The VOICE of LOCAL CONSERVATION

Northwest Conservation District

On Saturday, September 28th, 2024, we welcomed guests from the 34 towns in our district to our annual meeting held at Freund's Farm Market in East Canaan. Interim Executive Director Annette Lott began the meeting with a welcome and introduction, followed by a brief business meeting conducted by Board Chairman Larry Rousseau and included elections of board members and approval of the annual report and minutes. After our farm-to-table brunch, catered by Freund's Farm Market, we proudly presented this years' conservation awards.

The 2024 Conservation Farmer Award was given to Kent's Marble Valley Farm, run by Megan Haney and Sarah Lang. Sarah Ammirato from the USDA-Natural Resources Conservation Service presented the award, honoring their eager adoption of innovative practices, enabling them to produce food for their community while being mindful of soil, water and air quality.

The 2024 Conservation Volunteer Award was given to Scott Eisenlohr. His award was presented by Interim ED Annette Lott and retired NWCD Program Administrator Karen Griswold Nelson. NWCD honored Scott's many years of serving our Earth Day Plant Sale by coordinating the acquisition and delivery of grocery carts to the Goshen Fairgrounds. An unassuming necessity to our sale, these carts are vital to it's operation. Additionally, Scott, as a land use official, continues to involve NWCD's services in his work when appropriate.

Doreen Lynch-Sudol received the 2024 Conservation Cooking Award presented by NWCD staff Kelsey Sudol and Children's Librarian Carol Parent. Doreen was recognized for her dedication to promoting garden- and farm-totable food. She has prepared over 750 delicious treats for children, teens and adults attending NWCD programming at the Beardsley Library over the last two years, encouraging families to connect their garden to their plates and deepening their understanding of agriculture and our food systems.

Lastly, Lori Kaulback recieved the 2024 Conservation Achievement Award for her many years of work as a Soil Conservationist with USDA-NRCS. In her time, she had the opportunity to work on a diverse portfolio of projects, including the largest NRCS contract in Connecticut history! Lori worked with the Freund family to facilitate the installation of a 1.3 million gallon manure storage tank, which will allow the farm to store manure through the winter and apply it to their fields during the growing season. The water quality from the Blackberry River down to the Long Island Sound will be improved because of the hard work, perserverance, and expertise that Lori brought to this project.

The evening concluded by acknowledging the recipients of the Northwest Conservation District Scholarships honoring Jacolyn "Jackie" Mott, Rev. Ledlie Laughlin Jr. and Dick Leavenworth. We thank Freund's Farm for their warm hospitality, and all of our District partners, supporters and fellow Lori Kaulback, Conservation Achievement environmentalists who love and protect our natural world.

Winter Edition 2024



Megan Haney, Conservation Farmer



Scott Eisenlohr, Conservation Volunteer



Doreen Lynch-Sudol, Conservation Cooking



² Farm-to-Table at **NWCD's Library Program**

NWCD treasurer Doreen Lynch-Sudol prepares fresh farm-to-table snacks for our summer library programming at Winchester's Beardsley and Memorial Library, inspiring kids to try new things and encouraging families to add fresh veggies from local farms and their own gardens onto their plates.

Zucchini Fritters

Prep Time: 15 min Cook Time: 25 min Servings: 24 fritters Recipe adapted from: www.natashaskitchen.com/zucchinifritters-video/

Ingredients:

- 2 lbs zucchini, about 2 large or 5 medium
- 1 ½ tsp fine sea salt, divided
- 2 large eggs, lightly beaten
- 1/2 cup chopped scallions
- ¾ cup all-purpose flour
- 1 tsp baking powder
- ½ tsp ground black pepper
- Olive oil for sautéing
- Sour cream, greek yogurt, tzatziki sauce, marinara, or other sauce to serve



Growing Zucchini:

Even just one zucchini plant might be enough for a familiy garden! Each plant will produce several zucchini throughout the summer.

Direct-sow seeds in midlate spring when the soil is warm, or start seeds indoors to transplant after last frost, generally sometime in May. If transplanting, be gentle with the seedlings' roots - squash seedlings can be fragile.

