Do research in your own backyard!

**Why?**
Citizen scientists play an important role in helping scientists figure out what's happening in our environment. With just an internet connection, pen and paper, and a camera or smartphone, citizen scientists have the opportunity to be involved in cutting-edge research without the need for special training.

**Considerations before you begin:**
1. How much time do you have to contribute as a citizen scientist?
2. Many of these initiatives require research and data submission on a regular basis. Will you be able to do this?
3. What type of research are you interested in, are there opportunities available?

**23 Opportunities to become a Citizen Scientist in your own back yard, school yard or park** (Click on the link for more information from the website)

1. **Firefly Watch** Spotting fireflies is a special part of warm summer nights, but lately, they seem to be disappearing from the landscape. The Museum of Science, Boston, is once again teaming up with researchers from Tufts University and Fitchburg State College to track these amazing insects, with vital help from volunteers like you!

2. **Lost Ladybug Project** Across North America ladybug species distribution is changing. Over the past twenty years several native ladybugs that were once very common have become extremely rare. During this same time ladybugs from other places have greatly increased both their numbers and range. Some ladybugs are simply found in new places. This is happening very quickly and we don't know how, or why, or what impact it will have on ladybug diversity or the role that ladybugs play in keeping plant-feeding insect populations low. We're asking you to join us in finding out where all the ladybugs have gone so we can try to prevent more native species from becoming so rare

3. **Monarch Watch** Monarch Watch is an educational outreach program based at the University of Kansas that engages citizen scientists in large-scale research projects. This program produces real data that relate to a serious conservation issue. Monarch Watch gets children of all ages involved in science. Our website provides a wealth of information on the biology and conservation of Monarch butterflies and many children use it as a resource for science fair projects or reports. Additionally, we encourage children to showcase their research or school projects on our website and we involve them in real science with the tagging program.

4. **Great Backyard Bird Count** The Great Backyard Bird Count is an annual four-day event that engages bird watchers of all ages in counting birds to create a real-time snapshot of where the birds are across the continent. Anyone can participate, from beginning bird watchers to experts. It takes as little as 15 minutes on one day, or
you can count for as long as you like each day of the event. It’s free, fun, and easy—and it helps the birds.

5. **The Goldenrod Challenge** The challenge is simple--can you, or your team, photograph more species associated with goldenrods than your competitors? All ages and all levels of experience are welcome to join in the fun each fall during goldenrod season.

6. **Spring Beauty and the Bees** This research helps scientists find out how often pollinators (and others!) are visiting the native woodland wildflower Spring Beauty (*Claytonia*) By helping with some basic pollinator observations, you can help figure out what pollinators are visiting, and how often. These data will not only help determine the best way to evaluate pollinators, but add to our understanding of what determines the composition of pollinator communities.

7. **Bee Hunt** Bee Hunt is a participatory science project. It's your research. You are the scientists. By following our methods, you will collect and contribute high-quality data. Collectively your findings will help us all better understand and manage pollinators that are important in growing food and maintaining healthy natural ecosystems.

8. **Butterfly Count** Three of the main goals of NABA's Butterfly Count Program are to (1) gather data that will monitor butterfly populations, (2) give butterfliers a chance to socialize and have fun, and (3) raise public awareness by hosting events that will increase general interest in butterflies. We have found that a minimum of four observers and six party-hours best meets these three goals.

9. **Native Buzz** Native Buzz is a Citizen Science project created by the University of Florida (U.F.) Honey Bee Research and Extension Lab. The goal is to learn more about the nesting preferences, diversity and distribution of native solitary bees and wasps, share the information gained and provide a forum for those interested in participating in the science and art of indigenous beekeeping (and wasp-keeping!).

10. **Nest Watch** 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. Our database is intended to be used to study the current condition of breeding bird populations and how they may be changing over time as a result of climate change, habitat degradation and loss, expansion of urban areas, and the introduction of non-native plants and animals.

