

2018 NWCD Annual Meeting Celebrates Conservation, Friends And Farming at Freund's Farm, East Canaan

A warm late summer day saw our annual meeting step off with a Freund Farm tour led by family members, Matthew Freund and his daughter Amanda. Our friends and guests were treated to all of the wonderful sounds and smells that a real, working family-run farm offers—too often, an experience that we remember only from our childhood. The tour was followed by a buffet rich with healthy, locally grown fare from the Freund Farm Market and Bakery prepared by hostess, Theresa Freund, and her catering staff. Following pie and ice cream, three conservation award winners were honored.

A LIFETIME ACHIEVEMENT AWARD was presented to Tom McGowan by NWCD board chairman, Curtis Read, in recognition of the many leadership positions that Tom has held over the past 40 years that helped make Litchfield County's conservation and environmental organizations strong and effective. Tom's list of accomplishments include serving as Executive Director for the Sunny Valley Foundation, Weantinoge Heritage Land Trust and Lake Waramaug Task Force for over 30 years and often simultaneously. Noting that Tom was his first boss, Curtis deemed Tom a selfless professional and a longtime board member and friend of NWCD whose work always done with a smile, humor and respect for others opinions.

The CONSERVATION VOLUNTEER AWARD was presented to John Baker by NWCD Program Administrator, Karen Griswold Nelson, in recognition of John's many years of dedication and hours of volunteer service for the protection of the birds and the bees and the flowers and the trees in the Litchfield Hills. John, a longtime member of the Litchfield Hills Audubon Society, oversees the Society's Wigwam Brook Wildlife Sanctuary, located along Connecticut's scenic Route 254 in Litchfield. John was instrumental in the establishment of two American Chestnut orchards, totaling 2 acres, planted and managed to help restore this magnificent tree to its former grandeur. John and his wife, Janet, live in Milton and own and operate Berry Ledges Apiary, a small mom-and-pop apiary that provides a diverse mix of raw honeys to the local clientele.

The CONSERVATION FARMERS AWARD was presented to Freund's Farm by NWCD Executive Director, Cynthia Rabinowitz, in recognition of the Freund family's decades of sustainable and innovative farm products and practices and their commitment to preserving and promoting agriculture and farming through education and stewardship. Theresa, Matthew and Amanda accepted the award on behalf of the farm and gave a history of the farm and their longtime partnership with the Northwest Conservation District.

The evening's official business ended on a nostalgic note. A vintage "Got Milk" Freund's Farm milk cup, found in a NWCD staff member's kitchen cupboard was produced. Based on "expert testimony", it was determined that the cup dated back to 1997 when that staff member's kindergarten daughter, attending a New Hartford public school, went on a field trip and learned about farming, cows, and the value of drinking milk at Freund's. It was a great annual meeting and a good time was had by all. :)



L to R - Tom McGowan, John Baker and Theresa and Matthew Freund
Photograph by Republican American reporter Ruth Epstein



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Addressing our changing climate... what can we do?

In mid-October, NWCD staff, (Kelsey and I, Karen), used an overcast afternoon to visit NWCD's Native Meadows Preserve in New Milford and the Still River Greenway in Brookfield. It was Kelsey's first staff visit to both sites but not mine. I've visited and worked on the Native Meadows site for more than five years. I was on the greenway site during NWCD's partnership with the town of Brookfield to oversee an approved greenway construction design. The design included state-of-the-art stormwater management practices protective of the Still River and a valuable vernal pool. In October 2016, staff, (Jean and I) attended the greenway's official opening. It was a crisp, sunny day. The Greenway was alive with sounds of activity: people (and dogs) of all ages and types, walking, talking, and biking. We walked the greenway to assess content for educational signage being prepared by NWCD for four locations.



Brookfield Greenway, October 2016

In October 2017, Cynthia and I, in partnership with Housatonic Valley Association (HVA) staff and student volunteers planted wetlands vegetation in the newly constructed wetlands retrofit at the greenway entrance, the final part of the stormwater management plan approved.