Pick a location with full sun, and make sure that each plant has sufficient space (refer to the guidance on your seeds/ seedling, but generally 3 foot spacing between plants is appropriate.) Add plenty of compost or other organic fertilizers to the soil.

Check the plants periodically as they grow - squash bug eggs can be removed from the leaves before they hatch! Harvest zucchini at any size, and enjoy!

Instructions:

- 1. Wash zucchini and trim off ends. Grate on the large holes of a box grater or use the grater attachment for the food processor.
- 2. After 10 minutes, squeeze handfuls of zucchini tightly over the sink to remove extra water. It helps to wring it out in a cheesecloth if you have one. You should end up with 3 ½ to 4 cups of squeezed-dry zucchini. Transfer to a large mixing bowl.
- 3. Add scallions and eggs to the zucchini in the mixing bowl.
- 4. In a small bowl, stir together the flour, baking powder, ½ tsp salt and pepper, and any other seasonings you would like. Add flour mixture into zucchini mixture and stir until well combined.
- 5. Place a large, heavy-bottomed cast iron or non-stick skillet over medium heat and add 2 tbsp olive oil. Once the oil is hot, add the zucchini mixture a heaping tablespoon at a time and flatten out the tops slightly to make them pancake-shaped. Sauté for 3-5 minutes per side, or until golden brown. If they brown too quickly, reduce the heat. Serve warm with a dollop of sour cream or other preferred sauce.

NWCD Outreach & Education: Library Gardening Programs

Beardsley Library

For the fourth summer in a row, NWCD expanded our programming at the Beardsley and Memorial Library in Winchester. The goals of this programming are to increase access to locally grown produce while expanding agricultural education at the local level.

We continued our Community Garden Program where each week in the summer NWCD held an hour long program for kids and an hour long program for teens. Students harvested hand-grown produce from the community garden and learned about a variety of environmental and agricultural topics.

Thanks to funding from the Northwest Connecticut Community Foundation, we were again able to provide 50 at-home container garden kits. Each kit included a trowel, watering can, bottle of fertilizer, gardening gloves, 12-inch pot, and 4 plants. Participants were able to practice at home what they learned at the library.

NCCF also funded a small permanent pollinator garden next our summer community garden. The teens helped plant and weed the garden, and we were on the look out for new exciting pollinator friends every week – look below for an example! We hope to add to this garden each year.

Lastly, we were also able to expand the program to include container garden programming for adults. We gave out take home kits and NWCD treasurer, Doreen Lynch-Sudol, held three cooking classes that highlighted skills that paired with the garden vegetables. This new series called "From Garden to Table with Doreen" encourages participants to look to their own backyard for ingredients. Doreen also held one of our weekly programs with the Teens!

The Beardsley program was made possible thanks to funding from the Northwest CT Community Foun-



dation Elson-Slemmer Fund for the Environment. We would also like to thank librarians Carol Parent, Emily Young, and Karley Padin, for their partnership. And thank you to all of our participants this year - your dedication and enthusiasm were contagious!

New Milford Library

For the second year, NWCD held an agricultural education summer program at the New Milford Public Library (NMPL)! Held over six weeks, the weekly program taught children how to grow food and about their connection to the natural world. We handed out 25 at-home garden kits to participating families during the first week. After that, each week focused on different hands-on environmental experiences from watershed and run-off simulators, pollinator games and more – and would conclude with a snack from a local farm such as cucumbers, corn or cherry tomatoes. The program finished off with a book gifted to participants, encapsulating the summer program. The book was donated by the Friends of NMPL.

The NMPL program was made possible thanks to funding from the Environmental Professionals Organization of Connecticut. We would also like to thank Sue Ford, Children's Services Librarian.





