#### bw%20logo **Volunteer and Citizen Science Projects**

####  **www.lcbp.org**

**Prepared by:** Lake Champlain Basin Program

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**Contact the LCBP:** 802-864-1848 ext. 109 (LCBP Resource Room at ECHO)

 802-372-3213 (LCBP Main Office located in Grand Isle, VT)

This list includes opportunities for both volunteer projects and citizen science projects. Citizen scientists are volunteers that help conduct surveys, take measurements or record observations that are used for scientific research. In citizen science, the public participates in the scientific process, addressing real-world problems.

**(V) = Volunteer Project**

**(CS) = Citizen Science Project**

**(O) = Online Project - can be done remotely, any needed training is online**

**Aquatic Invasive Species**

**Adirondack Park Invasive Plant Program (V, CS)**

* **Paddle Survey Volunteers**
* We need your help to protect the Adirondacks from invasive species. The Adirondack Park Invasive Plant Program (APIPP) provides a variety of opportunities to volunteer with its Aquatic and Terrestrial Invasive Species Projects.
* <http://adkinvasives.com/get-involved/volunteer/>

**The Nature Conservancy in Vermont (V)**

* **Water Chestnut Pulling Volunteers**
* On work days, TNC transports canoes to the handpulling site and provides sturdy bags for collection.
* <https://www.nature.org/en-us/about-us/where-we-work/united-states/vermont/stories-in-vermont/volunteering-in-vermont/>

**Vermont Aquatic Invasives Program - VT DEC (CS)**

* **Invasive Patrollers (VIPs)**
* Participate in a VIP workshop to learn how to identify and survey for aquatic invasive species. During the summer, survey for the presence of invasive plants and animals in a local lake or pond. Volunteers provide survey results to DEC staff and submit suspicious samples for positive identification.
* <https://dec.vermont.gov/watershed/lakes-ponds/aquatic-invasives/monitoring/vips>

**Lake George Association (CS)**

* **Invaders Watch**
* In conjunction with the Adirondack Park Invasive Plant Program, the LGA regularly seeks volunteers for our Invaders Watch program. Citizen scientists help the LGA and the larger Adirondack community protect the Lake from new invasions of aquatic invasive species by watching their own shorelines.
* <https://www.lakegeorgeassociation.org/protect/citizen-science/>

**Conservation**

**Intervale Conservation Nursery (V)**

* **Nursery Volunteers**
* The Intervale Conservation Nursery is dedicated to growing native, locally sourced trees and shrubs for riparian restoration projects throughout Vermont and the Lake Champlain region.
* <https://www.intervale.org/get-involved#volunteer>

**The Nature Conservancy in Vermont (V)**

* **Tree Planting, Invasive Species Removal, Trail Work Days**
* Please consider signing up to volunteer during one of our work days. We own, manage and maintain natural areas throughout Vermont and your help is instrumental to getting our "to-do" list complete. <https://www.nature.org/en-us/about-us/where-we-work/united-states/vermont/stories-in-vermont/volunteering-in-vermont/>

**Vermont Urban & Community Forestry (CS)**

* **Forest Pest First Detectors**
* The goal of Vermont's FPFD Program is to create a group of well-trained, committed volunteer leaders at the community level to increase public awareness about the threat of tree pests to Vermont's forests.
* <https://vtcommunityforestry.org/programs/citizen_engagement/firstdetectors>

**Vermont Center for Ecostudies (CS, O)**

* **Vermont Vernal Pool Atlas**
* VPAtlas is a web-available database of vernal pool location data, monitoring data, and an interactive citizen science data-gathering. Anyone can become a VPAtlas user and contribute to this community resource by recording their observations of vernal pool locations, indicator species, and more.
* <https://vtecostudies.org/projects/forests/vernal-pool-conservation/vermont-vernal-pool-mapping-project/>

**Water Quality**

**Addison County Riverwatch Collaborative (CS)**

* **Water Quality Monitoring**
* Volunteer monitoring on the Little Otter Creek and Mud Creek, Lewis Creek, Lemon Fair, New Haven, Otter Creek and Middlebury River.
* <http://acrpc.org/programs-services/natural-resources/acrwc/>

**Ausable River Association (V, CS)**

* **Water Quality Monitoring, River Clean-ups, Tree Plantings**
* The Ausable River Association (AsRA) works to protect the Ausable River for its ecological value and its value to the human communities that enjoy its many benefits.
* <https://www.ausableriver.org/programs>