Our recent visit was my first since May 5th, when tornados and heavy rains hit the area, leaving many towns, including Brookfield, with massive devastation to homes and property, closed streets and schools, and power failures but luckily, no human loss. Native Meadows was unscathed, but the Greenway, reopened to walkers, was a vista of downed and damaged trees and vegetation. Nearby highway noise was no longer muffled. The experience, at first blush, for me, was heart wrenching and visceral. And, it raised the question, what can I do as NWCD staff?

As this newsletter goes to press, we are experiencing very heavy rain events with rivers and streams swollen and overflowing. Clean-up remains ongoing statewide from this year's nine reported tornados. At this time two years ago, our state was recovering from a record drought that resulted in cyanobacteria outbreaks (blue-green algae) in lakes and communities engaged in raging "water rights" fights over shrinking drinking water supplies. Many experts believe these unusual weather events are related to climate change. And if so, what is NWCD's response.

We, at NWCD, intend to focus first on the evidence that our state's climate is changing and how we can assist the 34 communities we serve. Some evidence is described in a recent report (available on NWCD's website) by Joanna Wozniak-Brown, PhD, a regional planner for the Northwest Hills Council of Government (NWCOG), for a Rural Resiliency Sharing Session this past July.

The report lists several "general changes":

- From 1958 to 2012, the Northeast has seen a 71% increase in "very heavy" (heaviest 1% of all daily events) precipitation. By the end of the century, it may increase by 5% to 10% more.
- Precipitation will occur in heavier events with extensive flooding possible.
- Overall, Connecticut is getting warmer. Average temperatures could rise between 8-12 degrees Fahrenheit in summer.
- Summer drought conditions will increase.

The report addresses the impacts of climate change on agriculture, cultural resources, infrastructure, natural resources and public health. It is one of many documents presented during educational outreach sessions to our state's elected officials and land use professionals in support of programs being formed on state and regional levels to address our changing climate. These programs aim to help our natural, built, and human environments become resilient and sustainable as they adapt to a changing climate. Hence, the terms "resiliency/resilience", "sustainability/sustainable" and "adaptation" have become part of the discussion of climate change.

One such program, initiated by the University of Connecticut, is the Connecticut Institute for Resilience and Climate Adaptation (CIRCA). CIRCA's mission is to "increase the resilience and sustainability of vulnerable communities along Connecticut's coast and inland waterways to the growing impacts of climate change."

To learn more about CIRCA, visit <https://circa.uconn.edu/>



NWCD, partnering with NWCOG, received funding from CIRCA to design a state of the art “town specific” Low Impact Development manual to address impact on our towns’ water resources. LID is part of a suite of state approved techniques to address stormwater management in the design build community. While the manual’s initial focus was on LID, the idea of identifying, evaluating and preserving more sensitive resources gained traction as this approach would lead to creating sustainable development practices. Thus, the word “Sustainable” was added to the title. A link to this manual is found on the CIRCA website and our own website.

Another program, Sustainable CT was created by towns, for towns. Municipal leaders and residents from across the state, the Connecticut Conference of Municipalities and people from key agencies, non-profits and businesses partnered to develop the program during 2016 and 2017. In the words of one town facilitator, Katherine Freygang from Cornwall, “This program is a list of Actions compiled by hundreds of CT people, and facilitated by the Sustainability Institute at Eastern CT State University, to create a master list of best practices and resources for resilient towns. Resiliency is based on communication, resources, structure, and human energy. This program is a process to examine and enact practices that will build the strongest towns. The Actions are to be customized according to relevance and reported so that others can share experience and expertise. There is a point

system that has proven beneficial to those who want that kind of structure and incentive. Overall, SustainableCT is built to support and inspire. To learn more about Sustainable CT visit



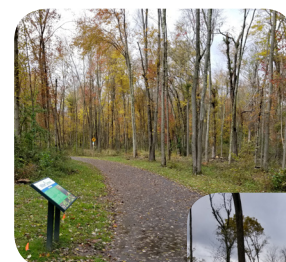
<https://sustainablect.org>

Many NWCD towns, including Barkhamsted, Bethel, Brookfield, Cornwall, New Milford, Norfolk, Roxbury, Thomaston, Torrington, Warren, Washington and Woodbury are already signed up as participants in this program. In concert with Ms. Freygang, NWCD encourages you to dig into the Actions and read to the end where funding, resources and benefits are listed. There are so many opportunities here for citizens of all ages, elected officials or volunteers to find an action appropriate to one’s personal station in life.