MANURE STORAGE (a) FREUND'S FARM

In 2023, Freund's Farm and NWCD partnered on a grant proposal for the National Fish and Wildlife's Long Island Sound Futures Fund (LISFF). With funding from LISFF and the US Department of Agriculture - Natural Resources Conservation Service (USDA-NRCS), the goal of this million-dollar project was to expand the farm's manure storage capacity, allowing them to store six months of manure through the winter. This increased storage capacity enhances the farm's current innovative manure management practices, allowing them to spread manure onto their fields only when it is environmentally best to do so. Because the farm is on the floodplain of the Blackberry River, the impact this will have on watershed health cannot be understated. NWCD hosted our 2024 Annual Meeting at Freund's Farm to highlight the farm's incredible efforts to increase their sustainability and conservation of the land.

Watersheds are areas of land that drain all the watercourses and rainfall to a common outlet such as the outflow of a reservoir, mouth of a bay, or any point along a stream channel. Healthy watersheds provide many ecosystem services. For example, they provide wildlife habitat, clean drinking water, recreation (e.g. fishing and boating), and more. Even property values can be higher if you are fortunate enough to live near healthy (rather than impaired) waters! All water in Connecticut eventually flows south to the Long Island Sound. To protect the water quality in the Sound, the National Fish and Wildlife Foundation provides funding for projects that promote clean waters and healthy watersheds. Even projects hundreds of miles from the Sound can have a large impact on its water quality.

Cow poop, called manure, is high in nutrients and fecal coliform bacteria that can pollute our waterways.

Source: USDA-NRCS

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UNDERGROUND RIVERS One cow produces around 100 lbs of manure and urine daily. Typically, this manure is spread onto fields throughout the year, where plants then use the waste as a fertilizer. Crops harvested from these fields then feed the cows, and the cycle continues. However, the potential for runoff from the fields into our waterbodies increases in the winter when the ground is frozen and the plants are not growing. Freeze-thaw cycles and precipitation in the fall and spring further exacerbate this risk.



Nutrient pollution such as high levels of nitrogen, phosphorous, and potassium, can cause an increased risk of cyanobacteria blooms (pictured to the left) and harmful algae and in our waterbodies. Certain algal blooms (caused by excess nitrogen) can even create hypoxic conditions where normal aquatic life is starved of the oxygen it needs to live. This is true for Long Island Sound as well, where these elevated nutrients degrade the water quality.

1.3 million gallon capacity tank



Increasing manure storage capacity decreases the need to spread manure during risky seasonal time frames. In the Northeast, because of climate change, winter is becoming more varied with increasing freezethaw events that create more intense stormwater run-off. Winter and fall are the two seasons with the largest increases in temperature and precipitation.

NRCS calculates that storing the manure (rather than spreading) during winter months will reduce contamination risk by 19,000 pounds of Nitrogen, 11,000 pounds of Phosphorus, and 15,400 pounds of Potassium. This project enhances the farm's current innovative manure management practices, such as using manure solids in biodegradable pots called Cow-Pots.



Manure Maker



Leveling the Ground



Laying Foundation



Finishing the Storage Tank (man for scale)



The First Fill 9/27/2024

Funding for large projects like this is essential.

The funding for this project came from a unique leveraging of funds between USDA-NRCS, NFWF LISFF, and the farm. In fact, the NRCS contract associated with this project was the largest ever signed in the state of CT! (And NRCS projects give *partial* financial assistance.) Not all solutions, however, have to cost over a million dollars. Lots of small changes can add up. Please join us in reducing nutrient loads in our watersheds. If you have gutters, consider downspout disconnect kits that allow stormwater to infiltrate into the ground. Look into opportunities for low-impact development on your property or in your town, such as permeable pavements and rain gardens. If you are a farmer, USDA-NRCS and other organizations have funding for climate-smart practices that will also reduce your impacts on the land. Please feel encouraged to reach out with any questions or ideas for public projects at: *info@nwcd.org* or (860) 626-7222.

Climate Smart Ag Partnership: Cover Crops & Agroforestry

For the fourth year, NWCD (and partners CT Resource Conservation & Development, USDA-Natural Resources Conservation Service, and Berkshire Agricultural Ventures) offered free cover crop seed and technical assistance to farms through our Cover Crop Challenge! Cover crops protect soil health and increase farm resiliency. They also protect our watersheds by reducing nutrient runoff and soil erosion, benefiting not only farmers but their surrounding communities as well.

