

Lamoille County Conservation District

Conserving Our Natural Resources since 1945



Lake Eden Watershed Assessment In June of 2018 LCCD was

awarded an Ecosystem Restoration Program grant from the VT Department of Environmental Conservation to assess sediment and nutrient loading in the Lake Eden watershed. This is in conjunction with VTANR, the Town of Eden, the Lake Eden Association and Fitzgerald Environmental Associates, LLC. The District will combine a quantitative Stormwater Master Plan study along with Lake Wise assessments and stream walk surveys to determine where stressors exist that contribute to sediment and nutrient loading through development, erosion or old stormwater conveyance systems. The goal of the study is to determine where the more significant problems are and search for funding to correct them using Vermont Shoreline Best Management Practices (BMPs), BMPs for road erosion based on public and private

road erosion inventories (REIs), and Green Stormwater Infrastructure (GSI) treatment strategies for problematic stormwater conveyance systems within the Lake Eden Watershed.

The study relies on the support of private landowners who will work closely with VTANR Lake Wise Vermont Lakeshore Management division and our regional river scientist, basin planner and district manager. Private landowners will help with stream walk surveys and be advised on BMPs for their own shoreline property. Meanwhile, Fitzgerald Environmental Associates, LLC will complete a Stormwater Master Plan of the entire watershed area using all available data. The assessment is due to be completed by the fall of

2019 and at least five stormwater mitigation projects will be identified for implementation for 2020. We also hope that numerous households will adopt shoreline BMP practices based on the Lake Wise assessments they volunteer to do. Those households that go above and beyond implementing shoreline BMP practices on their land will be awarded the Lake Wise Award!

The breadth of this study is groundbreaking in scope and design. Because of this, it is the first of its kind! Upon its success we hope that it can replicated throughout the state for lakes that are undergoing stresses due to development patterns, erosion issues and stormwater-related events. The most important result of this assessment will be the sense of empowerment it will instill in the public who will have a say on what should be done to address water quality issues in their own backyard!



Lamoille County Conservation District Mission:

To maintain and improve our natural resources.

To aid and educate our fellow citizens to appreciate and adjust to the changes taking place in our natural resource system.

To be a local voice for conservation, preservation and stewardship of all natural resources

and work in conjunction with other agencies, private and public.

LAMOILLE COUNTY CONSERVATION DISTRICT

FALL 2018 PROJECT UPDATES

Brewster River Reach 13 and 14 River Corridor Floodplain/Stream Restoration - Implementation Project

LCCD was recently awarded a NRCC-DEC Block grant to implement the projects sited in Phase 1 and Phase 2 stream geomorphic assessments (SGA) to develop projects on the Brewster River for berm removal, head-cut stabilization and improving corridor conditions. LCCD has begun working with Smugglers Notch and Fitzgerald Environmental Associates LLC on the projects that will mitigate flooding and sediment flow into the Lamoille River watershed. Concurrently, LCCD will be looking at plans to remove the dam at Morse originally created to enclose a snow making pond. The removal of this dam will improve normal sediment flow as well as positively effect the temperature and dissolved oxygen levels for aquatic organisms.

Lake Champlain Basin Program FY17 Education & Outreach. Linking local road maintenance with water quality in Lake Champlain: Education outreach series on BMPs.

The Lamoille County Planning Commission (LCPC) was awarded this grant last year and included LCCD as a partner. The purpose of this project is to engage a diverse group of stakeholders in Lamoille County on the potential for road maintenance Best Management Practices (BMPs) to reduce erosion and contaminant related runoff from municipal roads, leading to improved water quality in Lake Champlain. Activities will include: site visit tours catered to road foremen, municipal employees and local officials; a private roads workshop with local landowners; and a presentation on erosion and sediment transport by the State of Vermont Department of Environmental Conservation for students in the Department of Environmental and Health Sciences at Northern Vermont University. The first two workshops were completed by LCPC and the LCCD on July 31, 2018 and September 14th respectively. The next workshop will be



presented by LCPC on November 2nd, 2018. If you are interested in attending please contact lccddirector@gmail.com for specifics!

