

onservation Times

Newsletter of the Connecticut River Coastal Conservation District, Inc.

January 2015

The Dust Bowl, the Conservation Districts, and a Celebration of Soils

Soil is fundamental to sustaining life. It supports healthy ecosystems and a nutritious and abundant food supply. 2015 has been declared International Year of Soils by the United Nation's General Assembly, so it seems an appropriate time to not only celebrate soils, but take you back to the Conservation District's roots, our reason for being.

Why the International Year of Soils? According to a recent press release from the CT Natural Resources Conservation Service, "With an increasing global population, a shrinking agricultural land base, climate change and extreme weather events, the nations of the world are focusing their collective attention to the primary resource essential to food production—the soil...The year of awareness aims to increase global understanding of the importance of soil for food security and essential ecosystem functions." Join us—and the rest of the world—in a celebration of life-giving soils!

Healthy soil is the foundation that ensures working farms and ranches become more productive, resilient to climate change and better prepared to meet the challenges of the 21st century.

- Agriculture Secretary, Tom Vilsack

Try to imagine the time of sky-blackening dust storms sweeping across the country, when our soil was being lost due to drought and unsustainable agricultural practices. Fortunately, we learned a valuable lesson from the Dust Bowl: it was national concerns over worsening agricultural erosion, floods and the Dust Bowl's storms that launched the movement to conserve our soils in the 1930s, and led to the formation of the soil and water conservation districts.



Initially, Congress enacted the Soil Conservation Act of 1935, establishing a national policy to control and prevent soil erosion, and directing the Secretary of Agriculture to establish the Soil Conservation Service (now the Natural Resources Conservation Service). Then, the locally-led Conservation District concept was developed to enlist the cooperation of landowners in carrying out the programs authorized by the act. In 1937, President Roosevelt recommended state-level legislation that would

allow local landowners to form soil conservation districts. Given that about 75% of the continental United States was privately owned, Congress realized that only active, voluntary support from landowners would help ensure that local needs were being met and guarantee the success of conservation work on private land.

Today, there are over 3,000 conservation districts nationwide, continually adapting to new conservation challenges. Connecticut's conservation districts were formed by state statute in 1946, initially one in each of the state's eight counties. Our District covered Middlesex County, but after our reorganization in 2003, we work in an expanded area that includes 26 municipalities in the lower CT River watershed and adjacent coast. The focus of our work has also branched out from the early days. We now address a variety of natural resource conservation challenges, such as assessing and restoring water quality and aquatic habitat; protecting wetlands; promoting and implementing low impact development practices; preventing erosion and sedimentation; stormwater management; educating the public about "backyard" stewardship; habitat management planning for open space preserves; as well as working with the agricultural community to develop conservation plans and implement sustainable management practices—to protect natural resources, including our prime agricultural soils, and promote soil health.

A healthy, diverse landscape helps ensure stable, healthy soils! Don't forget...our annual plant sale is coming up in April featuring a great selection of CT natives for landscaping your yard. For more information about the sale, see the article on page 4, or go to www.conservect.org/ctrivercoastal for a copy of the brochure and order form.

★ **News Flash!!! The District will be launching a new environmental film series this winter with partners Wesleyan University, Middlesex Community College and The Rockfall Foundation. The series will feature four screenings per year, all free of charge. Plans for our first films will be announced shortly—check our website for the latest...** ★

Bacteria Detective Work Continues in the Coginchaug River Watershed!

Tracking down areas or specific sites contributing bacteria to the Coginchaug River and addressing these sources has proven to be a daunting task! With the help of our stakeholder committee, cooperative landowners, and "citizen scientists" from the community this effort is ongoing...and we are in hot pursuit of potential sources that are keeping the river on the state Impaired Waters List. At the same time, we are also in the planning/design stages of several projects to address potential sources.

For our 2014 water quality study, the District recruited and trained community volunteers to collect water samples for a study focused on the upper part of the watershed (Guilford/Durham), though samples were collected from all watershed towns (also encompassing Middlefield and Middletown). Weekly sampling was done from June through August, a total of nine weeks. An ambitious 24 sites were sampled, including previously tested and new tributary and main stem sites. As in the past, samples were analyzed for the indicator bacteria, *Escherichia coli* (*E. coli*), at the CT Public Health Laboratory in collaboration with municipal health department staff.

A majority of the sites sampled (~70%) did not meet the criterion for *E. coli* in the State Water Quality Standards. Of note is that two days of very wet weather had a marked impact on the overall results. During and after heavy rain, storm runoff carries pollutants into streams from land-based sources, resulting in spikes in bacteria levels in downstream areas. Several "hot spots" were identified that will require further investigation...and the search for potential sources and fixes continues!

Two related items of interest include...

- A presentation made by staff at a statewide volunteer monitoring conference this past July for the panel, *Bacteria Monitoring: From Poop to Nuts*. Our well-received mini-talk was about District monitoring efforts in the Coginchaug and how the bacteria data supports our conservation/water quality improvement work.
- A grant awarded by The Rockfall Foundation to develop creative, user-friendly ways to communicate Coginchaug water quality results, such as a web-based interactive "story map" to graphically display sample sites along with data, photos, and an overall assessment for each site. This project will support our efforts to engage the public in our water quality improvement work.