USDA-NRCS conveniently divides soil health into four distinct principles: minimize disturbance, maximize biodiversity, maximize soil cover, and maximize living roots. These principles support the soil ecosystem, which in turn makes the farmer's job easier and minimizes risks to the surrounding environment. Fortunately, cover crops fit into each principle!

Instead of leaving a field bare after a cash crop has been harvested, cover crops provide living roots and aboveground biomass over winter and into the spring to directly compete with weeds. After termination, cover crop residue can block sunlight from weed seeds, providing increased suppression for the cash crop growing season. Because of these weed-suppressing properties, farmers can reduce the use of tillage and herbicides, thus helping to minimize disturbance and maximize biodiversity.



NWCD and partners CT Resource Conservation & Development, USDA-NRCS, and Berkshire Agricultural Ventures also partnered to coordinate a Climate Smart Ag Field Day with Adamah Farm at the Isabella Friedman Jewish Retreat Center in Falls Village.



This was the first *on-farm* workshop put on by this Climate Smart Ag Partnership, and included the presentation "Farming with Trees: Growing your Farm's Resilience with Agroforestry" by Jono Neiger and Seva Waters of Regenerative Design Group, a farmer panel on cover crops, and a tour of Adamah Farm. With around 30 people in attendance, the fieldday was a success despite persistent rains.

Adamah Farm provided an excellent case study to observe the early implementation of an agroforestry project. Agroforestry, or using trees with agriculture, is an attractive option for many farmers. Compared to vegetable farming, an agroforestry planting productively use steep and or rocky land, requires minimal maintenance, and sequesters more atmospheric CO₂. Additionally, whenever trees are added to a system, one can expect to see improved soil health and water quality benefits.

Agroforestry can complement existing farm oprations in a variety of ways - alley cropping (rows of trees between alleyways where crops grow) and hedgerows/windbreaks can protect crops from wind; riparian buffers incorporate productive trees while protecting water quality, and silovpasture (combining trees and livestock grazing) can improve herd health. In Adamah's case, 200 chesnut trees were planted on a hill slope that was full of brush and invasives. Their goat/sheep herd rotationally grazes, helping control these unwanted plants. As the trees mature, the area will become a proper silvopasture with the herd grazing under the trees.

Featured Intern Article: All About River Health

Signs of a healthy river include the presence of riffles (shallow areas), runs (deep, straight areas where water moves slower), and pools (found where the river bends; water moves slow and bottom may appear muddy), a variety of plant and animal life (including insects, fish, salamanders, and frogs), minimal erosion along the bank and connection to a vegetated floodplain. This ensures that water is protected from activities on land, sediments and nutrients are captured, and that animals have a place to live. The floodplain ideally should have trees, grasses, and shrubs.

Signs of an unhealthy river include cloudy or milky water, slimy fungus or algae, foam in still water, foul smells (think chlorine, rotten eggs, chemical, sewage), dead/dying fish or other animals, oil film, debris in water, sewage, and litter.

The benefits of a healthy river are numerous. Health rivers ensure clean drinking water, preserve biodiversity, and support recreational activities (ex. tubing, boating, fishing). Vegetated flooodplains help control flooding and fights climate change. Unhealthy rivers negatively impact human health and the environment. People can contract illnesses like cholera, typhoid, Legionnair's disease, and respiratory infections.

You can promote river health by educating yourself and taking action! Find out which watershed you live or work in, and any local organizations associated with it. Reduce runoff by disconnecting downspouts from sewer systems, installing rain barrels, and planting rain gardens. Consider permeable pavement if you need to repave your driveway. Try to reduce use of fertilizer and let your grass grow a little taller. Commit to proper disposal of household chemicals. Volunteer to become a stream monitor or take part in a river cleanup. Together, these actions add up to help maintain the health of our local waterbodies.