Lake Champlain Basin Education & Outreach Program, GSI Training for Conservation Managers

The Green Stormwater Infrastructure Training for Conservation Managers (GSI Training) is a targeted effort by LCCD to strengthen the programmatic capability of Vermont's Natural Resources Conservation District's (NRCD), watershed groups, and local planning commissions in regards to GSI. The first of two workshops will be on October 24th in Rutland, VT. If you are interested in attending please contact lccddirector@gmail.com for specifics!

Stormwater Master Plans for the Towns of Hyde Park and Morrisville

LCCD received a VT ANR Ecosystem Restoration Program Grants to continue work to address stormwater runoff in the Lamoille Watershed. This project is entering its final phase of deliverables this fall. A number of sites have been identified as ranked high for remediation. If all goes as planned, some of these stormwater remediation projects will be implemented starting in spring of 2019. Stay tuned!



Regional Conservation Partnership Program (RCPP) – Farm Nutrient Management Planning

In 2019 LCCD will once again be assisting small farm operators in Lamoille County in their efforts to comply with Vermont's Required Agricultural Practices (RAPS) through the development of Nutrient Management Plans. LCCD provides labor and technical assistance as farmers work through UVM's "Digging In" class. Are you a Certified Small Farm Operator in need of a NMP? The RCPP program covers the cost of soil and manure testing as well as the class fee and a one-year subscription to goCrop. As a reminder, a Nutrient Management Plan is required for all CSFO's and all other Small Farms are required to have soil and manure tests. Please contact lccddirector@gmail.com for specifics!

The Lamoille Watershed Agricultural Project

LCCD is currently refining its database of working farms in Lamoille County. The ultimate goal of this project is to make it easier to connect with local farms and

provide them with information that will help them effectively implement Best Management Practices (BMPs) to increase nutrient and sediment storage in the Lamoille River Watershed. The new director would also like to see a farmers coalition formed so that BMPs and innovative farming techniques in general can be more easily disseminated throughout the region.

LAMOILLE COUNTY NATURE CENTER

See our Calendar for a complete list of fall program offerings.

Spring Nature Playgroup

LCCD partnered with the Lamoille Family Center to welcome spring by hosting a nature playgroup for six weeks in May and June. Each Tuesday little nature explorers turned up at the Nature Center with their moms, dads and even some grandparents to hike the trails, look for nests and flowers, go on a scavenger hunt, catch some frogs and have fun together in the spring sunshine. For many, this marked their first introduction to the Nature Center and our education programs. We hope to see these fun-loving playgroup participants back as nature campers in the future.

Lamoille County Nature Center Hosts Field Trips

In June the Nature Center hosted Wolcott Elementary School 1st and 2nd grades and the Johnson Elementary School kindergarteners for end-of-the-year field trips. Students enjoyed a guided hike and got up close with a variety of macro-invertebrates and amphibians in the pond. A trip to the Nature Center is a great way to wrap up the school year. Interested in treating your class to a Nature Center field trip? Contact Stacey at stacey.waterman@vt.nacdnet.net for more information.



Lamoille County Nature Center Summer Camps

Summer at LCNC means nature camp! Nature's Neighborhood campers spent the week exploring animal dwellings in rotting logs, up in the trees, down in the soil, and at the pond, above and below the water. Highlights of the Wild & Woodsy camp included making earth paints, learning about animal tracking and tree identification and using newly-acquired compass skills on a treasure hunt. Our campers got dirty, ran through the woods, caught toads and picnicked in the shade of the climbing tree. Kids being kids, immersed in the beauty of a Vermont summer. Special thanks to our wonderful and energetic summer staffer Ashley Donahue and volunteer Julia Bruner.

Vermont Envirothon 2018—Public Land Management—Balancing Diverse Views

The 23rd Vermont Envirothon was held on May 23, 2018 at the Mount Norris Scout Reservation in Eden, VT. Seven schools and ten teams participated in the culminating event. Coach Susan Steiner's team from Bellows Falls Union High School were the winners, earning the top overall score for the second year in a row. Other schools with top scores included Rutland High School in aquatics and Randolph Technical Center in forestry and wildlife. The Bellows Falls team went on to compete at the North American Envirothon held at Idaho State University in July.



