



For Land's Sake

Summer
2022

Madison County Conservation Farm of the Year

One hundred and ninety-nine years ago, a dairy farming legacy, borne of Honeoye soils and sacrifice was started in the tiny hamlet of Stockbridge along the banks of the mighty Oneida Creek in Madison County. In describing the Lyman Farm's historic and current journey; resilience and adaptation are key components in the lives of the 7th generation organic dairy farm managed by Glen, Elaine, and sons, Jesse and Sam Lyman.

For the 2003 New York State Century Farm, and soon to be bicentennial farm, the Lyman family has a new distinction to go along with their years of hard work, sacrifice, and stewardship: 2022 Madison County Conservation Farm of the Year.

Glen, who graduated from Cornell with an Ag. Economics degree, carrying on the dairy tradition has always been about transition, with the constant of keeping the hills and valleys of their now 400 acres mostly in sod. Since the farm was founded, the land has produced quality forage to feed the high-producing, prize-winning "Lyman" prefixed Holstein herds. "With our forage base and business model, my son Jesse and I saw a natural progression to organic production starting in 2013", said Lyman.

Shipping their milk to Organic Valley Cooperative from the 35 cow herd lines up well environmentally and financially, while "simplifying and lowering expenses" on the farm. With the advent of more grazing time, cow traffic, and nutrient management plan considerations, Glen and Jesse teamed up with the Madison County Soil and Water Conservation District to plan, design, and build a covered bedded pack/manure storage facility, reinforced laneway, and a heifer grazing system with portable water stations and stream buffer. Prior to this, the farm did their own strip cropping, water diverters, rock-lined waterway, and paddock fences for the dairy grazing system.

These measures have enhanced water quality throughout the property using the family's resources and sweat equity along with program funding and technical assistance from the Madison County Soil and Water Conservation District, the New York State Agricultural Environmental Management Program, the New York State Environmental Protection Fund, and the Finger Lakes - Lake Ontario Watershed Protection Alliance (FL-LOWPA).

The Madison County Soil and Water Conservation District Board of Directors congratulates the Lyman Farm family on 199 years of dairy farming success and for their positive community impacts and volunteerism within the county. To learn more about the positive attributes of conservation planning and implementation, give the Madison County Soil and Water Conservation District a call at 315-824-9849 or madcoswcd.com.



Madison County SWCD Board Chairman Ric Barnes congratulates Jesse and Glen Lyman

CNY Regional Envirothon Returns

By Jessica Heim

After a long Covid induced pause, it felt great to be able to plan for an in-person CNY Regional Envirothon event this spring! The event was planned and scheduled to be held April 20, 2022, at the Friends of Rogers Center in Sherburne, NY but as the event neared Mother Nature had other plans yet again. A large storm dropped 12+ inches of heavy snow on us leaving Chenango County in a state of emergency without power and the event had to be cancelled.

The CNY Regional Envirothon was rescheduled and on May 11, which turned out to be a beautiful and sunny day, 7 teams total from 3 of the 5 counties (Madison, Onondaga, and Chenango) showed up and were able to compete for a shot at going to the NYS Envirothon. The Cazenovia team "Forrest and the Fun Guys" came out on top for Madison County and the Skaneateles team "Fishy Fishers" had the overall high score for the event. Both the "Fishy Fishers" (Onondaga) and "Forrest and the Fun Guys" (Madison) went on to participate in the NYS Envirothon at Hobart & William Smith Colleges in Geneva, NY where Skaneateles placed 3rd and Cazenovia placed 14th out of 32 teams!

While we had a smaller than normal turnout our first year back, we are both optimistic and excited to start planning for our 2023 event! For any additional information regarding the CNY Regional Envirothon please feel free to contact our office at 315-824-9849 ext.5.



Madison County's winning team from Cazenovia Central School, Forrest and the Fun Guys

Successful Annual Tree Sale

By Joann Burke

Since Covid reared its ugly head a few years ago, interest in purchasing and planting trees, shrubs and plants has been on the rise here in Madison County. This year, the district's 36th annual tree and shrub sale proved to be our best sale in the past 10 years. The number of trees, shrubs, and plants purchased increased 60% from 2022 while the number of orders remained constant.