**EarthEcho International (CS, O)**

* **EarthEcho Water Challenge**
* The EarthEcho Water Challenge builds public awareness and involvement in protecting water resources around the world by engaging citizens to conduct basic monitoring of their local waterbodies.
* <https://www.monitorwater.org/about>

**ECHO, Leahy Center for Lake Champlain (V)**

* **Education, LCBP Resource Room, and Animal Care Volunteers**
* ECHO, Leahy Center for Lake Champlain is an innovative science and nature center located on Burlington, Vermont’s Waterfront. Our mission is to inspire and engage families in the joy of scientific discovery, wonder of nature, and care of Lake Champlain.
* <https://www.echovermont.org/join-support/volunteer/>

**Friends of the Mad River (V, CS)**

* **Mad River Watch Program**
* Mad River Watch is a water quality monitoring, improvement, and protection program for the Mad River and its tributaries. The program involves community participants in collecting high quality information on the physical, chemical, and biological indicators of water quality.
* <http://friendsofthemadriver.org/>

**Friends of the Winooski River (V, CS)**

* **Water Quality Monitoring, River Clean-ups, Tree Plantings**
* Volunteers are essential to helping us achieve our mission to protect and restore the Winooski River and its tributaries. We have numerous volunteer opportunities throughout the year.
* <https://winooskiriver.org/volunteer.php>

**Lake Champlain Committee (V, CS)**

* **Blue-green Algae (Cyanobacteria) Monitors, Clean Lake Environmental Action Network (CLEAN), Work Project and Event Volunteers, Office Volunteers, Paddler's Trail Site Stewards**
* The Lake Champlain Committee works with citizens, businesses, farmers, communities, and governments to protect and restore lake health. LCC focuses on three strategic areas: clean water, a healthy lake and access to the lake.
* <https://www.lakechamplaincommittee.org/get-involved/volunteers/>

**Lake George Association (CS)**

* **Wildlife Monitoring, Water Quality Monitoring, Invasive Species Monitoring**
* The Lake George Association has been the guardian of Lake George water quality since 1885, with a mission to protect the water & educate for the future.
* **Loon Census -** Loon Monitoring with LGA.
* **Citizens Statewide Lake Assessment Program (CSLAP) -** Collect data about conditions in various areas of the Lake eight times a season to help assess the Lake’s overall health.
* **Water Assessments by Volunteer Evaluators (WAVE) -** WAVE is a New York State Department of Environmental Conservation project that the LGA manages locally. The LGA offers training and equipment to citizen scientists to collect valuable water quality data from New York streams and rivers.
* <https://www.lakegeorgeassociation.org/protect/citizen-science/>

**Lewis Creek Association (V, CS)**

* **Water Quality Monitoring, River Clean-ups, Tree Plantings**
* LCA works in the areas of Data Collection & Planning, Conservation & Restoration, and Education & Outreach to complete a wide of array of projects in the Lake Champlain Valley.
* <http://www.lewiscreek.org/projects/>

**Missisquoi River Basin Association (V, CS)**

* **Water Sampling, Riparian Restoration, Educational Outreach**
* The Missisquoi River Basin Association (MRBA) is an active, non-profit group of volunteers dedicated to the restoration of the Missisquoi River, its tributaries, and the Missisquoi Bay.
* <https://www.mrbavt.com/>

**Rethink Runoff (V, CS)**

* **Stormwater Volunteers, Water Quality Monitors, River Clean Up Days**
* **Chittenden County Stream Team -** The CCST organizes and implements projects designed to reduce non-point source pollution and reduce the volume of stormwater runoff at the local level. Projects include stream clean ups, rain barrel building workshops and rain garden maintenance days.
* <http://rethinkrunoff.org/the-stream-team/volunteer-opportunities/>

**St. Albans Area Watershed Association (SAAWA) (V)**

* **Weed Harvester Campaign, Area Coordinator, Communications & Newsletters, Grant Writers**
* The St. Albans Watershed Association (SAAWA) is a group of grassroots volunteers - young and old - who love the lake. There are many ways you can participate in our efforts for cleaner water.
* <http://www.saintalbanswatershed.org/volunteer.html>

