water bodies. The first occurrence of SSW was documented in the late 1970's in the St. Lawrence River. Ballast water from ships is the prime suspect for the entry and spread throughout the Great Lakes basin.

Left unchecked SSW will cause harm to natural environmental systems, fish habitat and inhibit use of waterways, which can potentially result in economic impacts.

With funding from the US Environmental Protection Agency Great Lakes Restoration Initiative, The Starry Stonewort Collaborative for the Great Lakes basin enhances the capacity of experts, resource managers and local stakeholders to address starry stonewort infestations in the general focus areas of Outreach, Ecology, and Control.

A key component of the Collaborative is the engagement of citizen scientists to complete simple surveys for SSW. The Finger Lakes Institute and FL-PRISM provide training, identification materials, and basic field kits. These surveys provide important information that support early detection efforts and a better understanding of its growth and spread.

The Collaborative website (www.starrystonewort.org) has information about how to get involved, a growing library of information and research about SSW, and a forum to ask questions and discuss what others are learning.

Go to the website or contact David Carr at 315-781-4398 for more information and help us fight this invader!



Underwater view of starry stonewort





Typical size of starry stonewort





Small Markets Step Up In a Big Way During the Coronavirus Pandemic

By: Jake Solyst Chesapeake Bay Program

During a typical spring day at Godfrey's Farm in Sudlersville, Maryland, customers enjoy ice cream while shopping for strawberries and asparagus grown just down the road. But in the face of the coronavirus pandemic, the family-run farm has come to mean even more to its Eastern Shore community.

Shoppers looking to avoid understocked and overpopulated grocery stores have been visiting the market in triple the numbers since it first announced that it would offer curbside pickup. The demand from the community took everyone at Godfrey's by surprise, especially its owners.

"That first day, we thought we'd get ten to fifteen orders," said Lisa Godfrey, who is a part owner with her husband, Tom. "We ended up with 150."

What's happening in Sudlersville is common in agricultural communities throughout the Chesapeake region. Many farms, dairies, seafood suppliers and others are facing a lost market for their products, and sometimes having to dispose of them due to the closing of restaurants, schools and processing plants. But producers with the ability to serve their local

market directly are seeing a huge uptick in business.

Lisa, Tom and their staff, which includes the couple's two high school-aged daughters, stayed up past eleven that first night putting together orders. Every day since, people from down the road and as far as forty miles away have been counting on Godfrey's for fresh vegetables, cheeses and meats.

Keeping up with the demand while adopting protective measures has required hard work and ingenuity. Workers now wear gloves and masks, routinely sterilize the counters, and use a card payment system that doesn't require the customers to touch or sign. Curbside pickup is organized through a Google form that the owners put on the website, while pick-your-own produce events will be held in scheduled visits to account for social distancing. Logistical hurdles, such as keeping certain products cool before they get picked up or allowing pick-your-own customers to pay beforehand, have been solved on-the-fly by the Godfreys.

These innovations have made Godfrey's stand out in the community and attract many new shoppers. Just down the road, another Sudlersville business whose products help fill Godfrey's shelves—is also answering to a sudden rise in demand.

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Above: Sudlersville Meat Locker has seen their orders almost double since the quarantine began. The small butcher shop's products have appeared in 11 new produce markets since the start of the pandemic.(Photo by Will Parson/Chesapeake Bay Program)



Quinn Williams, left, hands change to customer Sue Miller at Godfrey's Farm Market in Queen Anne's County, Md., on May 11. The market has seen a three-fold increase in business since the coronavirus pandemic began (Photo by Will Parson/Chesapeake Bay Program)





Small Markets Step Up In a Big Way During the Coronavirus Pandemic ... Continued from Page 5

Sudlersville Meat Locker is a classic family-owned butcher shop that slaughters and processes its own meat, raised by local farmers. As larger processors have shut down in response to local COVID-19 outbreaks and broken supply chains, it has left some farms scrambling for a place to send their products. As a smaller operation, the Meat Locker has remained open, processing for its usual suppliers plus taking on some of the excess from larger suppliers.

"We used to get around 200 customers a day," said Dwayne Nickerson, part owner of the Meat Locker. "Now it's around 360."

In the first 10 hours after offering curbside pickup, 1,600 orders came through. With the help of his staff, Nickerson filled all the orders and has been working seven days a week ever since to make sure the community can buy meat. In the first week, cars lined up down the road while the Queen Anne's County Sheriff's Office monitored to make sure people were staying at a safe distance.

Businesses such as Godfrey's Farm and Sudlersville Meat Locker are rare in that they can sell their product directly to the consumer and don't produce too much more than what's in demand within the local community. The presence of these businesses means more options for consumers and less crowded grocery stores. During these uncertain times, these businesses will continue to be a much-needed food provider for communities across the Chesapeake region. The responsibility is something that Nickerson takes to heart. Even as the long, pressure-filled days take a toll, the Meat Locker doesn't plan on stopping. "We can't just shut down," Nickerson said. "That's not what we're about."

