

Cowling Arboretum

Carleton College
Northfield, Minnesota

Arboretum Volunteer Program

We are thankful to have the help of many volunteers every year in every season! We offer volunteer opportunities on a regular basis to both the Carleton and Northfield communities. While some volunteers participate in large group events for tree planting, seed collecting or invasive plant removal, others work on their own on special projects. Retired English faculty member Ed Sostek, has been an Arboretum volunteer for the past six years. While Ed is willing to jump in and help with any task he especially likes collecting seed for our prairie restorations. He says “the prairie is so peaceful on a summer evening, and I love that I can contribute to the Arboretum restoration goals while enjoying the company of others who enjoy the property as much as I do.”



Ed Sostek, collecting seed in the prairie.



In addition to seed collecting, Ed volunteers on our prescribed burn crew, plants and waters trees, and helps supervise the Northfield 7th graders when they visit the Arboretum to learn about and remove the invasive shrub, buckthorn.

Cowling Arboretum Mission

Provide opportunities for education and research.

Preserve and restore native plant and animal communities on College natural lands.

Provide opportunities for outdoor recreation and nature appreciation.

Special Funding:

In addition to operating support provided by Carleton College, the Arboretum’s programs are supported by grants and funds that have been established through generous gifts (listed alphabetically):

- Arboretum Endowed Fund
- Arboretum Restoration Fund
- Richard S. Cole '69 Memorial Fund
- Conservation Reserve Program of the U.S. Department of Agriculture
- Environmental Quality Incentive Program of the U.S. Department of Agriculture
- George W. Megeath Fund for the Cowling Arboretum
- The Louise '51 and Frank '50 Wright Endowed Arboretum Fund
- The Puzak Family

We wish to thank the Arboretum’s many benefactors who help make our work possible.

Arboretum Academics

Not all classes are offered each year.

Physical Education

- Nordic Skiing
- Outdoor Skills for the Backcountry
- Winter Sports Fitness

Religion

- The Sacred Body

Biology

- Entomology
- Ecosystem Ecology
- Population Ecology
- Introductory Biology: Genes, Evolution, and Development
- Grassland Ecology
- Plant Biology

English

- American Nature Writing

Cinema and Media Studies

- Digital Foundations

Environmental and Technology Studies

- Introduction to Environmental Studies
- Environmental Ethics
- Introduction to Geospatial Analysis

Math

- Sample Survey Design and Analysis

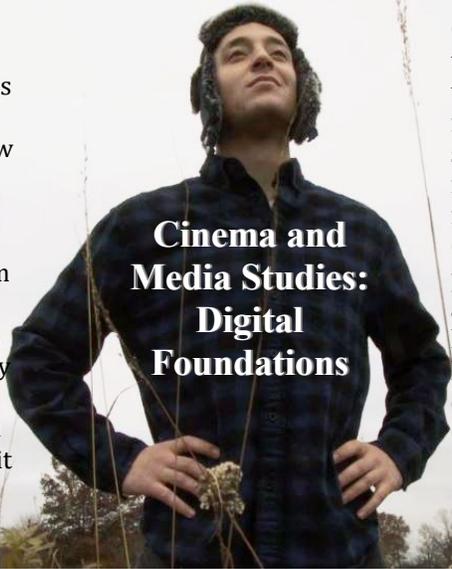
Geology

- Geology in the Field
- Geology of Soils
- Introduction to Geology
- Geomorphology
- Geochemistry of Natural Waters

Studio Art

- Advanced Ceramics
- Intro to Digital and Film Photography
- Advanced Photography
- Woodworking
- Field Drawing
- Table Making
- The Digital Landscape

Digital Foundations is the class where every Carleton CAMS major is armed with a camera and starts learning how to make their ideas show up on screen. Unsurprisingly, many students get ideas from their surroundings at Carleton - for Charlie Kilman '16, specifically the Arboretum. He filmed "Nature Man," a short film about what it means to be a 21st



Century woodsman in the Arboretum. While the Arboretum has not yet actively started marketing itself to the film industry outside of Carleton, we love projects like these—another example of how the Arboretum has an impact on everyday life at Carleton.

Arb Sonics!

Cinema and Media Studies major Chris Baur '13 drew on the emerging field of "Acoustic Ecology" when proposing his senior comps project, a field for scientists working to understand how humans influence acoustic signatures in environments, and conversely, how sounds impact humans. By documenting the Arb's Soundscape, he hoped to determine its "acoustic health." Chris details the project in his web site www.arbsonics.com. Tune in to hear some of the fabulous soundtracks he recorded from the Arb's fields and forests and learn about how we might think about preserving the acoustic health of the Arb.



Faculty Scholarship: Laska Jimsen, CAMS

Laska Jimsen is a professor in the Cinema and Media Studies department, teaching classes like Digital Foundations, Nonfiction, Fiction, and Advanced Production Workshop. She works across nonfiction forms from video documentary to artisanal 16mm filmmaking and animation, often drawing on influence from the natural world to address the relationship between people, landscapes, plants, and animals. She recently received a Film and Video Grant from the Jerome Foundation to work on a video essay about the contradictory and mythologized relationships between human beings and deer in North America. The bow hunters that roam the Arboretum in the fall are of particular interest to her, and as a consequence, the Arboretum has become a valuable creative and professional resource.



A screenshot from Professor Jimsen's film which examines the relationship between deer, hunter, and the environment.