**Vermont Lay Monitoring Program - VT DEC (CS)**

* **Volunteer Monitors (Lay Monitors)**
* The Vermont Lay Monitoring Program (LMP) trains and equips volunteers to conduct periodic lake water quality sampling using quality-assured methods. The principal goals are to establish baseline water quality conditions to track long-term nutrient enrichment, and to teach lakeshore homeowners and lake users about lake ecology and stewardship.
* <https://dec.vermont.gov/watershed/lakes-ponds/monitor/lay-monitoring>

**Weather, Climate, Science Research**

**Budburst (CS, O)**

* Budburst brings together researchers, educators, gardeners, and citizen scientists on a shared journey to uncover the stories of how plants are affected by a changing climate. Register as a Budburst citizen scientist and post your observation reports online.
* <https://budburst.org/>

**Community Collaborative Rain, Hail, and Snow Network (CoCoRAHS) (CS, O)**

* Each time a rain, hail or snow storm crosses your area, volunteers take measurements of precipitation from as many locations as possible. These precipitation reports are then recorded on our web site. The data are then displayed and organized for many of our end users to analyze.
* <https://www.cocorahs.org/>

**GLOBE Observer (CS, O)**

* GLOBE Observer is an international network of citizen scientists and scientists working together to learn more about our shared environment and changing climate. To participate, just download the GLOBE Observer app and submit regular observations.
* <https://observer.globe.gov/>

**USA National Phenology Network (CS, O)**

* The USA-NPN brings together citizen scientists, government agencies, non-profit groups, educators and students of all ages to monitor the impacts of climate change on plants and animals.
* <https://www.usanpn.org/>

**Zooniverse (CS, O)**

* The Zooniverse is the world’s largest platform for people-powered research. This research is made possible by volunteers - more than a million people around the world who come together to assist professional researchers.
* <https://www.zooniverse.org/>

**Wildlife - Listed by Project Name**

**Amphibian Road Crossing Program- North Branch Nature Center (CS, O)**

* Volunteers “adopt” a confirmed or suspected amphibian road crossing site that has been identified by NBNC. Volunteers visit their site at least three times over the spring on warm rainy nights. They record weather, species, and abundance data while escorting amphibians safely across the road.
* <https://northbranchnaturecenter.org/amphibian-conservation/>

**Bat Colony Monitoring** **-** **Vermont Fish and Wildlife Dept. (CS)**

* VTFW is seeking volunteers who can commit to watching bats at assigned sites for at least four nights each summer. Some sites require teams of volunteers.
* <https://vtfishandwildlife.com/get-involved/volunteer/monitoring-bat-colonies>

**BioBlitz- North Branch Nature Center (CS)**

* Biologists and passionate citizens will fan out to discover orchids and otters, ferns and frogs, birds and butterflies, lichens and liverworts. What we find will be cataloged and presented for anyone to see.
* <https://northbranchnaturecenter.org/citizen-science/>

**Bird Banding****-** **North Branch Nature Center (CS)**

* Training is available to volunteers who are interested in developing the skills to participate in our banding process. In this program, volunteers commit a certain number of hours over the course of the season to become proficient in station setup, data collection, and eventually bird handling and banding.
* <https://northbranchnaturecenter.org/citizen-science/>

**Bird Monitoring, Bird Banding - Audubon Vermont (CS)**

* Audubon Vermont is a nonprofit conservation organization whose mission is to protect birds and the places they need, today and tomorrow. Our 255-acre Green Mountain Audubon Center located in Huntington, Vermont has been a community hub of outdoor education and conservation for 50 years.
* <http://vt.audubon.org/events>

**Bumble Bee Watch (CS, O)**

* Bumble Bee Watch is a collaborative effort to track and conserve North America’s bumble bees. Create an online account to upload photos and help researchers determine status and conservation needs.
* <https://www.bumblebeewatch.org/about/>

**Celebrate Urban Birds (CS, O)**

* Celebrate Urban Birds is a year-round project developed and launched by The Cornell Lab of Ornithology. Its primary purpose is to reach diverse urban audiences who do not already participate in science or scientific investigation.
* <https://celebrateurbanbirds.org/>