Finger Lakes Land Trust Aquires New Land

Submitted By: Edie Jodz Finger Lakes Land Trust

The Finger Lakes Land Trust acquired 80 wooded acres in Danby, Tompkins County. The property borders Danby State Forest and is also adjacent to private property protected by a Land Trust conservation easement and two parcels of land previously acquired by the organization.

The new acquisition is located within a habitat linkage zone identified by New York State classified trout stream and tributary of the Susquehanna River.

The property will be transferred to New York State as an addition to Danby State Forest when funds become available. In 2018, the Land Trust worked with the state to add 144 acres, including approximately one mile of the Finger Lakes Trail, to the state forest, and will soon transfer an additional 50-acre parcel in this area.

Protection of this parcel will also safeguard additional wildlife habitat within the Emerald Necklace, an ambitious effort to link 50,000 acres of existing public open space that extends in an arc around Ithaca from Finger Lakes National Forest in the west to Hammond Hill and Yellow Barn state forests in the east. Finger lakes Land Trust partnered with the New York State Department of Environmental Conservation to complete this project.







USC Welcomes 2020 Riparian Buffer Stewards

Submitted By: Lydia Brinkley USC Buffer Coordinator

The 2020 Riparian Buffer Steward season kicked off on June 1st with an online training for incoming stewards on how to evaluate planted riparian areas and determine appropriate management activities. This year there are 9 stewards throughout the watershed working in riparian areas- taking plant survival assessments, collecting information on herbaceous cover within riparian areas, and conducting much needed establishment activities. Stewards will work on riparian buffers planted through any program, but most notably the Trees for Tributaries and Conservation Reserve Enhancement Programs. Paying attention to plant survival and growth during the first few years is critical in achieving forest establishment.

This year's group of stewards have diverse backgrounds, with some district staff taking on the role this summer. Please help us in welcoming Delaney Brown, Jack Stanton, and Morgan Hungerford from Delaware County SWCD, Hanna Whalen from Cortland County SWCD, Emma Beavers and Hannah Foster from Chenango County SWCD, Andy Haslauer from Madison County SWCD, Miranda Palmer from Tioga County SWCD, and Nick Jordan from Otsego County SWCD.

The USC Buffer Steward program was piloted in 2018 using DEC funding and then expanded in 2019 and 2020 with the award of the NFWF Steward Grant. We currently plan to continue the program through 2021 using the State Buffer Program funding.



Top from left to right: Emma Beavers (Chenango), Hannah Foster (Chenango), Hanna Whalen (Cortland), Nick Jordan (Otsego)

Bottom from left to right: Jack Stanton (Delaware), Mogran Hungerford (Delaware), Delaney Brown (Delaware), Andy Haslauer (Madison)





Project Spotlight: Madison County SWCD

Submitted by: Troy Bishopp

Madison County Spring Tree Plantings

Two tree planting projects totaling 3 acres were planted by District and USC staff in late May in conjunction with cattle exclusion fence to provide future wildlife habitat and hold soil resources within the Upper Chenango and Unadilla River Watersheds. Species included: Swamp White Oak, Nannyberry, Sycamore, Stream-co Willow, Arrowwood, River Birch, Poplar, Red Osier Dogwood, Ninebark, Red Maple and Black Cherry. Trees and supplies were provided by the Upper Susquehanna Trees for Tribs Program.







The beginning of a buffer along the Unadilla River

Madison SWCD buffer steward lays out site

Site prepped in fall of 2019



Fence installed as USC buffer team inspects buffer

USC buffer coordinator planting

Buffer planted for next generations



Thank you to the Trees for Tributaries program

Be a conservation warrior

Finished planting in the era of Covid-19





Project Spotlight: Chenango County SWCD

Submitted by: Jennifer Kelly

Wiley Brook Forest Buffer and Erosion Control Project

This spring, the Chenango County Soil and Water Conservation District began the first phase in completing a 14-acre buffer along Wylie Brook in Coventry. Harold Anderson, a retired dairy farmer, has been battling streambank erosion and flooding within the 1400' stretch adjacent to his cropland. His task has been exacerbated by a concrete bridge abutment, a remnant of an old bridge that was demolished decades ago. The stream is now eroding behind the abutment, sending tons of sediment downstream to the Susquehanna River.

The project will remove the abutment and reestablish a stable, riparian forest buffer along Wylie Brook on Harold's property. The District called upon Joe Quatrini and Jeremy Waddell of the USC to develop a natural stream design and cost estimate for the project. The project is currently awaiting funding for full implementation.

Meanwhile, the District obtained tree seedlings from the Trees for Tributaries program and planted red maple and willow stakes along a portion of the project area to stabilize the banks. The rocky terrain along the banks made tree planting difficult however, District staff are hopeful the willows will thrive!