Stock from the tree sale is used to reforest land, establish windbreaks, prevent soil erosion, establish riparian buffers along streams, and to create habitat for wildlife to just name a few.

Planning for the 2023 tree sale is already underway. It is our hope to offer online ordering this coming year for those interested. Stay tuned!



SWCD Technicians Carl Bartlett and Andrew Haslauer with happy customer



Andrew Haslauer picking an order for a customer amongst the 250 orders

Watershed Management Students Tour Dairy Farm

By Troy Bishopp

Professor of Environmental Biology at Cazenovia College, Thad Yorks, led a lab class of watershed management students at the Cody Farm in Cazenovia, NY. The group of students, with varying environmental career paths, toured the 175-head dairy farm and learned about the diverse suite of sustainable practices that help with water quality and water retention on the land. They looked at silage ag bag pad management, calf rearing systems, strip cropping practices, drip trenches, fertility management, and waste handling systems. In addition, the students learned about energy conservation systems in the milking facility from plate coolers to heat exchanging systems and variable speed milk pumps.

The students also planted trees at a pond site while discussing career options with Madison County Soil & Water Conservation District professionals.

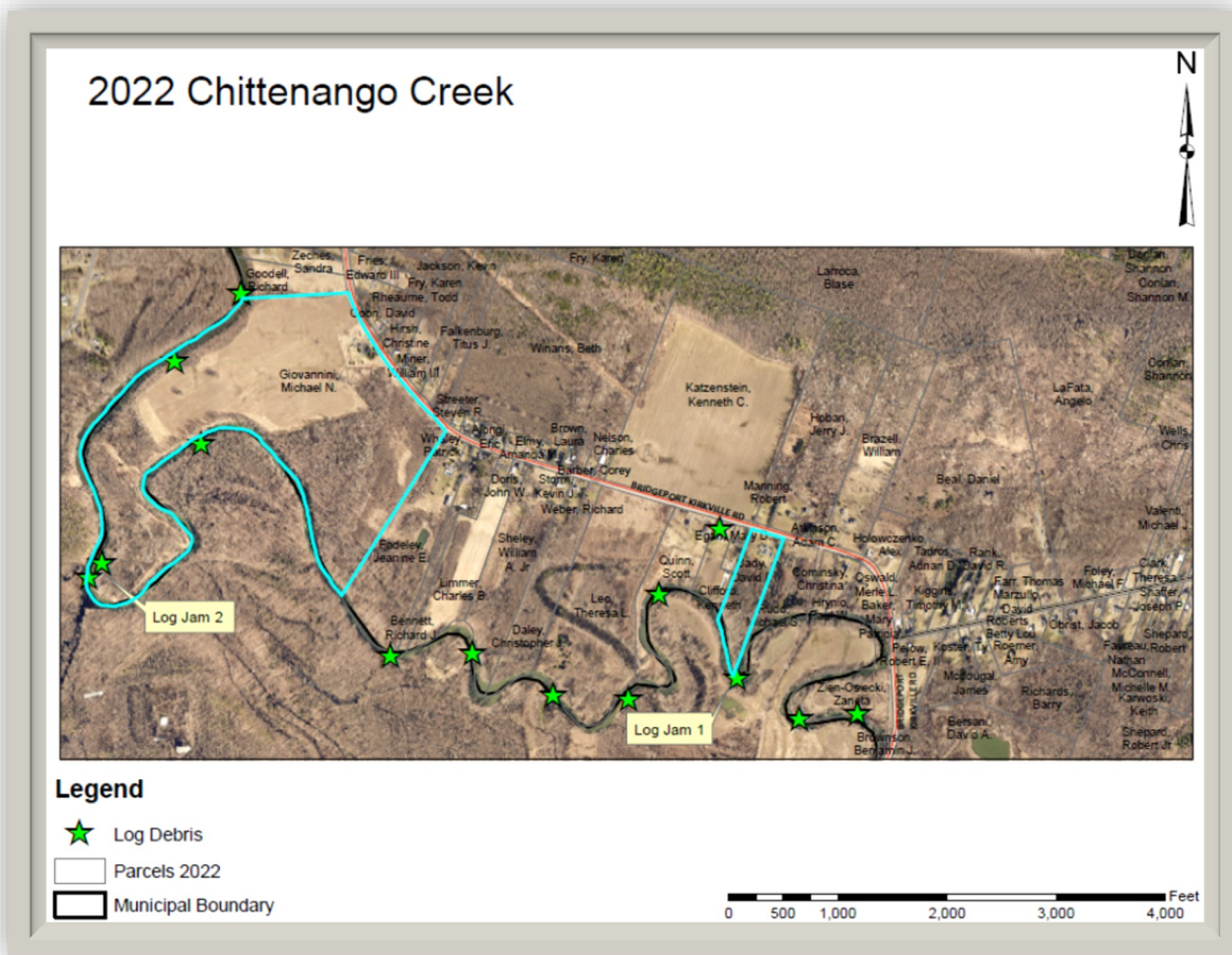


Chittenango Creek Flood Mitigation Project

Since 1996 Madison County SWCD has worked with the Towns of Sullivan, Manlius, and in the past but no longer, the Town of Cicero to remove log jams in Chittenango Creek between Fly Road and State Route 31 in Bridgeport. Removing these log jams reduces flooding during severe storm events. District staff float the creek in this section and document the location of log jams that need to be removed in order for the stream to flow properly during storm events. The District makes contact with landowners in the areas requiring work to get their permission to access the log jams and remove them. Contractors are then brought in to remove these log jams and depending on the location, the Town DPW will haul off the debris.



SWCD staff canoeing Chittenango Creek in June 2022 to locate the log jams



This map depicts the log jams identified after floating a section of the stream in 2022.

Agricultural Best Management Project Implementation

Grazing/Riparian Herbaceous Buffer