Winter Wildlife Outdoor Series

Thanks to a grant from the Green Mountain Fund of the Vermont Community Foundation, LCCD will offer a four-lesson series on animal adaptations for winter and changing habitats in four classrooms at Wolcott Elementary, Hyde Park Elementary, Waterville Elementary, and Bishop Marshall Schools.







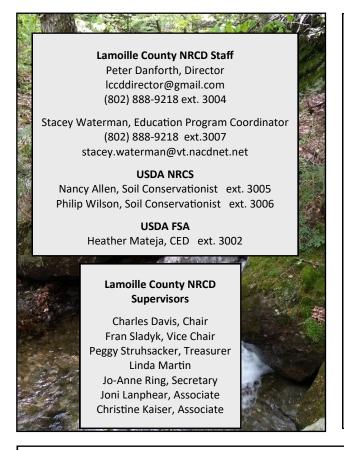
THANK YOU TO OUR MEMBERS

Gratitude and appreciation to LCCD's Generous Members:

Stewards: Judy Geer and Dick Dreissigacker; Concept 2, Inc.

Sponsors: Elizabeth & Nicholas Deane; Union Bank

Supporters: Robert & Jane Whitley; Gravel Construction, Inc.; Susan and Bob Titterton; Janet Lanphear in memory of Pete Lanphear



Thank You to our Current Members! We appreciate your help! If you're not listed on this page and are receiving this newsletter, please renew your membership.

Please let us know if your name is missing from the list.

Jan & Richard Bailey; Gary & Nancy Banks; Geoffrey and Martha Bentley; Charlie & Linda Berry; Donald Blake Jr. Inc; Elizabeth Bourdon; William & Carol Bradley; Dave & Julie Brown; Thomas Cady; Anne & Mike Cassidy; Al & Alice Cepetelli; John & Judy Clark; Thomas Cote; Nick Crandall; Steven Cummings; Charlie Davis; Elizabeth & Nicholas Deane; Dick Dreissigacker & Judy Geer; Betsy Field and Paul Rogers, M.D.; Jeannine Fortin & Dale Percy; Barbara Gameroff; Dave & Trina Hosmer; Sue & Gordon Johanson; Dorcas Jones; Corey Jordice; Liz & Tom Lackey; Kenneth Lamb; Janet Lanphear; Walter Levering and Carolyn Ruschp; Steve & Carol Lichenstein; Trudy Louson, Susan Ludington in memory of Chris Ludington; Stacey Manosh; Roy & Marcia Marble; David & Lucy Marvin; Betty McGill; Donald & Susan Miller; Ann Nichols; Kim Nichols; Sally & Peter Nolan; Peter Opstrup; Michael & Louisa Pfaelzer; Alan Peister; William & Donna Putnam; William & Mary Quigley; Karen & Lawrence Rhodes; Jeff & Penni Rochette; Peter & Sabrina Rossi; Richard Rubin; Jim Ryan; Sheila Rysz; CJ & Gale Seitz; Joel & Elizabeth Silverstein; Fran Sladyk; Michael Snyder & Kristen Sharpless; Al Sparks; Kermit & Hazel Spaulding; Ron and Judy Stancliff; Mary Sullivan; Ann Thursby; Susan & Bob Titterton; Alex Tolstoi; Union Bank; Robert & Jane Whitley; Amy & Chris Whitlock; Charles & Pam Witherell; Cynthia & Charlie Yerrick; Town of Wolcott.; Concept 2, Inc.

New Boardwalk Complete

If you visited the Nature Center this summer you probably noticed that work has begun on improvements to our trails. Thanks to a Building Communities Grant from the Vermont Department of Buildings and General Services, a boardwalk has been installed along the wildflower path that leads to the teepee meadow. As many a nature camp parent knows, that part of the trail is often saturated and muddy through the spring and well into the first weeks of summer. Foot traffic on the trails is at its highest during that time of year as we host school field trips, spring playgroup and nature camps. The new boardwalk will keep visitors out of the muck as they enjoy the wildflowers, drop off their campers or head off on a hike. Stay tuned—work is currently underway to install new interpretive signs along the pine trail across the road.