Multifunctional **Riparian Buffers**

Research shows that riparian buffers that separate open areas from aquatic ecosystems (like rivers, streams, lakes, and ponds) protect their ecosystem services from pollution, erosion, and heat.

Many properties have lawns which often extend to the very edge of waterbodies. With minimal effort, a buffer (10-15 feet deep) can be planted along the edge of the waterbody and include trees, shrubs, and herbaceous plants (or just herbaceous plants) including native grasses. Preferably, buffer plantings should include trees as their roots help to protect the banks of the waterbody from erosion and flood damage. Tree branches provide shade over the water that maintains cooler, less fluctuating, water temperatures, an important factor for the health of aquatic life.

Natural forests surrounding water resources provide the best protection. Especially in more developed areas, riparian buffers supply some of the needed protections to ensure continued water quality and protect habitat.



Buttonbush Chokecherry Elderberry Highbush Blueberry Pussy Willow Red-osier Dogwood River Birch Steeplebush Swamp Azalea White Meadowsweet

Example of a Riparian Buffer Planned Layout

Incorporating flowering and fruit-bearing plants into the buffer planting creates a multifunctional riparian zone with food and cover for wildlife. For example, plants like hazelnut, black walnut, elderberry, chokeberry, blueberry, serviceberry, pawpaw, perismmons, and other fruiting plants can be incorporated to feed both native wildlife and people alike. Woody florals, like pussy willow and red or yellow twig dogwood can be coppiced every 2-3 years to be used for decoration or crafts.

Vegetated buffers are critical in protecting our valuable water resources and are easy to create and maintain, similar to other landscape plantings.

If you would like guidance on planting your own riparian buffer, please reach out to info@nwcd.org or 860-626-7222, we would be happy to assist!

Future Environmental Stewards 2023-2024 CT Envirothon

This year marked the 33rd year of CT Envirothon, which provides high school students an opportunity to explore the environment through an applied science approach, while promoting skills in communication and teamwork. There are five main stations - Soils, Forestry, Aquatics, Wildlife, and a rotating 'Current Issue'.

This year, CT Envirothon held three in-person workshops, while continuing to hold webinars and post content on our YouTube channel. NWCD Staff coordinated two of these events. The first was an Aquatics and Forestry workshop held in October 2023, where students waded into streams near People's State Forest in Durham, and learned how to identify trees, measure trees using biltmore sticks, and more. The second workshop was held at the CT River Academy in East Hartford in January 2024 (pictured below), which focused on the Aquatics Station and the Current Issue: "Renewable Energy for a Sustainable Future". Students learned about renewable energy through games and discussions, and also experienced live demos of amphibians, aquatic invasive plants, and more.



In May, the state-wide competition was held at the CT Agricultural Experiment Station in Hamden, CT with 25 participating teams from 16 schools. From our district, Marvelwood School, Housatonic Valley Regional, Nonnewaug High School, and Northwest Regional High School participated. Students took a 50 minute, hands-on test at each station, with students giving a 10-minute prepared presentation on the current issue. The following teams were awarded:

- 1st place Marvelwood School (*Team 2*)
- 2nd place Lyman Hall HS
- 3rd place Housatonic Valley Regional HS (*Team 1*)

In July, Marvelwood *Team 2* (pictured below) competed in the 36th International Event hosted in Geneva, New York. NWCD helped in their aquatics preparation. They competed with teams from 49 states, 6 Canadian provinces, China and Singapore. Congratulations to Marvelwood and their advisor Laurie Doss. We appreciate the dedication and hardwork of all our teams and advisors, and look forward to next year!



Expanding the Program

NWCD staff assisted the Steering Committee with a successful grant application to the 2024 Diversity Grant program from NCF (National Conservation Foundation) Envirothon. This project centers around the creation of hands-on learning kits (featuring materials from each station) to be loaned to CT schools by each Conservation District. Examples of activities include macroinvertebrate sampling, conductivity water testing, game-cameras, soil texturing activities, tree identification and more.