We encourage you to consider NWCD as a resource for technical and educational support for your individual or town efforts to address our changing climate. We are committed to promoting and assisting land use agencies in incorporating LID into their local regulatory land use processes. We provide technical assistance for sustainable design projects of all sizes and kinds from commercial developments to farms and backyards. We provide educational outreach to anyone interested in participating in or being trained for leadership in local initiatives to address our changing climate.

In closing, I am returning to our recent visit at the Greenway.

My take-away changed as we continued to walk the entire greenway. The weather was iffy, not rainy or clear but the Greenway was far from abandoned. Visitors of all ages, some with dogs, and others alone, were quick to greet fellow visitors. The Greenway was alive with conversation, dog pats, sharing and laughter. In the midst of the walk, we stopped to listen in a damaged area open to the Still River. It was a microcosm of bird activity on broken branches with the trills and calls of flycatchers, titmice, woodpeckers and nuthatches over the highway noise. It made me realize that nature and all its creatures, including us, have some innate resiliency to handle environmental changes. But thriving in the face of dramatic changes in our climate, which we are already seeing, will depend on us taking action.



October
2018

200 ft past
far sign



My favorite “Earth Day” quote remains, “Never doubt that a small group of thoughtfully committed citizens can change the world. Indeed, it’s the only thing that ever has.” (Margaret Mead, famed anthropologist and Earth Day supporter.)

*Authors Karen Griswold Nelson,
NWCD Programs and staff*

CT Envirothon is a STEM-compliant resource-based education program started in 1992 by the state's Soil and Water Conservation Districts. Since its inception, this high school level program has provided in-class curriculum and hands-on field experience in core categories of forestry, aquatics, wildlife, and soils. It promotes environmental awareness, knowledge, and stewardship through education and team competition for thousands of high school students statewide, many whom have gone on to become environmental stewards and leaders in our communities.

CT Envirothon — Education for Today's Youth & Tomorrow's Leaders

One such person is Emily Freund, a 2006 Housatonic Valley High School (Agriscience) graduate and Freund Farm family member. As a junior, Emily was encouraged by educator David Moran to create and organize an Envirothon team as an independent study project. Emily participated in two field day events before her graduation. Her "team" continues to be active participants in yearly events and representing

Connecticut in 10 national competitions between 2007 and 2017. Emily graduated from Cornell University in 2010 with a BS in Natural Resource Management, served in AmeriCorps for a year and currently is the farm manager at Jones Family Farm in Shelton where her focus is on farm education and hospitality.

To support CT Envirothon, visit ct.envirothon.org



Energy Updates — 2018

What Can We Learn from the End of Net Metering in Connecticut?

Metering in Connecticut?

This past June, Governor Malloy signed into law Public Act No 18-50, requiring electric suppliers to obtain 40% of their energy from Class I renewable sources by 2030. While this was accurately presented as a step forward in combating climate change, the same bill caved to utility pressure to eliminate our state's consumer-friendly net metering laws.

The net metering policy we are losing credits excess solar production to the next monthly billing cycle on a kilowatt-per-kilowatt basis, to be squared up after March 30 each year. In practical terms, this allows the typical solar home to make excess summer production available to the grid, during times of peak loads, and to take them back in winter, when photovoltaic (PV) production is poorer. It is a simple and sensible system that has encouraged rapid

solar adoption in our state, with associated growth in well-paying green jobs.

The utilities, on the other hand, would prefer solar PV built at "utility scale," thus under their control rather than available as a practical option for a homeowner. In place of net metering, they plan to set a fixed rate to pay for all electricity supplied to the grid.