Locally Led Conservation Survey – Northwest VT Zone

The Natural Resources Conservation Service and the Franklin, Grand Isle, and Lamoille Conservation Districts are seeking your ideas to focus our outreach activities and cost share programs over the next year in the Northwest Zone.

We hope to incorporate the goals and needs of residents into developing priorities for program direction and funding. To do this, we need your help in deciding which environmental concerns, along with their appropriate solutions, are most important in each of our counties. This survey is open to farmers, farmworkers, forest owners, loggers, resource professionals, and all residents.

nty (Select all that apply):	Franklin	Grand Isle	Lamoille
se indicate which land-uses you th	ink should receive the r	most financial assistance:	
Access Road Animal Trail Buffer Zone Plantings Cover Crop Critical Area Planting Culvert Options Diversion Fence Forage & Biomass Planting	Grade Stal Grassed W Green Sto (GSI) Heavy Use Herbaccoo	nd Improvement bilization Structure Vaterway rmwater Infrastructure e Area Protection us Weed Control nel System Pest Management	Invasive Control Irrigation Manure Injection Organic Farming Options Pipeline Pumping Plant Reduced Tillage Watering Facility
	for practices, timeline o	r process of working with NI	RCS, or desired workshop topics. Not
of financial assistance provided y some decisions are made at the s We ask for your personal information will remain con	for practices, timeline of tate or national level. We attend to the tate of a san option to transfidential and used only	r process of working with NI Ve will do our best to incorpe cks responses in the county a for these purposes.	and provide follow-up on your feedba



postage here

Franklin County Conservation District 50 South Main St. Ste 20 St. Albans, VT 05478

fold here

Please complete and return by October 22

Survey for Franklin, Grand Isle, and Lamoille Counties. Please complete if you reside, work, or own land in any of these counties.

tape shut

tape shut

CALENDAR FALL/WINTER

SEPTEMBER

Children's Program, Seeds on the Move

Monday, September 24, 6:00-7:00 pm. Lanpher Memorial Library, Hyde Park

Just as parents are sending their kids off to school in September, plants are sending their seeds out into the world to begin their own adventure. We will explore the ingenious ways that plants disperse their seeds and perform tests on a variety of seeds to figure out how they leave home without legs! Preschool-4th grade. FREE.

Community Event—Rocktoberfest

Saturday, September 29, in downtown Morrisville Stop by the LCNC tent to check out our skull collection or craft an owl mask.

OCTOBER

Children's Program, Eek! Predator Plants!

Thursday, October 4, 10:30-11:30 a.m. Stowe Free Library, Stowe

Monday, October 15, 6:00-7:00 pm. Lanpher Memorial Library, Hyde Park

Plants are usually the ones getting eaten but did you know that we have three types of meat-eating plants in Vermont? Fascinating and a little freaky, these plants trap and eat animals for their dinner! We'll find out who they are, how they do it, where to find them and whether we're in danger of becoming a snack! Preschool –4th grade. FREE.

NOVEMBER

Children's Program, Let's Talk Turkeys

Thursday, November 1, 10:30-11:30 a.m. Stowe Free Library, Stowe

Saturday, November 3, 10:00-11:00 a.m. Juedevine Library, Hardwick

Monday, November 19, 6:00-7:00 p.m. Lanpher Memorial Library, Hyde Park

Wild turkeys are year-round residents of Vermont's fields



and forests. But did you know that wild turkeys were once extinct in New England? As Turkey Day approaches we'll talk about a day in the life of your average wild turkey and craft our own turkey calls. Preschool-4th grade. FREE.

