

Citizen Science Programs

Citizen science programs bring ordinary people who have time and an interest in wildlife, plants or species at risk, together with the scientists that need their help. Citizen science programs are a combination of learning, field work and volunteer research.

Citizen Science initiatives and programs are popular and a good way to get to know local flora and fauna. There are many interesting projects, start with one and see how you like it. Sign up as a volunteer to assist scientists with research or use data.

A local resource that Albertans can take advantage of is a local chapter of [Nature Alberta](#). There are local clubs around the province. Annual events are held such a bird counts and they have ongoing programs such as Young Naturalists, Alberta Bird Atlas, Plant Watch, Prairie Nest Records and Living by Waters to name a few.

Below are some of the many Citizen Science programs you may get involved in. They are organized by: Invertebrate and Insects; Birds, Herptiles; Mammals; Plants; and Water.

Find out how you can collect meaningful data for your area, province, Canada or the whole world. In the process you will gain a new understanding of how scientific data are collected and analyzed. You may communicate with fellow citizen scientists, expand your horizons, learn new things and have fun. Some studies help determine distribution and abundance of native and introduced organisms as well as climate change. Others work to improve local environments.

Most studies involve public volunteers making observations and reporting them, usually by computer, to a central location.

Invertebrates and Insects



North American Butterfly Association

Organize and register a summer butterfly count. http://www.naba.org/butter_counts.html

See also **The Alberta Lepidopterists' Guild**,

<http://www.biology.ualberta.ca/uasm/alg/index.html>

Butterfly Count

Waterton Lakes National Park's Butterfly Count works to catch, identify and count Waterton's butterflies. email: Justin.McKeown@pc.gc.ca phone: 403-859-5107

<http://www.pc.gc.ca/pn-np/ab/waterton/ne/ne3/ne3b.aspx>

The Dragonfly Swarm Project

The Dragonfly Swarm Project aims to report dragonfly swarms observed to learn more about this understudied phenomenon. email: thedragonflywoman@gmail.com
<http://thedragonflywoman.com/dsp/>

The Manitoba Dragonfly Survey

The Manitoba Dragonfly Survey endeavors to help scientists inventory and monitor Manitoba's dragonflies, assess the effect of habitat disturbance, and identify uncommon species. email: James.Duncan@gov.mb.ca phone: 204-945-7465
<http://www.naturenorth.com/dragonfly/index.html>

The Lost Lady Bug Project

The Lost Lady Bug Project tracks ladybugs (and absences) given that many that were once common are now rare, especially the nine-spotted ladybug. email: ladybug@cornell.edu
<http://www.lostladybug.org>

Zombee Watch

Zombee is a Citizen Science Program designed to help scientists find out where honey bees are being parasitized by the Zombie Fly (*Apocephalus borealis*) as well as how big of a threat the fly is to honey bees.
<https://www.zombeewatch>

WormWatch

By taking samples of earthworms, you can help scientists to find out how many species of earthworms are in Canada, and where they live. The research results help researchers follow ecological changes that may harm the environment.
<http://www.naturewatch.ca/english/wormwatch>



Birds



Alberta Nocturnal Owl Survey

The Alberta Nocturnal Owl Survey increases the understanding of owl distribution, abundance, population trends and habitat associations using annual 2X night surveys in March-April.

email: lisa@beaverhillbirds.com phone: 780-918-4804

http://www.beaverhillbirds.com/owl_surveys.php

Bird Studies Canada

Bird Studies Canada advances the understanding, appreciation, and conservation of wild birds and their habitats, in Canada and elsewhere, through studies that engage the skills, enthusiasm, and support of members, volunteers, and the interested public. Volunteer programs include Baillie Birdathon, Beached Bird Surveys, Breeding Bird Atlases, Breeding Bird Surveys, Canadian Lakes Loons Survey, Canadian Migration Monitoring Network, Christmas Bird Counts, Coastal Waterbird Surveys, eBird Canada, Marsh Monitoring Program, Nocturnal Owl Surveys, Project Feeder Watch and Project Nest Watch. email: generalinfo@birdscanada.org