Besides harming the residential solar industry and associated job losses, this change is bad for other important reasons. Experts of all stripes agree that we need to be moving in the direction of widely distributed energy resources. A million solar homes, especially as battery technology becomes more cost-effective, provide a more reliable grid, one less vulnerable to disruption by extreme weather or terrorist attack. Less acute summertime peaks mean fewer outages and fossil-fuel plants maintained to service them, thus improving air quality and mitigating climate change.

Although Connecticut still ranks among states with forward-looking energy policies, our position is slipping. How did we allow this to happen? And how can we get back on track?

Your town probably has some variation of a Clean Energy Task Force. Find out, go to a meeting, and learn about local issues. If there is no task force, start one. Check out programs for your town and your home at Energize Connecticut (energizect.com). Learn about statewide and regional energy issues from the Acadia Center (acadiacenter.org) and the Connecticut Roundtable on Climate and Jobs (ctclimateandjobs.org). As your understanding grows and your opinions form, ask your state's elected officials about theirs. These are complex issues, but we cannot allow their complexity to keep us out of the discussion. We need to educate ourselves, remain vigilant, and be prepared to push back.

Author Ray Furse, manages sales and marketing for Litchfield Hills Solar and serves on the NWCD Board of Directors.

Steele Brook Restoration — Watertown

For over 10 years, the town of Watertown has been working on a Steele Brook restoration project, including changes to the Heminway dam to address serious environmental and public safety concerns. Extensive professional studies, funded by state and federal agencies, were conducted regarding options for the repair or removal of the failing dam. These studies all concluded that the full removal of the failing dam was the best solution for the environment and the community by removing town liability in the event of dam failure and costly damage to private and public property without any adverse impact to downstream properties.



Supporting information and educational outreach addressed additional community benefits realized by the spillway removal, including the restoration of a natural riverine corridor with expanded bird and wildlife habitat and the removal of a major fish barrier to provide free, natural migration for a full range of fish species. In addition, a restored channel and functioning floodplain/wetland system will be created. It is anticipated that the project will improve water quality and possibly even remove Steele Brook from the CT DEEP list of impaired waters. Equally important, the completed project will expand passive recreational opportunities, extend the already popular Steele Brook Greenway for walkers and cyclists; and enhance Watertown's future by removing an industrial structure representing past environmental damage.

The project, approved by town vote in July, is currently in progress. Due to excessive amounts of rain causing delays, it is anticipated that the majority of the work will be completed by the end of the year and the site planted in the spring. This project was funded in part by the CT DEEP through a US EPA Clean Water Act Section 319 Grant in partnership with the Northwest Conservation District.

Cyanobacteria (Blue-Green Algae): A Health Concern

Cyanobacteria are photosynthetic bacteria that live in most waterbodies. They first evolved over 3 billion years ago in rock structures called stromatolites, which still exist in Shark Bay, Australia. Stromatolites occur in tidal areas where cyanobacteria live underneath a layer of sand on rocks, protecting them against the sun. As the first photosynthetic organisms, cyanobacteria played a large role in creating our oxygen-filled atmosphere.

Today, cyanobacteria dominate many lake communities during late summer. Their populations often increase to high numbers – resulting in “blooms”. These “pea-soup” blooms destroy lake aesthetics, kill birds, mammals such as cows and deer, and aquatic life, and harm economic value by decreasing tourism and property values. More importantly, these blooms are dangerous and a serious human health concern.

Certain species in blooms create toxins, which can cause drowsiness, nausea and vomiting if ingested in large quantities by humans. Exposure to the skin may also cause rashes, hives and other allergic reactions.



Dogs and other pets are also susceptible to these toxins. While these organisms are always in the water, these health concerns occur when high-density blooms are present.

There are ways to protect yourself from blooms. Notice if a body of water has a green tinge on the surface and throughout the water column. Look out for beach closures, which are controlled by the local health department. Certain lake groups and associations may also post signs warning of increased cyanobacteria levels. If you suspect you were exposed to a cyanobacteria bloom, be sure to wash off as soon as possible, and change any clothing or bathing suits.