What Are Indicator Bacteria?

The presence of certain bacteria in water indicates that human sewage or animal manure is present. While not harmful themselves, they are indicators of other disease-causing organisms. When bacteria counts are over a certain level there may be a health risk from water contact. *E. coli* are the indicator bacteria used by the State of CT to evaluate general sanitary conditions of freshwater, and determine whether areas are safe for water contact. Sources include on-site septic systems; sewage treatment plants; manure from pets, livestock, and wildlife; urban runoff; and others.

Horse Manure Management Project Reaps Results

Given that one horse produces approximately eight tons of manure each year and uses three tons of bedding material, managing horse waste properly is essential to preventing environmental impacts. We are pleased to report that our two-year project to improve manure and nutrient management at horse operations is completed. The project, funded by the Long Island Sound Futures Fund, was a major joint undertaking of three CT conservation districts with coastal areas: ours, and the Southwest and Eastern CT districts.

Staff conducted education on best management practices; completed twenty-one on-farm assessments, with written recommendations for reducing natural resource impacts; and provided technical and financial assistance for eight management practice/water quality protection projects.

On-farm assessments revealed a variety of potential natural resource impacts and management needs. Opportunities for improvements were found in all cases, suggesting a great need for projects such as these. Typical concerns included: uncontained or uncovered manure piles; excessive or year-round manure spreading; animal access to streams; signs of overgrazing and soil compaction; exposed soil in pastures; nutrient accumulation in the soil (based on soil sampling); minimal or no vegetated buffers around farm ponds and other water resources; no gutters on farm buildings; eroded areas; and other stormwater runoff or drainage concerns.

Manure management, e.g. manure storage structures and reducing horse numbers, was recommended for all farms. Potential pollution reductions from these practices total 2,299 tons of manure contained per year; and about 8,161 lbs. of nitrogen, 5,403 lbs. of phosphorus, and 5,678 lbs. of potassium. Recommendations have been implemented or are in process to address about 1,443 tons of manure.

Pasture management, e.g. soil tests, seeding and fertilizing, and rotational grazing, was recommended for many farms, totaling about 117 acres. Resulting annual reduction in sediment loss/loading is an estimated 66 tons. Recommendations are implemented or in process for 71.5 acres.

Though the grant project is now completed, we plan to continue to offer assistance to horse owners. Please contact our office if you have a horse farm or just a few backyard horses, and would like to learn more about management practices to protect water quality and available technical and financial assistance, or to schedule an assessment!



67th Annual Meeting Features Tour of Urban Oaks Organic Farm



New Britain's Urban Oaks Organic Farm was a wonderful setting for the Conservation District's 67th annual meeting, held on a warm sunny day in late October. The program featured a talk and tour led by Mike Kandefer, Urban Oaks Founder and Farm Manager, and Joey Listro, Education Coordinator. Our staff, board, friends and partners gathered to hear highlights of last year's conservation work; learn about and honor the accomplishments of our 2014 award winners (see below); and hear about the history of Urban Oaks and the farm's education and outreach programs, and tour the extensive fields and greenhouses. Participants were encouraged to taste the delicious salad greens and other produce as we toured the farm, and also had the opportunity to shop at the farm's excellent market!

Everyone enjoyed our visit, and was impressed with the success of this unique operation, the wide variety of foods grown, and the tie the farm has forged with the neighborhood and surrounding community. The first urban farm of its kind in the nation, Urban Oaks' mission is to nourish the local communities and greater CT with high-quality produce accessible to all; provide education and employment opportunities; and showcase economically viable, progressive, organic farming methods that promote and provide sustainable, ecologically sound agriculture in an urban environment. We applaud Urban Oaks for their significant accomplishments, and thank Mike and Joey for taking the time out of their very busy Saturday to host our annual meeting. We encourage you to visit the farm and see for yourself how a blighted inner city area was transformed into an urban oasis.

Congratulations 2014 Conservation Award Winners!

Environmental Professional

Joe Wettemann, Senior Sanitary Engineer, CT Department of Energy and Environmental Protection (pictured on left, with Tom ODell)

Special Merit

Bob Dobmeier, Deputy Director, Middletown Public Works Department
Sciongay Family, Westbrook, CT

Alex Palluzzi, Jr., Director of Recreation, Branford Parks & Recreation Department



Certificates of Appreciation

Gail Reynolds, UConn Master Gardener Program
David Richards, Clinton Nurseries
Mark & Mindy Yuknat, CT River Expeditions
Gary Crump & Gloria Priam, Priam Vineyards
Mary Kay Brown, Organic Vintages
Matthew Rubin, Old Saybrook Shopping Center
Pierre Bennerup & Marc Laviana, Sunny Border Nurseries
Rob Merritt, R2 Graphics
Thomas D. Comer, CPA, Comer & Company, LLC

Preserving a Family Legacy—Westbrook's Sciongay Family

There are many people who worked with the Sciongays to help preserve the beautiful Chapman Mill Pond and surrounding forest they call home, but it was the family's strong desire to protect this special place that made it possible. The Sciongay family—Harriet Sciongay, and Shirley and Dick Carroll (at right)—honored recently by the Conservation District, has left a living legacy to be enjoyed by all through several significant land conservation efforts in Westbrook and Clinton. Initially, the family sold 103 acres of land to the town of Westbrook for conservation, now open to the public for passive recreation; and in 2014, the state purchased 155 acres in Clinton on the pond and the Menunketesuck River, also to be accessible for passive recreation.