<http://www.birdscanada.org>



eBird Canada

eBird is an online checklist program that aims to maximize the utility and accessibility of bird observations made by recreational and professional birders. The program was developed by the Cornell Lab of Ornithology and Audubon. Bird Studies Canada is the Canadian eBird partner, and manages eBird Canada. email: eBird@cornell.edu

<http://www.ebird.ca>



May Species Count—Alberta

The May Species Count counts birds at various locations around Alberta during the second last weekend of May. email: info@naturealberta.ca phone: 780-427-8124

<http://naturealberta.ca/alberta-natural-history/bird-projects/opportunities-for-birders/may-species-count>

Manitoba Piping Plover Guardians

The Manitoba Piping Plover Guardians monitor endangered piping plover nests and chicks in Manitoba during the plover's breeding season, from late June-August. email: wildlife@gov.mb.ca
phone: 1-866-626-4862
<http://www.gov.mb.ca/conservation/wildlife/spmon/birds/index.html>

NatureCounts—Canada

NatureCounts, managed by Bird Studies Canada, facilitates the collection, management, analysis, and sharing of natural inventory and monitoring data. Contact form:
<http://www.birdscanada.org/birdmon/default/contact.jsp>
<http://www.naturecounts.ca>

Operation Burrowing Owl--Saskatchewan

Operation Burrowing Owl seeks to document & report endangered Burrowing Owl nests and sightings, and promote beneficial habitat management techniques.
email: obo@naturesask.ca phone: HOOT LINE at 1-800-667-4668
<http://www.naturesask.ca/?s=stewardship>



Project FeederWatch—Canada

Project FeederWatch has participants count birds at their feeders at regular intervals from November to April and submit their observations to Bird Studies Canada. email: pfw@birdscanada.org
<http://www.birdscanada.org/volunteer/pfw>
<http://www.birds.cornell.edu/pfw/>



Spring Bird Count—Waterton Lakes National Park

Waterton Lakes National Park's Spring Birds Count counts birds in the park as part of a province-wide bird monitoring program.
email: Justin.McKeown@pc.gc.ca phone: 403-859-5107
<http://www.pc.gc.ca/pn-np/ab/waterton/ne/ne3/ne3b.aspx>



The Great Backyard Bird Count—North America

The Great Backyard Bird Count (GBBC) engages volunteers in a free annual four-day event each February in which North American

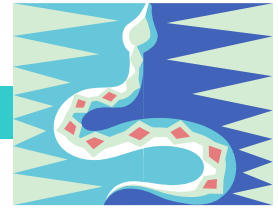


birdwatchers of all ages count birds and fill out an online checklist to create a real-time snapshot of where the birds are. The GBBC is a joint partnership between Audubon and the Cornell Lab of Ornithology, with Bird Studies Canada as the official Canadian partner. email:

gbbc@birdscanada.org

<http://www.birdcount.ca>

Herptiles



Save Our Skinks

Save Our Skinks gathers observations of endangered northern prairie skinks (*Eumeces septentrionalis*) in south-western Manitoba to better protect skinks and their habitat. email:

nnz@mts.net

http://www.naturenorth.com/Skink/SOS_monitoring.html

FrogWatch

You can report on amphibians in your area. Frogs and toads are especially sensitive to pollution and other environmental changes. Because of this, they can tell us a lot about the health of wetlands.



http://www.naturewatch.ca/english/select_province.html

Mammals



Project Squirrel—Canada and US

Organized out of Chicago, Project Squirrel is looking for squirrel monitors in the US and Canada. Observations can be from as many places as you like. However, it's recommended as most effective to submit at least one observation per site per season.