**Christmas Bird Count - National Audubon Society(CS, O)**

* Each year, birdwatchers nationwide don snow boots and binoculars to scour their hometowns, documenting and enjoying resident winter birds. This annual tradition, over a century old, has become a powerful tool for understanding the rise and fall of bird populations over time.
* <https://www.audubon.org/conservation/science/christmas-bird-count>

**Dragonfly Pond Watch - Migratory Dragonfly Partnership (CS, O)**

* Dragonfly Pond Watch is a volunteer-based program to investigate the annual movements of five major migratory dragonfly species in North America. By visiting the same wetland or pond site on a regular basis, participants will note the arrival of migrant dragonflies moving south in the fall or north in the spring, as well as record when the first resident adults of these species emerge in the spring.
* <http://www.migratorydragonflypartnership.org/index/dragonflyPondWatch>

**eBird (CS, O)**

* eBird is the world’s largest biodiversity-related citizen science project, with more than 100 million bird sightings contributed each year by eBirders around the world. eBird data document bird distribution, abundance, habitat use, and trends through checklist data collected within a simple, scientific framework. Birders enter when, where, and how they went birding, and then fill out a checklist of all the birds seen and heard during the outing.
* <https://ebird.org/home>

**e-Butterfly (CS, O)**

* Help us track butterfly populations across North America on e-Butterfly. A real-time online checklist program and photo storage program, e-Butterfly is providing a new way for the butterfly community to report, organize, and access information about butterflies in North America.
* <http://www.e-butterfly.org/>

**Firefly Watch - Mass Audubon (CS, O)**

* Firefly Watch combines an annual summer evening ritual with scientific research. Join a network of volunteers by observing your own backyard, and help scientists map fireflies found in New England and beyond.
* <https://www.massaudubon.org/get-involved/citizen-science/firefly-watch>

**Freshwater Mussel Survey - VT Center for Ecostudies (CS, O)**

* From the common to the rare, we need your help in recording locations of freshwater mussels in Vermont. Citizen scientists are trained in identification and surveying using shoreline and shallow water searches.
* <http://val.vtecostudies.org/projects/vermont-freshwater-mussel-atlas/report-mussels/>

**FrogWatch USA (CS, O)**

* FrogWatch USA is the citizen science program of the Association of Zoos and Aquariums. FrogWatch provides individuals, groups, and families opportunities to learn about wetlands in their communities by reporting on the calls of local frogs and toads.
* <https://www.aza.org/frogwatch>

**Great Backyard Bird Count (CS, O)**

* For at least 15 minutes on one or more days of the count in mid-February, simply tally the numbers and kinds of birds you see. You can count from any location, anywhere in the world, for as long as you wish!
* <http://gbbc.birdcount.org/>

**The Great Sunflower Project (CS, O)**

* People all over the country are collecting data on pollinators in their yards, gardens, schools and parks. Together, we take counts of the number and types of pollinators visiting plants (especially sunflowers).
* .<https://www.greatsunflower.org/>

**HawkWatch International (CS, O)**

* The mission of HawkWatch International is to conserve our environment through education, long-term monitoring, and scientific research on raptors as indicators of ecosystem health.
* <https://hawkwatch.org/>

**Hummingbirds at Home - National Audubon Society (CS, O)**

* With technology widely available today we can all become community scientists, spending a few minutes each week to collect data in our communities that will be invaluable for hummingbird research.
* <http://www.hummingbirdsathome.org/>

**iNaturalist (CS, O)**

* Every observation can contribute to biodiversity science, from the rarest butterfly to the most common backyard weed. We share your findings with scientific data repositories like the Global Biodiversity Information Facility to help scientists find and use your data. All you have to do is observe.
* <https://www.inaturalist.org/>

**Journey North (CS, O)**

* Journey North is one of North America’s premiere citizen science projects for tracking migrations and seasons. It provides an easy entry point to citizen science, with simple protocols, strong online support, and immediate results. Reported sightings are mapped in real-time as waves of migrations move across the continent. Report sightings from the field, view maps, take pictures, and leave comments.
* <https://journeynorth.org/>

**Keeping Track (CS)**

* Keeping Track® Monitoring Programs (KTMP) put those boots on the ground, training citizen volunteers and professionals alike to detect, identify, interpret and record the tracks and other signs of the animals that are critical to local ecological health.
* <http://keepingtrack.org/wildlife-monitoring-programs>