Environmental Education and Community Outreach

Field trips are an important way to share the work of the Arboretum with others. Field trips are provided for prospective students, visiting alumni or other guests, reunion groups, faculty, staff, current students, and members of the general public.

Volunteer Work

Volunteer opportunities are offered on a regular basis to both the Carleton and Northfield communities. Volunteers include current students, retired staff and faculty, scout groups, K-12 classes, adults from the Northfield community and alumni year-round and during reunion weekend. 19 volunteer opportunities were offered in 2013, representing more than 550 total hours of assistance.

Type of Group	Number of Field Trips, Talks or Workshops	Total Number of Attendees
College Related	10	183
Youth (K-12 or Other)	8	791
Adult (Local Community)	5	116



Cole Student Naturalist Program 2013-2014

The Cole Student Naturalist Program is funded through an endowment created in memory of Richard S. Cole '69. It trains students in natural history and nature interpretation and provides opportunities to lead field trips and other events for Carleton and the Northfield community. Student Naturalists meet each week during the academic year to share experiences and learn from experienced naturalists. Various campus offices request them as trip leaders, including admissions and alumni affairs, scouting groups, schools and garden clubs. The student naturalists also write a weekly column for the *Carletonian*. Meet two of our Cole Student Naturalists:

Brandon Valle '14 grew up in Spokane, Washington. Happy to escape his local pine forests for the more varied prairie, savannah, and deciduous forests of Carleton's arboretum, he enjoys spending time in the Arb and learning its secrets. Thinking back on his experience, he talks about what brought him to the Naturalist program to begin with. "I knew little about land management when I got to Carleton. I simply felt awed that a small college could take 880 acres of land swept out of balance by tilling, grazing, dumping, damming, invasive species, overpopulation, etc., and make a plan to restore a balance not seen since before European settlement. Learning about the Arb has been and will continue to be a wonderful experience. I hope that as progress continues, it's an experience that many more students and visitors will share."



Maddie Reynolds '14 spent her childhood in St. Louis, MO, reading animal stories and watching suburban squirrels. She is fascinated by the relationships between plant species and animal species, and sees these forces of nature as inspiration for art, dance, and writing. The Carleton Arb has provided her with a tranquil hideaway, a place for friendly conversations, and a great spot to seek out critters and familiar plants. Maddie says that she's particularly interested in "learning more about the restoration projects Carleton uses to preserve the ecological integrity of this beautiful swath of nature."

In 2013 the Arboretum hosted a course for the Master Naturalists program. Targeted at adult members of the community, this curriculum has been developed by the University of Minnesota Extension Service as a way to engage citizens in stewardship of our natural resources. 24 participants from Northfield and the surround area learned about the “Big Woods Biome”, studying the plants, animals and natural communities found in the Arboretum and nearby. The Master Naturalist participants have already put their knowledge to good use, attending and helping to lead volunteer work events at the Arboretum and helping with environmental education programming at local schools.

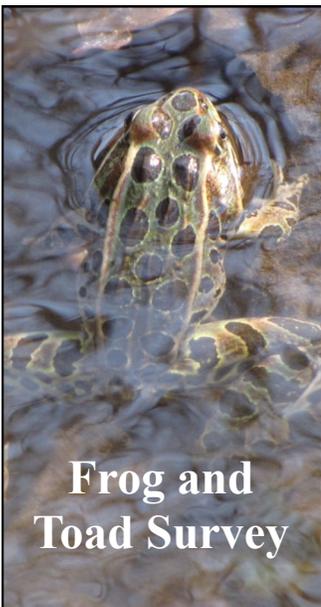
Minting Master Naturalists



Arboretum Aperture



Spring burns prepare the prairie for regrowth.



Frog and Toad Survey

2013 marked the fourth year of the frog and toad survey in the Arboretum. While we have known for years the species found in the Arboretum, and some idea of what areas they inhabit, until we started this project we did not have information on population levels. Utilizing the methods established by the Minnesota Department of Natural Resources, a route that includes ten stops was established through the Arboretum. We visit each location three times during the breeding season, listening and assigning a ranking to each species heard. This same method is used throughout the state and the Midwest to monitor frog and toad populations. Over time we expect to be able to compare our local populations with state and regional data and understand better how our restoration activities may be changing the population of these species. We will also be able to track the status of invasive species such as the bullfrog, which in 2009 we found only in lower Lyman Lake but was also detected in 2010 in one of the floodplain ponds along the Cannon River.



An exoskeleton exposé in the Carleton Arboretum.

The Arboretum utilizes student workers to get much of our work done. Many freshmen are assigned to work in the Arb as one of their first student jobs; some of them develop a love for the work that keeps them coming back for the rest of their student career! Our student workers learn about restoration and land management techniques such as seed collecting, invasive plant control and prescribed burning. We strive to make sure our workers understand more than just how to use a shovel; every work shift includes instruction on the details of our restoration work. This might include plant identification, how habitats are managed to provide for the animals that use them, or the conservation status of a specific species. Our six summer workers and thirty-five students we employ during the school year provide over 4500 hours of valuable labor in the field, while inside the Arb Office, additional students work 300 total hours of research and outreach assistance.



Student Workers

For additional information, contact the Arboretum director or visit our Web site or Facebook page:

www.carleton.edu/campus/arb
www.facebook.com/carletonarboretum

Nancy C. Braker
 Puzak Family Director of the
 Cowling Arboretum
 507-222-4543
nbraker@carleton.edu

