



Lamoille County Conservation District

Conserving Our Natural Resources since 1945

Conservation Education Programs

Lamoille County Natural Resources Conservation District is the leading natural science education organization in Lamoille County. We are one of fourteen "districts" throughout Vermont that were formed during the Dust Bowl to assist farmers with land erosion control. Since then, conservation districts have helped landowners to utilize federal and state land-use programs.

Lamoille County Natural Resources Conservation District (LCNRCD) has varied meanings to different folks and our various names reflect their experience. Whether we are LCNRCD, or now our shortened name of Lamoille County Conservation District, Lamoille County Nature Center, or simply the Nature Center, we are the only District with a broad base environmental and service learning program.

Education has been at the forefront of the District's mission since its inception. Lamoille County Conservation District has worked over the years to develop this investment into a Nature Center and educational grounds. Land was purchased in the early 1960's to allow vocational students to learn about forestry and agricultural practices. Throughout the years, LCCD has added an environmental education component to our responsibilities for our neighbors. Lamoille County Nature Center consists of 47 acres of a working forest in every aspect. Though there is no building to house our efforts, it is the heart of the work that we do throughout the county and the watershed.

Lamoille Conservation District is a county resource that provides valuable services and information to farmers and foresters. The range of our community involvement is vast, from providing information about NRCS land-use programs to coordinating native trout and plant sales. Towns within the county rent valuable erosion control equipment from us. We provide children within our community the ability to enjoy nature camps, and programs both at the Nature Center and at natural settings throughout the region. Many more have joined us in planting trees along the Lamoille River and its tributaries.

LCCD's Conservation Education Programs are meant to inspire, educate, inform, and relate to the whole. Our staff, trained in up-to-date education methodologies, use both experiential and inquiry methods to reveal scientific principles and issues. It is our goal to allow children to be part of their educational experience, to appreciate their natural surroundings, and to become scientifically literate.

Teachers find LCCD useful in providing programs, curriculum, educational kits, and service-learning opportunities for their students to broaden their experiences in the natural world. For more information about the Conservation Education Programs, reference books and materials, on-line educator information, and educational kits, please contact us at:

Lamoille County Conservation District
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www.lcnrcd.com

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Lamoille County Conservation District



Nature and Environmental Education & Outreach

Connecting children to the natural world through hands-on activities to activate and spark their interest in science provides an appreciation for the foundation for life. Our Conservation Programs form the basis for a better understanding of the complexities of ecosystems, organisms, and the cycles that are imperative in completing a harmonious earth. Programs are designed within the children's capacity for understanding and align with the Next Generation Science Standards. Please contact us for a specific list of standards connections. Whenever possible, access to the outdoors is a valuable component to the learning content.

Outside Components

Let us show you how to bring the learning outside! The Outdoor Symbol ♦ makes note of workshops that have an outside option.

Field Trips

Come to the nature center on Cole Hill Road in Morrisville and explore one of our varied ecosystems. Available seasonally.

Custom Classes

Is there a natural science topic that you'd like to explore that isn't on our list? We'd be happy to design a custom workshop to suit your needs. Additional fees may apply.

OUTREACH PROGRAM DETAILS

Fee: \$55/program plus travel at applicable rate. Lamoille County Schools may inquire for reduced fees through generous donations by our members. Community Service-Learning Projects are covered by additional grants, please inquire about free programs to complement these projects.

Group Size: 10 to 25 students. Additional student numbers will require an additional program or additional staff/fees.

Where: Programs are designed to be facilitated in the classroom with the exception of those with an ♦ that can include an outside component. **Programs are also available at Lamoille County Nature Center.**

Program Time: A 1 hour block of time including educator set-up and tear-down works best for us, please let us know what works best for you.

Contact: (802) 888.9218 www.lcnrcd.com
Stacey (ext.3007)
Stacey.waterman@vt.nacdnet.net

PreK (Ages 3-5)

Workshops consist of explorations, stories, games, and animal artifacts. Contact us for a list of this year's program options.

K – 3rd Grade Programs

Homes and Hideaways ♦

What are the basic needs of all living things? What characteristics do all living things share? How do animals alter their surroundings to prepare for changes in the seasons?

Soil Under Our Feet ♦

Almost every object you eat, wear or use can be traced back to the soil. In this lesson we will learn what soil is made of, get a feel for soil texture and explore the beauty and variety of soil colors to make our own soil masterpieces. You'll never want to treat your soil like dirt again!

Seasonal Adaptations ♦

How do animals survive the changing seasons in Vermont? What adaptations and strategies do they use? We'll explore the changes that animals make to deal with the long, cold Vermont winter or learn how animals change their appearance or behavior for summer survival

Nature Detectives ♦

Become an animal tracker and discover the many signs animals leave behind. What can we learn about our animal neighbors? Pattern, place, and print will help us decipher animal mysteries.

Species Specific ♦

Choose an animal family to explore in-depth. Insects, reptiles, amphibians, birds, or mammals. Each have certain unique characteristics.