Cyanobacteria blooms are increasing across the world, caused by agricultural and stormwater runoff which adds phosphorous and nitrogen into water systems. Key ways to reduce blooms in many local watersheds is reducing runoff, a major goal of LID or Low Impact Development strategies. Management strategies to reduce lake blooms have been implemented in northwestern Connecticut lakes, but more research is needed.

For more information about the management of cyanobacteria blooms, their health effects and more, visit <https://www.epa.gov/nutrient-policy-data/health-and-ecological-effects>

Author Kelsey Sudol, NWCD Environmental Associate

NWCD News And Events

It is with great sadness that we acknowledge the passing of longtime board member and vice chairman, our friend Frederick “Dick” Leavenworth. A lifelong conservationist, Dick demonstrated constant dedication by making our local environmental health one of his top priorities. Dick served on the District Board for over 40 years, was founder and former chair of the Pomperaug River Watershed Coalition and founder and chair of the Woodbury Conservation Commission. He was a dedicated volunteer for over 20 years at Flanders Nature Center, assisting in their acquisition of hundreds of acres of land dedicated for open space. He was recently recognized by Flanders with the naming of the Leavenworth Preserve, a 126-acre Woodbury property of walking and hiking trails. Dick’s leadership style was respectful, concerned and wise. He will be greatly missed.



Coalition board member Anne Westerman and Dick



Coalition E.D. Vincent McDermott, and Curtis

We are pleased to announce that our chair, Curtis Read of Bridgewater, was recently presented with the 2019 Dr. Marc J. Taylor Environmental Stewardship Award by the Pomperaug River Watershed Coalition. Curtis was recognized for his countless contributions to the environment, including 30 years serving the NWCD board and leading the District in providing technical support for environmental best management practices within our 34 towns. Curtis’s environmental resume also includes past chairmanship of the Bridgewater Conservation and Wetlands Commission and work with the Woodbury Conservation Commission. Curtis is currently the First Selectman in Bridgewater where he continues to focus on environmental and conservation issues.

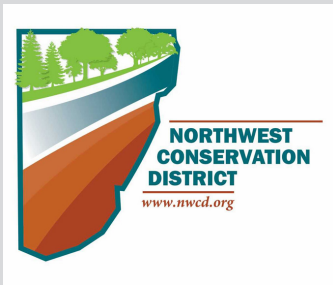
The Executive Director’s Corner

Recently, I have been excited about the spotlight on soil health and soil microbiology. At the onset of the Industrial Revolution, humans recognized the connections between microorganisms in the soil and soil health, leading to plant health, crop yield, and crop nutritional density essential for human health. Many studies show the downward shift in nutritional content of common foods grown by modern agricultural methods. Research has connected some of this shift to specific health conditions in western countries. These studies date back to the early 20th century but were sidelined and, in some cases, ridiculed. Many publications now available deal with this important subject. This March, NWCD collaborated with RC&D (part of USDA) to bring a “Soil Health” Workshop to Morris, Connecticut.

The program brought together speakers from Connecticut and Massachusetts, with over 80 participants learning how to improve soil health for farms and gardens. The fall 2018 issue of Permaculture Design Magazine is themed “Building Living Soil, and the fall 2018 issue of “The Natural Farmer”, (NOFA) is devoted to “Fungal Friendly Farming, referring to the soil microbiome. I just read “The Hidden Half of Nature: The Microbial Roots of Life and Health’ (Montgomery and Bikle). One of the best books I have read on the subject, it illuminates the hidden microbial life in the soil, its critical role in promoting and maintaining plant health, nutritional density and human health. The book has an extensive reference list for anyone interested in delving further into this fascinating subject. Part memoir,

part history, and very readable science, I recommend it as a good read.

On another subject, many of you met Kelsey Sudol, our Environmental Associate, at last year’s Plant Sale. Kelsey has a BS in biology and environmental science. She is passionate about fresh water ecology and its relationship to stormwater runoff, soils and agriculture, and healthy aquatic systems. Kelsey also works part-time at the Lake Waramaug Task Force. Using her innate can-do approach, Kelsey has navigated the GIS mapping system to produce a variety of maps. She has assisted with production of newsletters and other administrative tasks. She is developing educational outreach programs for schools to teach kids about freshwater biology.