DECEMBER

Children's Program, Mice Moving In

Thursday, December 6, 10:30-11:30 Stowe Free Library, Stowe

Monday, December 17, 6:00-7:00 pm. Lanpher Memorial Library, Hyde Park

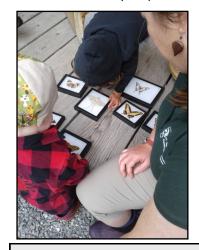
As the weather gets colder, we sometimes end up with mice as uninvited houseguests. Why exactly do mice want to move in with us? In this lesson we will learn about the many adaptations of the common mouse that enable it to live and prosper almost anywhere. Then see if you can *smell* danger the way a mouse does. Preschool-4th grade. FREE.

JANUARY

Children's Program, Foxes on the Move

Monday, January 28, 6:00-7:00 pm. Lanpher Memorial Library, Hyde Park

Unlike many other types of Vermont wildlife, foxes become more active during the cold months of January and February. So what are these wily foxes up to and why are they so noisy about it? Learn to tell the difference between the beautiful red fox and the elusive grey fox and find out what foxes have in common with your pet cat. Preschool-4th grade. FREE.





FEBRUARY

Children's Program, Subnivean Soiree

Monday, Monday, February 11, 6:00-7:00 pm. Lanpher Memorial Library, Hyde Park

How warm is a blanket of snow? In this lesson we will learn all about the insulating power of snow and the community of Vermont animals that spend the winter under the snow in the subnivean zone. Then test your knowledge with the subnivean matching game. Preschool-4th grade. FREE.

LCCD's Tree Sale of native trees and shrubs are available from species selected for our riparian restoration efforts. In an effort to increase sales for our Spring Tree sale we have decided to offer you selections in the fall for the Spring Sale. We're continuing the selection with a variety of riparian Bare Root trees and flowering shrubs. If the variety you want is not listed please add on a separate list and we will try to accommodate (see details below). The larger Ball & Burlap trees seem to be a good choice for members so we're continuing this option. These trees are larger and in most cases will need a truck for transport. For more information on the species, growing conditions, and photos, check out the USDA Plants Database at plants.usda.gov

LAMOILLE COUNTY CONSERVATION DISTRICT 2019 CONSERVATION TREE SALE ORDER FORM Date: _____ Name: _____ Phone: _____ Address: _____ e-mail: _____ Tree Species (Root Ball & Burlap) Pick Up at LCCD Office May 11th, 2019 or at scheduled time coordinated with Peter Balsam fir (Abies balsamea) \$18 3-4' \$10 Northern White cedar (Thuja occidentalis) Red maple (Acer rubrum) 6-8' \$20 Sugar maple (Acer saccharum) 6-8' \$20 White birch (Betula papyrifera) 6-8' \$20 \$18 White pine (Pinus strobus) 3-4' **Bare Root Trees & Flowering Shrub Species** Black cherry (Prunus serotina) 3-4' \$8 Elderberry (Sambucus canadensis) 3-4' \$8 3-4' Highbush cranberry (Vibunum trilobum) \$8 Shrub willow (Salix spp.) 4-5' \$8 3-4' Silky dogwood (Cornus amomum) \$8 Total from attached sheet: Please attach list of other varieties you would like to see. We will attempt to accommodate. Price will remain \$8 dependent on species but size may vary. **PLANT SUBTOTAL** A minimum of \$25 is required to cover administrative costs Fall order deadline is Nov 2, **Member Benefits** Discount: 2018.* Members receive 5% off entire order *Another sale will occur in the spring of 2019 Make me a Member/Renew Membership Member: \$35 Individual \$60 Family \$125 Supporter \$250 Sponsor \$500 Steward \$1000 Conservationist Pre-payment is required. Please make checks out to LCCD

No news is good news! You will not receive a confirmation for your order or a reminder.

We will contact you only if we cannot process your order.

Retain a copy of your order form and PLEASE mark your calendars.

Phone calls are not accepted on the day of the sale.