4 - 5th Grade Programs

Animal Tracks and Traces ♦

Students will develop observation skills as they learn how an animal's body shape and structure help them survive. What patterns can we see that tell us about their body shape or diet? What types of information does an animal's senses provide about its environment? What type of clues do they leave?

Skulls

How does the shape of a mammal's skull provide clues as to its habits and survival strategies? This introduction to skull identification will help students learn about certain adaptations that help VT mammals survive.

Powering the Planet ♦

Students will explore the earth's movements around our favorite star—the sun! We will learn how the sun provides the energy for all life on Earth and how the sun's energy moves through the food chain allowing us to “eat sunshine” every day! Finally we'll build our own solar cooker to harness some sun energy!

Species Specific ♦

Choose an animal family to explore in-depth. Insects, reptiles, amphibians, birds, or mammals. Each have certain characteristics that make them similar and different. Which are inherited, which are learned?



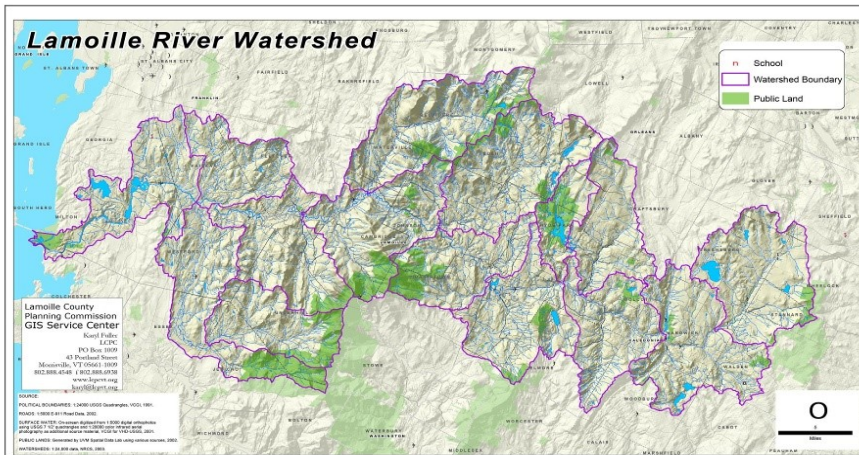
Nature Center Education Programs

Physical & Life Sciences Investigations

A main focus of Lamoille County Conservation District is to protect and restore soil and water resources by implementing and leading water quality projects on the Lamoille River and within the Lamoille Watershed. These projects serve as a foundation for students to receive a snapshot of a real-life application into scientific work. Whether introducing students to the natural world, or teaching them ecosystem indicators, our goal is to initiate future scientists, land stewards, and environmentally literate citizens. **Best for Grades 6-12.**



In Classroom and Field Surveys will feature a focus question and use inquiry methods. Students will be asked to actively participate in the lessons by taking notes, reflecting on activities, and discussing their findings with peers.



Watershed Model ♦

Students will induce how pollutants enter, accumulate, and/or are created in the water by investigating with a water model to see the flow of water throughout and the effects of erosion and deposition.

BMI Survey at River or Pond ♦

Using nets and guidance, students sample a local river section and collect data (counts) of different BMI species and tally the findings to measure the health of the river.

Physical Survey at River ♦

Students will complete a Physical Survey of the river using a student-directed fluvial geomorphic assessment to quantify the health of the river by tallying up specific land shape features.

Chemical Survey at River ♦

Students will gather data from chemical tests (pH, DO, Temperature, P, Turbidity) and will analyze their findings, compare their results with appropriate ranges, and make a conclusion based on their data.

The Evolution of Skulls

Animal skulls demonstrate evolutionary characteristics for students to investigate the physical traits of natural selection in mammal skulls.

Animal Tracks and Traces ♦

Learn the basics of animal tracking and discover the many signs animals leave behind.

Community Service-Learning Projects are a way for students to take action and participate in a seasonal and on-the-ground conservation technique. Some projects are available based on the identification of suitable sites within the local region and proximity to the school. All projects are 2-3 hours in length. Please contact Peter to plan and organize a project 6-8 weeks in advance.

Trees for Streams (TFS) ♦

Our most popular service-learning program allows students to come full-circle with their river studies. Students install a riparian buffer using bioengineering methods to secure river banks from eroding based on real scientific evaluations of pre-identified sites.

Vernal Pool Indicators & Monitoring ♦

Students will learn the importance of these temporary ecosystems, and how to identify the indicator species. Using maps, and the teacher's knowledge for an area, we'll seek out a vernal pool in the field.

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Education Program Brochure



Lamoille County Conservation District Conservation Education Programs

Teachers, did you know we offer:

- NGSS and Common Core–aligned workshops
- Guided field trips at our 40 acre Nature Preserve
- Customized lesson design
- Educational opportunities to help bring the learning outside
- Community service-learning projects

Educational Lending Kits Available for Teachers

- Macroinvertebrate Field Study Kit
- Chemistry Sampling Kit
- Lamoille Watershed Map Kit
- Barn Bins - Dairy Animals, Feathered Friends, Fiber Animals, Forestry, Plants, Pollinators, and Sugaring.

Contact us for details!

www.lcnrcd.com