This farm is milking approximately 90 dairy cows and raising Wagu beef as part of their diversification plan to make the farm viable into the future. They contacted the District regarding an expansion of their existing pasture system and looking for ideas on the best way to incorporate the new area into pasture production. District staff reviewed the site and proposed a plan that would include the protection and establishment of a 1.3 acre buffer to a sensitive section of the Nelson Swamp. The project installed nearly 2,500 feet of high tensile fence with a solar powered fence charger.



Wetland Buffer

This farm is a certified organic dairy milking approximately 50 cows with an extensive grazing system in place. The District has worked with the farm for many years to improve the grazing system, install a covered barnyard project, and implement multiple buffers on the farm. This most recent project involved the implementation of a wetland buffer to protect a tributary stream to Chittenango Creek. The installation of new high tensile fence to exclude the cows from this location in addition to critical area seeding resulted in a very successful project. The photos say it all!



Agricultural Best Management Project Implementation

Rock Lined Waterway

Farm fields in the Susquehanna River Watershed were experiencing significant erosion that resulted in sediment being deposited in the Chenango River, a protected trout stream. In order to reduce the slope length of these fields and collect the runoff water to be safely removed from the field's it was determined that the installation of a large diversion was needed to reduce the erosion on these fields. After the installation of over 2,000 feet of diversion ditch and drainage work, the installation of a rock lined waterway was required to handle the volume and force of the water that will travel through this structure to safely outlet the water without causing erosion in the waterway.



Bunk Silo and Silage leachate collection System

The district designed and is overseeing the construction of a new bunk silo with silage leachate collection system. The bunk is being installed with the proper grades to allow for the collection of low flow silage leachate that can be mixed with manure and land applied according to the farm's Comprehensive Nutrient Management Plan. High flow runoff that is diluted during storm events will be directed to a series of wetland treatments cells before entering a vegetated treatment area for final treatment.





Trees For Tributaries

By supporting plantings along tributaries, small streams that feed larger rivers and lakes, the program helps create healthier, more climate-resilient communities



Do you own property along a stream, creek or body of water within the Headwaters of the Susquehanna River? Even Intermittent streams qualify!

Would you like to increase flood protection and reduce stream bank erosion? Or interested in increasing wildlife value on your land?