NWCD staff is also central in creating new online resources for Envirothon. Filming aspects of our inperson workshops, we create unique short educational videos for our CT Envirothon Youtube channel. Videos create a good historic record and resource to teams and for any other student or member of the public to watch in the future. In 2024, we had approximately 2,600 views, accounting for 262 hours of watchtime.

2024 NWCD Scholarship Awardees

Honoring Jacolyn "Jackie" Mott, Dick Leavenworth, and Rev. Ledlie Laughlin Jr.



Dana Saccardi

I am attending the University Of Connecticut at Storrs. My major is Natural Resources with a concentration in water conservation. I became passionate about the environment in high school, when I joined my Envirothon team where we learn about four areas on the environment: forestry, soil, wildlife, and aquatics. That is where my interest in the environment sparked and now when I entered college I wanted to continue learning about nature, so I could then work in something I love and want to protect.



Logan Derochick

I am a 2024 graduate of Northwestern Region 7 High School. I am currently taking classes at CT State Community College at both the Tunxis and Northwestern Campuses, majoring in Natural Resources. I plan to transfer to a 4 year college in 2 years to get my bachelor's in Wildlife Biology/Conservation and get a job as a Wildlife Ecologist or Biologist. I became interested in this field when my life-long love for hiking and the outdoors combined with a passion for science.

2024 NWCD Summer Intern

2025 Applications Due: Feb 15, 2025 nwcd.org/employment-opportunities

Grace Jenks: Originally from New Hartford, I've since moved out west to pursue my education. I attend the University of Colorado Boulder studying Environmental Design (with a focus in Urban Planning and Sustainable Design) and Italian. This summer, I wanted to work somewhere that puts a focus on sustainability and working outside, two things I'm very passionate about. After much searching, I discovered not just NWCD, but the concept of conservation districts. I enjoy the variety of work I get to do here, like graphic design, being out in the field, and researching topics pertaining to water and soil health. I'm excited to see where this job will take me and the opportunities it will open up for me in the future!

NWCD Welcomes **New Staff**



Audra Leach Program Administrator

For the past 15 years, I have been an educator in science, environmental, and agricultural education. This year, I was honored to accept the Environmental Educator of the Year Award from the Connecticut Outdoor and Environmental Education Association (COEAA). It is my mission to weave environmental topics and concepts into all content areas to foster a holistic, hands on understanding of the world around us. Working for NWCD, I am excited to develop experiences for learners of all ages, as well as to continue my work with Envirothon. I have previously had two state-winning Envirothon teams that competed at the international competition and am currently a member of the state and international operating committees.

The diverse experiences that I have collected can continue to help strengthen the bonds between local communities, schools, industry professionals, and the na-

tural world. I look forward to sharing this passion and commitment to fostering environmental awareness by working with each of the 34 towns in the district to educate the public about environmental and agricultural topics that are relevant to our everyday lives.



Northwest Conservation District 1185 New Litchfield Street Torrington, CT 06790 Non-Profit Org US Postage Paid Winsted, CT Permit No. 11

Conservation Connections



Rain Gardens are a way you can reduce the amount of pollutants that leave your yard and enter nearby lakes, streams and ponds. To see if a rain garden is right for your home visit: www.nemo.uconn.edu/raingardens/

Looking to have your soil tested? Contact UConn's Soil Nutrient Analysis Laboratory www.soiltesting.cahnr.uconn.

Pollinator Pathways are pesticide-free corridors of native plants that provide nutrition and habitat for pollinating insects and birds. For a wealth of information on native plants and pathways in your area visit: www.pollinator-pathway.org

Follow the Forest's mission is to protect and connect forests and promote the safe passage of wildlife from the Hudson Valley to Canada! Check out their amazing map at: www.followtheforest.org

Environmental Concern or Problem? Go to https://portal. ct.gov/DEEP/About/Reporting-Environmental-Problems for what to do and who to contact.

To Support NWCD:

Make a charitable donation by either mailing a check made out to NWCD to: 1185 New Litchfield St, Torrington, CT 06790 or donate via Paypal on nwcd.org/donate.

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