The more observations, the better. Email: sciurus@uic.edu

Mailing address: Project Squirrel, c/o Steve Sullivan, The Chicago Academy of Sciences Peggy Notebaert Nature Museum, 2430 North Cannon Drive, Chicago, IL 60614

<http://www.projectsquirrel.org/index.shtml>

Chronic Wasting Disease (CWD) Surveillance—Alberta and Saskatchewan

[CWD surveillance in Alberta](#) has two parts--farmed species and wild species of deer and elk. In some areas hunter submission is mandatory and in others it is volunteers. [Information for hunters](#) tells what the surveillance study needs and how to prepare, store and send the sample to Alberta Sustainable Resources.

Saskatchewan Environment accepts adult deer and elk heads from hunters. Of particular interest are animals taken adjacent to the CWD zones. For more information about the Saskatchewan program, please check its [chronic wasting disease \(CWD\) program page](#).

Moose Survey—Alberta

Alberta hunters can contribute to wildlife management by collecting data when they are out. The survey is designed to collect long term data on moose populations and trends. Started in 2012 by Dr. Mark Boyce, the survey is coordinated by University of Alberta biological sciences department.

www.biology.ualberta.ca/moose

Mobile app downloads are available for [iPhone](#) and [Android](#) platforms. The website also has instructions about adding the app for your smart phone. The study is also co-sponsored by Alberta Sustainable Resources and the Alberta Conservation Association.



Plants



Alberta Plant Watch

Help track spring blooming times. By reporting when certain plants bloom and leaf out in spring, Albertans contribute vital information for climate change studies. The speed of spring plant development is controlled mainly by temperature. Warming winter and spring temperatures mean earlier appearances of flowers. This study of biological timing is called phenology, “the science of appearances”.

<http://plantwatch.naturealberta.ca/>



Garlic Mustard Field Survey

Garlic Mustard Field Survey aims to integrate volunteer survey observations of invasive garlic mustard with eradication efforts to track the effectiveness of different control options.

email: garlicmustard@gmail.com

<http://www.GarlicMustard.org>



PlantWatch

You can report the date on which certain plants flower in your area. With the help of that information, scientists can measure the effects of climate change on the flowering in various regions of Canada.

<http://www.naturewatch.ca/english/plantwatch/intro.html>



Weed and Wildlife Watchers

Waterton Lakes National Park's Weed and Wildlife Watchers help with the early detection of non-native plants in the park, and reporting of sightings of key wildlife. email: Justin.McKeown@pc.gc.ca phone: 403-859-5107

<http://www.pc.gc.ca/pn-np/ab/waterton/ne/ne3/ne3b.aspx>



Mushrooms

Help determine what mushrooms and other fungi occur in your area.

Alberta Mycological Society

<http://www.wildmushrooms.ws/web/guest/home>

Water



Alberta Water Quality Awareness (AWQA)

Collect water samples from your local streams, rivers and lakes. Alberta Water Quality Awareness (AWQA) is a province-wide program focused on increasing people's awareness and understanding of water quality and watershed health, through hands-on water quality testing. Participants explore the health of their local waterways using test kits and gather basic information about the health of Alberta's surface waterbodies and then contribute what they find to our online database and watershed map.

<http://www.awqa.ca/pages/index.php>



IceWatch

You can volunteer to observe when ice forms in autumn and thaws in spring. Scientists want to know whether climate change is affecting streams and lakes.



<http://www.naturewatch.ca/english/icewatch>

Weather and Storms

Canadian Weather Amateur Radio Network (CANWARN). CANWARN involves an active group of people that spot and report on severe weather. It was originally formed as a network of weather-trained ham radio operators across Ontario, and has since spread to Alberta, Saskatchewan, Manitoba, Quebec, and into Atlantic Canada. The network now includes a growing team of other formally trained severe-weather spotters, from members of the Canadian Red Cross to government and provincial park staff.

<http://www.ec.gc.ca/meteo-weather/default.asp?lang=en&n=82ade061-1>