We have many different trees and shrubs that attract anything from pollinators to deer and other animals

The Trees for Tribs Program allows us to help improve the water quality throughout our watershed by offering Free Trees to plant Riparian Buffers



For More Information: Email: Joann-Burke@verizon.net or Bufferteam@u-s-c.org

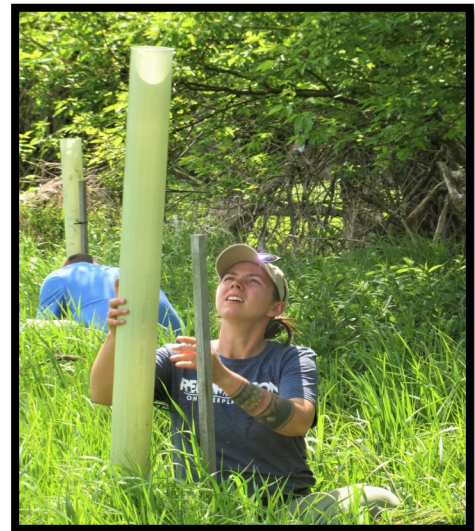
USC Buffer Steward Work Day held in Madison County

By Troy Bishopp

The Upper Susquehanna Coalition Buffer Team led by Coordinator Lydia Brinkley and USC Buffer Technician Rainer Lucas held a work day at Hope Springs Ranch buffer site in West Edmeston, along the Unadilla River. The goal is to train new buffer stewards from Tioga, Chenango, Onondaga, and Delaware County Soil and Water Conservation Districts. The stewards learned how to monitor and collect tree growth data within a buffer planting, perform maintenance duties (weeding, adjusting tree tubes & stakes), and replant where necessary. Routine tree maintenance and data collection is generally a practice done for 3 to 5 years to insure a successful riparian forest buffer project.



Buffer Stewards monitoring, performing maintenance and replanting of a riparian buffer area



Heather Scott, Tioga County employee, performing maintenance on a tree

Plan-to-Pasture Training Delivers Hands On Results

By Troy Bishopp

On May 3rd, thirty-three local NYS Conservation Agency professionals closed their computers for the day and traveled to Madison County, New York for a unique grazing training opportunity on Keith and Jody Palmer's organic dairy farm in Hubbardsville, NY. The training opportunity was meant for new district employees using the Agriculture Environmental Management (AEM) grazing planning matrix and conservation staff and agriculture professionals honing their technical skills in putting practical grazing on the ground and helping farmers be successful practitioners.

Bishopp teamed up with Dr. Samantha Glaze-Corcoran from the University of Massachusetts-Amherst and the Palmer family, to teach the power of grazing management for profit and improving soil health and animal production systems. Using grazing planning calculation tools and the Palmer's goals as a guide, agency professionals learned specific considerations to guide decision-making and allocate a forage plan for the herd of 52 organic dairy cows.

The large group started with everyone figuring out their "step" (in feet) and heading out to the pasture led by Dr. Sam to measure pasture growth (growing at 1"/day), determine the right time to graze based on how many leaves were present, count how many worms in a shovelful of soil, and use a grazing stick or the "Canopeo" smart-phone App to calculate forage production.

This ground-truthing inventory exercise helped 5 teams, led by an experienced professional, spread out to estimate a daily paddock size to feed the dairy herd to which they would set the portable fence and move the cows to. Interestingly, the friendly competition, yielded a consensus of 2 acres/day for the herd, giving the farm and the people a confidence boost. Volunteers laid out the paddock shift and moved the eager cows while everyone observed how they grazed and what they grazed.

After lunch the group visited the cows again and learned about manure quality while seeing dung beetles and golden dung flies miraculously working a cow patty after just one hour. This led to a discussion of how fence and water tub placement and frequency of movement can positively affect fertility placement and increase forage yield.

Bishopp led the group into a mob grazing and paddock design exercise by sandwiching people together in a tight rectangular paddock to mimic efficient grazing, manure deposition, and the trampling effect, while explaining the need for frequent moves in this situation. He then made a square paddock and the relieved group witnessed how the herd behavior changes

The group then took a pasture walk to determine a week's worth of pasture moves and were shown how the Palmers use a grazing planning chart to track their management decisions for organic verification

The training was supported by the Upper Susquehanna Coalition, the NYS Conservation District Employees Association, Madison County Soil and Water Conservation District, Maple Hill Creamery, Corrine Bishopp and Farm Marketing Solutions.



