



MINNESOTA NATURALISTS' ASSOCIATION

Organization Highlight: Cedar Creek Ecosystem Science Reserve

By Caitlin Potter



Hello from Cedar Creek Ecosystem Science Reserve! We are a U of MN ecological field station located about an hour north of the Twin Cities in the city of East Bethel. Since the early 1940s, we have been working to discover sustainable solutions to environmental challenges through research, conservation, education and community engagement. Our property contains 5500 acres of protected land on the Anoka Sand Plain, with a huge diversity of ecosystems, plants and animals. We have large swaths of oak savanna, a peat bog, prairie remnants and recovering farm fields, boreal coniferous forests, lakes, and even deciduous forests with trees more than 300 years old. These ecosystems provide habitat for a wide range of species that are challenging to find so close to the Metro area: lady slippers and other rare orchids, red-headed woodpeckers (and more than 250 other bird species), Blanding's turtles, gray wolves, hognose snakes and much more. It's an incredible place to work, learn and explore!

Our site is very unique. Unlike most environmental education facilities, our purpose first and foremost is scientific research. We are considered the birthplace of modern ecosystem ecology: Ray Lindeman conducted his ground-breaking research on food webs here in the 1940s. Radio telemetry and methods for automatically tracking wildlife were developed here in the 1960s. We are home to some of the longest-running prescribed burning experiments in the world, and are a founding member of the National Science Foundation's Long-Term Ecological Research network. Through this network, we currently focus on long-term and large-scale questions about the world around us. Some of our most well-known projects study biodiversity, nutrient addition, climate change, and land management. Our scientists are among the most and influential ecologists in the world (five of our lead investigators were named to the 2018 Highly Cited Researchers List, an international list of researchers whose citation records place them in the top 1% of citations for their field in the last decade. Research here informs international policy and the scientific community's understanding of the world we live in.

Our education and community engagement programs take full advantage of our science and scientific legacy. We serve more than 5000 K-12 students a year on field trips and educational programs, as well as providing events and opportunities for an additional 5000+ members of the public to engage with the reserve and our work. For many visitors, a trip to Cedar Creek is their first chance to meet a scientist or see scientific research in action. We pride ourselves on giving students a chance to work with real equipment, experimental plots and data – to truly DO meaningful science and build their own science identity. Our public programs provide these opportunities as well. We are especially excited about the ways community members and students take ownership of aspects of our research. We have a seasonal herd of bison that provides opportunities for both research and teaching, with public access provided during the summer by volunteer naturalists from the community. We have recently launched an online citizen science project called "Eyes On The Wild" (eyesonwild.com) that engages participants of all ages into new work studying mammal communities and animal-ecosystem interactions via a site-wide network of trail cameras. We also host several long-term citizen science projects onsite: a research initiative studying red-headed woodpeckers with data collected by 50+ volunteers, a 4x a year animal track and sign survey project, and even a native bumble bee project. These projects and data are hugely valuable to our scientists and really build a sense of ownership in our local community.

Our biggest challenge is a branding one – we are a singularly famous site in the field of ecology, but essentially unknown among most Minnesotans! We are working to change that through an expansion of our public programs as well as a quarterly newsletter (cedarcreek.umn.edu/FieldNotes), an active facebook page (facebook.com/CedarCreekESR) and regular contributions to local news media. We hope you'll lend a hand with this effort by coming for a visit and spreading the word that we exist!