Willow Stakes planted along the Wylie Brook, Photo courtesy Lance Lockwood, Chenango County Soil and Water

Red Maple Plantings along Wylie Brook, Photo courtesy Lance Lockwood, Chenango County Soil and Water

Project Spotlight: Tioga County SWCD

Submitted by: Miranda Palmer

Working Together While We're Apart

On Sunday, March 22, life in Tioga County, and across the rest of New York "paused". As the Covid-19 pandemic wreaked havoc, spreading uncontrollably across parts of downstate New York, we would work to do what was needed to slow the spread and flatten the curve of the virus. Over the next 54 days, daily routines would be disrupted, offices turned into any location in our homes that would accommodate a laptop and some workspace, sounds of children could be heard in the background of conference calls, sleeping babies swaddled in the arms of their others were seen on zoom meetings, dogs barking at postal workers became a recognized background noise, and the term working from home became a constant in the daily vocabulary of most. However, one of the most notable, and unexpected new norms that we saw here in Tioga County was our communities unwavering ability to show compassion, offer a helping hand, and bolster our ability to work together while forced to be further apart more than ever.

The Soil and Water Conservation District was able to see and participate in the community support that emerged each day. Over those 54 days, the District stepped up to help a local school plant 600 trees on their Christmas Tree farm, hosted a regional Envirothon competition that was opened up to any counties or schools in the state interested in participating, and hosted a free dairy product drive where 3,888 gallons of milk, 1,500 cups of yogurt, and 1,200 pounds of sour cream were distributed.

On April 20th, staff from both the District and the Upper Susquehanna Coalition partnered up with the Newark Valley Central School District to plant 600 trees on a unique piece of property that was donated to the school many years ago for educational purposes. The property, referred to as "Alexanders Pond" provides a unique experience for students, one of those most recent experiences being the start of the schools Christmas tree farm. Each year, the school orders at hundreds of trees from the Districts annual tree and shrub sale, and 6th and 7th grade students help to plant them. This year, nearly a month after students were removed from school, Mr. Greg Schweiger, Newark Valley Central School District Agriculture teacher, was looking for help getting the trees in the ground as he wouldn't have the helping hands of his students. So, District and USC staff volunteered to participate in this great, natural social distancing activity, planting trees! This is the fourth year that trees have been planted, and the first year's trees are starting to fill in nicely. Mr. Schweiger is looking forward to the fall, as he will begin teaching students how to shape the trees, the ultimate goal of the project is for the school to have saleable Christmas trees which will serve as a perpetual fundraiser for the Agriculture program.

Almost two weeks later, on May 5th, the District assisted with the coordination of a dairy drive event at the county fairgrounds. Across the county, some of our local farms were forced to dump their milk, and also required to cut their production. Dairy farms across the state, and country, lost a significant market when the food service industry, like restaurants and schools, essentially shut down. Dairy processors that serve those markets could not quickly change up processing and packaging to address the surge in demand at the grocery store. So that left a lot of excess milk with no place to go. The last thing that our dairy farms wanted to do is dispose of their milk. So we were able to find a place for some of that milk (and sour cream, and yogurt!) to go. The District worked with multiple other local agriculture agencies, and with the support of Dairy Farmers of America, Chobani, and Cabot were able to distribute products to 5 school, 7 food pantries, and the remaining product was handed out to residents on a first come first serve basis at the county fairgrounds where we served over 850 vehicles! In a time in which the dairy industry needed to continue distributing product, and when there were so many local families in need as a result from being displaced from their jobs, the District felt fortunate to be able to coordinate and host such an event.



Taylor Held (USC Buffer Team) and Danieller Singer, Miranda Palmer (Tioga SWCD) plant trees at the Newark Valley Christmas Tree Farm

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Working Together While We're Apart ... Continued from Page 10

Two days later, on May 7th, the District hosted their first ever online Envirothon competition. While the District had already planned on creating an online platform for our local schools to access, we ended up opening up the event to any county or school in the state who was interested. This effort was made in an attempt to aid others, as there was feedback from many Districts that while they were interested in keeping the integrity of the program a priority, they didn't feel they had the means or experience to offer their schools an online option. There were a total of 29 teams that competed in the event, participating counties included Columbia, Cortland, Kings, Manhattan, Montgomery, New York, Niagara, Onondaga, Oswego, Rensselaer, Richmond, Schoharie, Tioga, and Ulster. As a result of this regional event, there will be 15 teams that will be advancing to the state event, along with 3 other teams as some counties did also host their own online events. The outpouring compliments and appreciation from teachers who participated was incredible, in fact there wasn't one teacher who didn't reach out to the District to express their gratitude for willingly hosting the event. Ms. Mollie Burgett, teacher from Middleburgh Central School District in Schoharie County commented that, "I had 9 students participate and it was such a wonderful thing to see them collaborating and problem solving together and just loving it. We have a solid group of students in our school that live for Envirothon and the fact that they got to participate in one of their favorite events of the year meant the world to them."

54 days ... while it may have seemed like forever for some, it seems to have flown by for the District. In a time where we were forced to remain distant, we are able to strengthen relationships, continue to support programs at the core of our mission, and build community bonds. While the Covid-19 pandemic is a tragedy that will never be forgotten, it provided the District with countless opportunities to support and reinforce engagements with our customers, schools, partners, and community, and for that reason we find achievement in this time of misfortune.