NYS Agricultural Environmental Management

Madison County Soil and Water Conservation District (SWCD) leads in the implementation of the NYS Agricultural Environmental Management (AEM) program. AEM is a voluntary, confidential, locally-led, and comprehensive approach that further advances environmental management on New York's farms, across all sizes and commodities. This program delivers technical support and financial incentives needed to help farmers to implement conservation practices critical to the protection of water quality and other natural resources. AEM helps to ensure that New York's farms remain viable and continue to meet their business objectives in an everchanging market place. Over the last two decades, over 12,000 farms across New York State have participated in AEM by working with local SWCDs and partnering with resource professionals to develop and implement comprehensive, farm-specific plans using AEM's 5-Tier approach.

Tier 1: Inventory current activities, and future plans of the farm business.

Tier 2: Assess current environmental stewardship and opportunities for improvement.

Tier 3: Develop conservation plans addressing concerns and opportunities tailored to farm goals.

Tier 4: Implement plans utilizing available financial, educational, and technical assistance.

Tier 5: Evaluate practices and plans to ensure the protection of farm viability and the environment.

Completing this step provides farms the opportunity to become more engaged with the AEM program, often leading to further work through the Tiers to address farm and natural resource needs. Advancing through the AEM Tiers opens doors for farms to apply for cost-share funding to implement priority practices. AEM takes a whole farm view to address not only nutrient management but also farmstead water supplies, pasture management, pesticide mixing, loading and storage, erosion control, stream and floodplain management, irrigation water management, and soil health to name a few. AEM can also address farm-to-neighbor relations and agriculture in the community. In today's climate of environmental awareness AEM's technical and financial resources are valuable to assist farmers in maintaining their commitment to conservation. Proactively advancing conservation practices is central to economic viability on today's farms. Any farm can participate in AEM.

Madison County SWCD is currently reviewing potential projects for funding through the AEM process.

Madison County Soil and Water Conservation District continues their long record of leading and implementing AEM with farmers at the county level, supported by statewide leadership from the Department of Agriculture and Markets and the NYS Soil and Water Conservation Committee. To learn more about AEM or to get involved in the AEM program contact Madison County SWCD at 315-824-9849 ext. 5.



County Flood Mitigation Program

The Madison County SWCD continues to receive funding from the Madison County Board of Supervisors to design and implement flood mitigation projects across the County. This funding, coupled with additional funding that the District has secured from New York State, is utilized to design and implement flood mitigation projects for both municipalities and private landowners. Potential projects are inventoried and ranked by District staff through a ranking system that was developed in cooperation with the County Planning Department and County Highway Department. Once the ranked list is developed, high ranking projects undergo an engineering review to develop cost estimates utilized in determining which projects will receive funding in a given year. At this point the chosen projects have fully engineered designs completed, permits are obtained as needed and contractors are solicited to complete the work. District staff oversee construction from start to finish to ensure the project is constructed as designed. Just a few of the projects we are working on for 2022 are listed below.