**Let’s Go Fishing - VT Fish and Wildlife Dept. (V)**

* Volunteers with the Let's Go Fishing Program encourage and teach young people and their families how to fish, emphasizing that fishing is more than just catching fish.
* <https://vtfishandwildlife.com/get-involved/volunteer/lets-go-fishing-volunteers>

**Loon Census - Adirondack Center for Loon Conservation (CS, O)**

* The New York Annual Loon Census is held on the 3rd Saturday of July each year, to provide an annual "snapshot" of the breeding loon population. Results of the Census provide valuable information regarding the status and trends in New York's summer loon population.
* <https://www.adkloon.org/ny-loon-census>

**LoonWatch - VT Center for Ecostudies (CS, O)**

* LoonWatch volunteers can join us for a single day during our annual loon count in July or monitor a lake or pond on a regular basis. In each case, LoonWatchers provide VCE with essential data on the management, protection, and continued recovery of Common Loons across Vermont.
* <https://vtecostudies.org/projects/lakes-ponds/common-loon-conservation/loonwatch/>

**Monarch Larva Monitoring Project (CS, O)**

* The Monarch Larva Monitoring Project is a citizen science project involving volunteers from across the United States and Canada in monarch research. It was developed in 1997 by researchers at the University of Minnesota to collect long-term data on larval monarch populations and milkweed habitat.
* <https://monarchjointventure.org/mlmp>

**Monarch Watch (CS, O)**

* The Monarch Watch Tagging Program is a large-scale citizen science project created to help understand the dynamics of the monarch's spectacular fall migration through mark and recapture.
* <https://monarchwatch.org/tagging/>

**Mountain Birdwatch - VT Center for Ecostudies (CS, O)**

* Mountain Birdwatch features a short list of 10 birds to survey, a simple protocol, and extensive training materials for participants. Surveys take place on any morning in June, staring 45-minutes before sunrise. Observers must have excellent hearing (the vast majority of detections are made by *ear*, not by *sight*) and the ability to navigate the steep trails of our region.
* <https://vtecostudies.org/projects/mountains/mountain-birdwatch/>

**NestWatch (CS, O)**

* NestWatch is a nationwide monitoring program designed to track status and trends in the reproductive biology of birds, including when nesting occurs, number of eggs laid, how many eggs hatch, and how many hatchlings survive. A certification is required to participate, and children should always be accompanied by an adult.
* <https://nestwatch.org/>

**Project FeederWatch (CS, O)**

* Project FeederWatch is a winter-long survey of birds that visit feeders at backyards, nature centers, community areas, and other locales in North America. FeederWatchers periodically count the birds they see at their feeders from November through early April and send their counts in.
* <https://feederwatch.org/>

**Vermont Atlas of Life (iNaturalist) - VT Center for Ecostudies (CS, O)**

* From backyards to mountain summits, join hundreds of other citizen naturalists and biologists as we document and share biodiversity at iNaturalist Vermont.
* <https://www.inaturalist.org/projects/vermont-atlas-of-life>

**Vermont eBird (CS, O)**

* Help us track bird populations across the state using Vermont eBird, a real-time online checklist program that has revolutionized the way the birding community reports and accesses information about birds. Participants submit their observations online and view results via the eBird database.
* <https://ebird.org/vt/home>

**Vermont Forest Bird Monitoring - VT Center for Ecostudies (CS)**

* Help track long-term changes in populations of interior forest songbirds. In conducting these early morning counts in interior forest habitats, volunteers primarily rely on identifying birds by *ear* rather than by eye. Because they work off-trail, forest bird monitors must know how to navigate with map and compass or GPS.
* <https://vtecostudies.org/projects/forests/vermont-forest-bird-monitoring-program/participate/>

**Vermont Reptile and Amphibian Atlas Project (CS, O)**

* With the help of volunteers, we continue to collect information and broaden our knowledge base regarding the natural history, distribution, and effective conservation of Vermont’s reptiles and amphibians. We welcome your help in all its forms: contributing records individually or as organizations, funding, and through education.
* <https://www.vtherpatlas.org/>

**Wild Turkey Brood Survey - VT Fish and Wildlife Dept. (CS, O)**

* Help the Vermont Fish & Wildlife Department analyze spring turkey production by recording wild turkey sightings during August using our web-based survey.
* <https://vtfishandwildlife.com/get-involved/citizen-reporting/wild-turkey-brood-survey>