11. **Project Feeder Watch** 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 to Project FeederWatch. FeederWatch data help scientists track broadscale movements of winter bird populations and long-term trends in bird distribution and abundance.
12. **Wildlife Watch** National Wildlife Federation’s Wildlife Watch is a national, nature-watching program created for people of all ages. Through the program you can share details that help National Wildlife Federation track the health and behavior of wildlife and plant species nationwide. In return, the Wildlife Watch website keeps you up-to-date on wildlife news and facts, and new ideas for attracting wildlife to your backyard and community.

13. **Project Predator Watch** American Bird Conservancy (ABC) is conducting a citizen science project called Project PredatorWatch to determine the extent of predation on birds at bird feeders and in people’s backyards. Your help is critical in determining how many and what types of birds are killed by cats, dogs, and other predators at bird feeders. This information will be useful to scientists and conservationists, and may be compiled and reported in scientific journals and other publications.

14. **Great Sunflower Project** People all over the country are collecting data on bee pollination in their yards, gardens, schools and parks. We take 15-minute counts of the number and types of bee visits to sunflowers (and other plants). We have been gathering information on pollinator service since 2008, and now have the largest single body of information about bee pollinator service in North America. Thanks to our thousands of observers, we can determine where pollinator service is strong or weak compared to averages.

15. **IceWatch USA** With as little as 10 minutes, you can report information that will help to analyze how our climate will change in different regions of the United States, and how our ecosystems are reacting to the change. IceWatch USA™ is modeled after and a proud partner of Ice Watch Canada.

16. **Monarch Larva Monitoring Project** The Monarch Larva Monitoring Project (MLMP) is a citizen science project involving volunteers from across the United States and Canada in monarch research. It was developed by researchers at the University of Minnesota to collect long-term data on larval monarch populations and milkweed habitat. The overarching goal of the project is to better understand how and why monarch populations vary in time and space, with a focus on monarch distribution and abundance during the breeding season in North America.

17. **Journey North** Seasonal change is all around us. We see it in the length of a day, in the appearance of a flower, in the flight of a butterfly. Journey North engages students and citizen scientists around the globe in tracking wildlife migration and seasonal change. Participants share field observations across the northern hemisphere, exploring the interrelated aspects of seasonal change.

18. **Mushroom Observer** The purpose of this site is to record observations about mushrooms, help people identify mushrooms they aren’t familiar with, and expand the community around the scientific exploration of mushrooms (mycology).

19. **World Water Monitoring Day** an international education and outreach program that builds public awareness and involvement in protecting water resources around the world by engaging citizens to conduct basic monitoring of their local water bodies.
20. **Vegetable Varieties Investigation** Vegetable varieties investigation (Vvi) is a unique citizen science in horticulture program designed to engage youth. Participants interview gardeners about their opinions on vegetable varieties, and submit their findings to an online database that serves as a nation-wide online library of vegetable variety data. Contributing to this library supports science research and promotes biodiversity for healthy ecosystems, including our farms and gardens. Findings reported by Vvi youth participants are used by gardeners, plant breeders, and horticulture researchers.

21. **Viburnum Leaf Beetle** Learn more about this invasive beetle threatening our native Viburnums by going to this website. Then go check your local Viburnums for the beetle. If you see any report back through this link to let Cornell researchers know. This information will help stop the spread of this invasive pest.

22. **Asian Longhorned Beetle** Learn more about the invasive Asian Longhorned Beetle threatening our native hardwood trees. Begin monitoring local stands of hardwoods for this beetle. If you find signs of the beetle, enter the information on this website. This information will help save stands of our native hardwoods such as maples, ash and birch trees.

23. **Emerald Ash Borer** This invasive beetle is threatening the native Ash Tree which makes up a significant percentage of our native woodlands. Visit this site to learn more about the Emerald Ash Borer and then investigate your native woodlands for signs of this pest. If you see signs of the Emerald Ash Borer report the sightings on this website. Your information will help save native Ash trees and ensure people everywhere will have healthy trees and wooden baseball bats in the future!

**Interested in more? Visit [http://scistarter.com/index.html](http://scistarter.com/index.html).** This is a brand new website that aims to be a one-stop shop for those wanting to advertise citizen science projects and those seeking to participate. The site’s Project Finder enables you to search for projects by topic, location, time commitment, difficulty, suitability for students, and more.