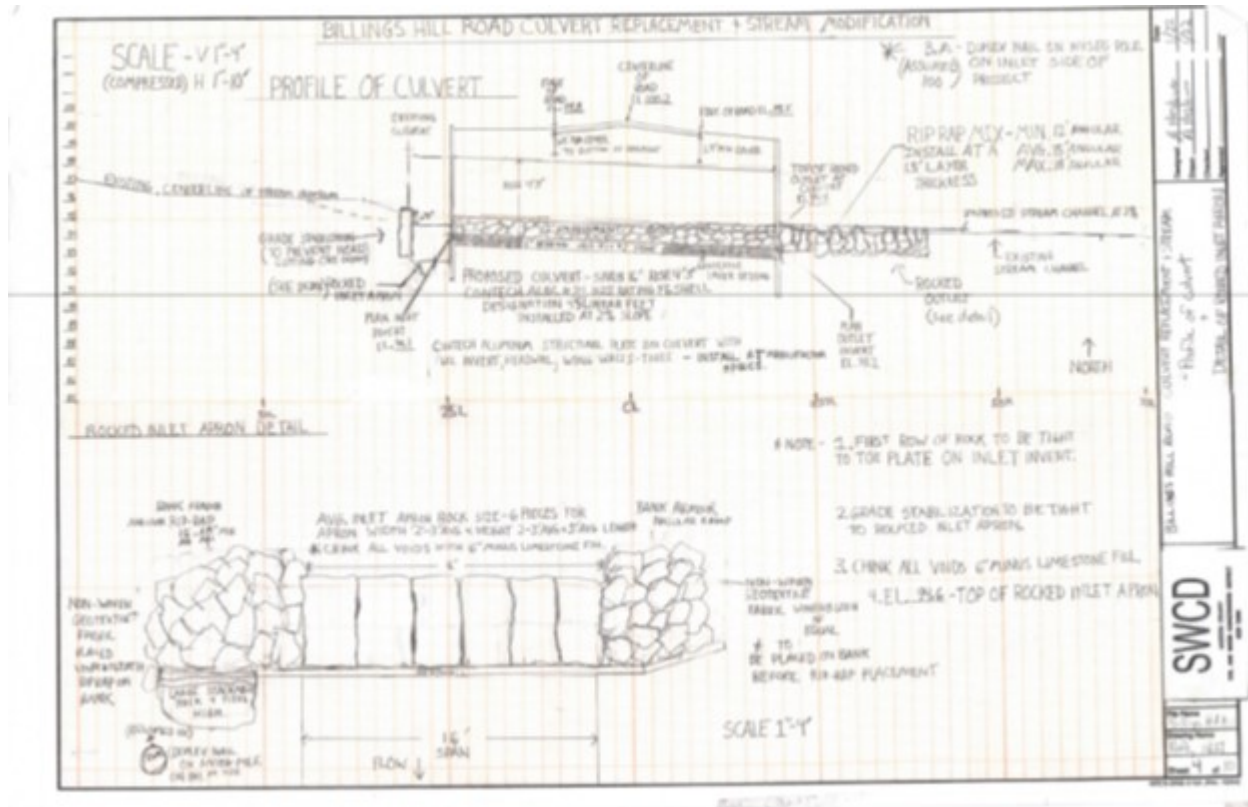


West Lake Road on Bradley Brook Reservoir has experienced severe flooding damage multiple times over the past years from debris washing out of an unstable stream channel, as can be seen in the picture. SWCD staff designed a stabilization project for this location and worked with the Town of Eaton and landowner to get the project constructed.

As seen in the below photos, the channel was designed to be stable during high flows with rock rip-rap large enough to handle the velocities flowing at this location during severe storm events.



Billings Hill Road Culvert Upgrade Project



Billings Hill Road in the Hamlet of Lebanon has been flooded repeatedly over the past few years, damaging multiple homes in the process. District staff working with the Town of Lebanon Highway Department, developed a plan to install an arch culvert with much greater capacity to pass water than the current structure. This also required resizing the channel below the structure to ensure it could handle the amount of water that would be flowing through the new arch culvert. The photo below on the right is the culvert that repeatedly floods. The photo on the left is with the new arch culvert installed.





Expanding Nutrient Management In Madison County, NY

Upper Susquehanna Coalition



Madison County SWCD has secured funding from The Upper Susquehanna Coalition through the National Fish and Wildlife Foundation to focus on expanding Nutrient Management Planning efforts to improve water quality across agricultural and urban landscapes

What You Need to Know:

- Madison County SWCD will soil sample your farm and fund the cost of the samples
- Madison County SWCD will provide the farm with a manure spreading schedule
- Madison County SWCD will provide fertilizer recommendations based on your soil samples and manure applications
- All planning will be based on NYS AEM protocols and the NRCS 590 Nutrient Management standard
- Farms need to be located in the Susquehanna River Watershed within Madison County

Contact:

Madison County SWCD
(315) 824-9849 ext. 5



www.u-s-c.org

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