Send to: LCCD 109 Professional Drive, Suite 2 Morrisville, Vermont 05661

PLEASE be sure to make alternative arrangements if needed with LCCD before Saturday. All orders must be picked up on Saturday, May 11th, 2019 between 10:00 am and 12:00 pm at

Lamoille County Conservation District
USDA Service Center
109 Professional Drive, Morrisville VT 05661



TROUT SALES 2018

Common Questions and Answers:

Will trout live in my pond? Which trout species is better for my pond?

Trout survive best in cold oxygenated water maintaining a water temperature of 65°. As long as there are springs or a source of water flowing into the pond, small ponds to large ponds will accommodate both species of trout. If waters are not consistently flowing into the pond, then the pond should be at least 8' in depth and shaded to maintain temperatures in summer and winter. Ponds that have well-oxygenated flowing waters support Brook trout best. If water warms in the summer, Rainbow trout have a higher success rate.

How many trout and how often should I stock in my pond? Should I feed the trout?

The number and size of fish depend on the water flow, chemistry, and available food source. The general rule of thumb is 100 8" trout per 1/4 acre of open surface area. If the waters are spring fed, and the temperatures are consistent then stocking once every few years may work. If there are predators such as heron, mink, or fishers present than you may want to stock annually. Large trout will feed on smaller trout that are half their size. Ponds that are older than three years should have enough aquatic insect larvae, worms, tadpoles, etc. for trout to eat. Newer ponds that lack substrate such as a vegetative buffer around the pond, and submerged and benthic plants may not support these natural foods. Feeding fish may cause an increase in nutrients to the pond which can then lead to algae.

What can I do about algae in my pond?

LCCD provides site visits for pond owners to assess pond conditions and make recommendations. Site visits are scheduled in June.

Fall Trout Sale Details

Please fill out the Order Form below and send it and payment to LCCD by October 19th, 2018. For more information about stocking trout, please visit our website www.lcnrcd.com. Sorry, we cannot take payments over the phone.

Make checks out to LCCD, 109 Professional Drive, Suite 2, Morrisville, VT 05661

Orders of 6-8" trout <u>must</u> be picked up on October 26th between 12:00 and 1:00 pm at Oxbow Park (at the end of Portland Street past rk. Miles). After 1:00 pm, we will forfeit unclaimed orders and will not keep the trout. Trout are provided in an air sealed large plastic bag. It's best to stock trout immediately in your pond after pick up to insure their survival.

Orders of 10-12" trout will be delivered by the trout farm *any time* on the afternoons of October 26th—27th. Price per lot includes delivery. We cannot schedule deliveries. A flag at the delivery site and/or an order confirmation will be left onsite. Please e-mail or include directions to the best location to leave confirmation and specific directions from the nearest route to your pond with your order form and payment. Addresses will be mapped via Google and GPS with other deliveries. Split deliveries within one-mile include a \$30 additional charge.

Order confirmation calls or reminders are not provided. Please retain this information sheet for your records. Please be sure to note the trout day on your calendars for deliveries and/or pick up orders.

2018 Fall Trout Order Form	Please check your member status on page	4 to receive member rates
PICK UP		
Fingerling Rainbow trout (Lots of 25)	# lots x \$40 (\$35 for members)	=
Fingerling Brook trout (Lots of 25)	# lots x \$40 (\$35 for members)	
DELIVERY		
8-10" Rainbow trout (Lots of 50)	# lots x \$170 (\$155 for membe	rs) =
8-10" Brook trout (Lots of 50)	# lots x \$170 (\$155 for membe	rs) =
Make me a Member/Renew Membership		
\$35 Individual \$60 Family \$125 Supporter \$250 S	Sponsor \$500 Steward \$1000 Conservationis	t =
	TOTAL	=
Name	E-Mail	
Name Mailing Address	E-Mail Phone	

Lamoille County Conservation District

109 Professional Drive, Suite 2 Morrisville, Vermont 05661 802-888-9218 www.lcnrcd.com

NON-PROFIT ORG. **U.S. PAID** MORRISVILLE, VT PERMIT NO. 38

Return Service Requested

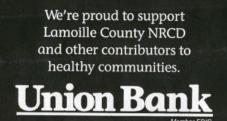


Fall 2018 Newsletter











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