Serving the following 34 northwestern CT towns:

Barkhamsted, Bethel, Bethlehem, Bridgewater, Brookfield, Canaan (Falls Village), Colebrook, Cornwall, Danbury, Goshen, Hartland, Harwinton, Kent, Litchfield, Morris, New Fairfield, New Hartford, New Milford, Newtown, Norfolk, North Canaan, Plymouth, Roxbury, Salisbury, Sharon, Sherman, Southbury, Thomaston, Torrington, Warren, Washington, Watertown, Winchester and Woodbury.

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Program Administrator
 Jean Cronauer,
Development
 Kelsey Sudol
Environmental Associate

We are now part of the NWCD team

I am Michael Sconyers from Norfolk

My father was a farmer before World War II and he taught me great respect for the land, which I carry with me today. I was a member of the Board of Trustees for the CT Chapter of The Nature Conservancy, from 1995 to 2005 and currently am a member of the Board of Trustees of the Norfolk Land Trust. I also serve on the Norfolk Board of Finance. My wife and I maintain a 3 acre patch of "all natural" blueberries, fighting invasives every year to preserve the native species. I hate buckthorn, bittersweet and barberries. I am involved professionally with land issues and preservation. God is not making any more land, and we must take care of what we have!



L to R - Kelsey, Jean, Karen, Michael and Cynthia

I am Doreen Lynch-Sudol from Morris

I joined the NWCD Board in December of 2017 as Treasurer because the environment has been important to me all my life. I have more than 30 years of experience in taxation, including 9 years of operating my own firm. I am a graduate of The University of New Haven where I earned a Masters in Taxation. I raised three children and currently operate Sunflower Hill Farm in Morris Connecticut with my family where we raise alpacas, chickens and goats. I enjoy farm life, hiking and skiing. I also am a trained pastry chef and donate my skills to local nonprofit fundraisers.



L to R - Doreen, Dawn Broadley
 plant sale volunteer

The Climate Reality

December 6th, 2018
 6:30-8:30 PM

Bantam Hall, Bantam

A free presentation sponsored by NWCD on how climate change happened, how it affects everyone, and what each person can do about it. Presented by Dawn Henry, a volunteer trained by former US Vice President Al Gore as a part of the Climate Reality Project.



To register, email info@nwcd.org or call 860-626-7222



Northwest Conservation District
1185 New Litchfield Street
Torrington, CT 06790

Non-Profit Org
US Postage Paid
Winsted, CT
Permit No. 11

Conservation Calendar

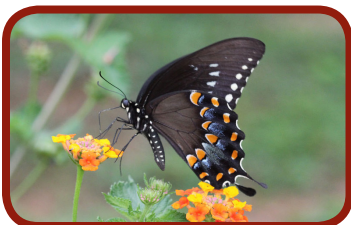
nwcd.org 860 626 7222

NOVEMBER

- 17 CACIWC Annual Meeting and Environmental Conference - www.caciwc.org

DECEMBER

- 6 The Climate Reality - 6:30-8:30 PM, Bantam Hall, Bantam CT, register @ email info@nwcd.org or call 860-626-7222
- 13 SIPRAC (State Implementation Plan Revision Advisory Committee) open forum about State's Air Quality programs and proposed regulations, 9 am, CT DEEP Headquarters Hartford, 79 Elm Street, Phoenix Auditorium, 5th Floor
- 16 Christmas Bird Count - Litchfield Hills Audobon, if you want to help, contact 860-482-4046 for more
- 19 Shepaug eagle viewing starts, open through March 10th, 2019, for reservations call 1-800-368-8954



Save the Date:
April 26-28th, NWCD's 38th Annual Earth Day Plant Sale at the Goshen Fairgrounds. For order forms, available March 1, 2019, call 860-626-7222, email us at info@nwcd.org or order online at nwcd.org