Primarily forested, the property is home to a rich assortment of fish and wildlife, such as osprey, bald eagle, great horned owl, wood duck, otter, a variety of herons and egrets, and rare turtles. Vernal pools provide critical breeding and overwintering sites for wood frogs, spotted salamanders and other amphibians that thrive under a unique combination of shaded, seasonal wetlands and drier upland forests. The Menunketesuck River also hosts abundant runs of migratory fish.

The Sciongays have also been key to a long term effort to develop a fishway at Chapman Mill Pond dam, the first barrier to fish passage on the river. With the dam now on state property, the District is working with CT DEEP to design and construct the fishway, which will open up almost three miles of river and forty acres of pond habitat for migratory fish, including river herring and sea-run brown trout. Stay tuned for updates on this important and exciting effort!

District News & Events

BOARD CHAIRMAN TOM ODELL HONORED

Chairman Tom Odell reached a rather significant milestone in 2014—40 years on the board!! We were pleased to recognize him at our 2014 annual meeting for his dedication and leadership, all that he has contributed to the District over these many years, and his unwavering commitment to local conservation. As an integral and significant part of our organization, he has led us through many challenges, changes and transitions, and has also contributed at the state-wide level benefiting all five of CT's conservation districts. We cannot thank Tom enough for all that he's done, and we look forward to continuing to work with him for many years to come.

DEPARTING BOARD MEMBERS OPEN UP BOARD POSITIONS

This past fall we said goodbye to three board members: Chris Holden, an eleven year member from Middletown, who was also our Treasurer for the past five years; Jennifer Weymouth, from Middletown, on the board for six years; and Warren Herzig, a member from Durham who served for over two years. We have valued their many contributions and are sorry to see them go.

In light of these recent departures, we are currently looking for new board members. Anyone interested in joining the board should contact the office for more information. Also, we encourage interested people to attend a board meeting to meet other members, and get a better feel for what we do and the duties and responsibilities of the board. We hope to hear from you!

10TH ANNUAL RIVER CRUISE FUNDRAISER OUR BIGGEST EVER!!

It's hard to believe we've been holding our CT River Tree Swallow Cruise and Wine Tasting to support the CT River Watch Program for ten years now. Word seems to be spreading, and the cruise sold out in record time this year. Our tenth annual fun- and fund-raising cruise was a most successful event, in fact our biggest ever, featuring an especially long, dazzling and memorable swallow show.

Thank you to everyone who came on the cruise to support the CT River Watch Program, and to our ongoing and very generous sponsors—CT River Expeditions, Priam Vineyards, Organic Vintages, Clinton Nurseries and R2 Graphics. Given how popular the cruise was this past year, if you'd like to join us next year, we recommend signing up early!



24TH ANNUAL SHRUB & SEEDLING SALE TO BE HELD April 24-26, 2015

Old Saybrook Shopping Center, Boston Post Rd. & Elm St., Old Saybrook



Spring is around the corner...and we've been busy getting ready for our annual plant sale! Once again, you will have the opportunity to select from an extensive and exciting variety of Connecticut native shrubs, ground covers, evergreen tree seedlings, flowering perennials, grasses and ferns, as well as several culinary herbs. As in the past, our offerings will include edibles, pollinator plants, and plants suitable

for a variety of landscape conditions and uses, such as waterside buffers and rain gardens. This year we'll also have the popular Collins Organic Compost, and two types of special grouped plants—for attracting hummingbirds or butterflies—packaged in a rustic, reusable handmade pine box. It's best to order early to reserve your selection!

Advance orders are due *by April 6, 2015*. For a brochure and order form go to www.conservect.org/ctrivercoastal, or phone (860) 346-3282.

January 2015

The Connecticut River Coastal Conservation District, Inc. is a nonprofit organization whose mission is to promote the sound use and management of our natural resources through technical assistance and education.

Board of Directors

Thomas M. Odell, Westbrook, *Chair*
Alison Guinness, East Haddam, *V. Chair*
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Natural Resource Specialist
Barbara A. Davis
Office Administrator

The District serves the towns of Berlin, Chester, Clinton, Colchester, Cromwell, Deep River, Durham, East Haddam, East Hampton, Essex, Haddam, Hebron, Killingworth, Lyme, Madison, Marlborough, Middlefield, Middletown, New Britain, Newington, Old Lyme, Old Saybrook, Portland, Rocky Hill, Salem and Westbrook.

The Board of Directors holds public meetings every fourth Tuesday, 6:00 PM, at the deKoven House Community Center in Middletown. All programs and services are offered on a nondiscriminatory basis without regard to race, color, national origin, religion, sex, age, marital status or handicap.

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