

Academic Workshops

Beginner Birding for Biology:

Led by Aranya Iyer, a MSc student from the University of Western.

This event will teach participants how to identify common birds by sight and sound. There will also be a focus on bird behaviour and habitat selection thereby integrating basic ecological knowledge in the field. A discussion will follow on some of the recent and relevant studies from this research area and how different strands of biology and new technology are used to answer research questions.

Turtling 101:

Led by Mariel Terebiznik, a MSc student from the University of Toronto

Participants will accompany turtle researchers on their twice-daily aquatic survey of turtle populations. This workshop will teach identification skills, basic canoeing, field techniques of mark-recapture studies, and techniques of specimen measurement and handling. A discussion will follow about how the data collected is being used by graduate students to answer questions in EEB.

BLISS (Bat Lake Inventory of Spotted Salamanders):

Led by Patrick Moldowan, a PhD student from the University of Toronto

Participants will accompany amphibian researchers on their daily drift fence survey of metamorphic amphibian populations. This workshop will teach amphibian identification skills, field techniques for mark-recapture studies, and specimen measurement and handling. A discussion will follow about how the data collected is being used by graduate students to answer questions in EEB.

Science Storytelling:

Led by Samantha Stephens, Science and Conservation Photojournalist

In an indoor lecture-style and workshop activity, students will learn the elements of narrative storytelling and how to apply the narrative structure to communicate science, with an emphasis on visual media. Practice how to tell your own science story, and also learn how to build collaborations with various professional storytellers.

Mammals Module:

Led by Rhiannon Kirton, a MSc student from the Western University

Students will be shown a range of different non-invasive methods for identifying mammals around the research station. This will include scat identification, track plates, radiotelemetry with VHF collar 'hide and seek' game, as well as the potential for bat detector walks in the dark and camera trap set up! Rhiannon will also provide a presentation on other common techniques to study mammals such as mist netting and small mammal trapping. We will not engage in these activities directly due to license restraints and Health and Safety, although students will be able to witness small mammal trapping in action by accompanying small mammal researchers as they check their trap lines (activity described above).

Tree & Plant ID Guided Hike:

Led by Vanessa Nhan, a MFC student from the University of Toronto

Students will follow a guided walk along a hiking trail to learn how to identify trees and plants (native and invasive) common in Southern Ontario through learning simple plant morphology and key identification features (e.g., bark, leaves, buds, environment, soil, topography, etc.). Field guides and additional resources will be utilized during the walk to help students develop field identification skills for plants. A general discussion on current ecological research surrounding plants will occur during/after the walk, with some focus on invasive plants and their ecological implications as well.

Introduction to Terrestrial Insect Diversity & Collecting:

Led by Rowan French, a PhD student from the University of Toronto

Participants will learn about and practice multiple methods of sampling terrestrial insects near the field station, with particular emphasis on aerial trapping, netting and litter sifting. Students will identify the insects they collect to Order or Family level using diagnostic morphological features, identification guides, and dichotomous keys. They will also learn curatorial techniques that researchers use to prepare insects for scientific study (e.g., pinning, spreading, pointing, and double mounting). The workshop will close with a discussion of the types of scientific questions that can be answered using data from insect biodiversity surveys and museum collections.

Introduction to Scientific Illustration:

Led by Elizabeth Ann Francis, artist and alumnus of the University of Toronto

Students will be led on a short hike to collect specimens for illustration, followed by a practical session + discussion. We will go through the history and utility of scientific illustration and the importance of observation. The practical portion will focus on the fundamentals of scientific illustration. Students will be guided through traditional techniques in scientific illustration using graphite and watercolour.

Medicinal Plant Talks & Guided Walks:

Led by Christine McRae, Waaseyaa Consulting

Our climate is quickly changing, and conversations surrounding the health of our natural world are more crucial than ever. This workshop will encourage participants to develop a deeper respect and understanding of the plants that are commonly found in Algonquin territory and have been used to encourage health and wellbeing by Algonquin people for thousands of years. This workshop will also explore the concepts of Indigenous food systems and Indigenous food sovereignty.

Informal Researcher Talks:

Casual event held by any graduate student or workshop leader

The AWRS is home to many researchers collecting data for their theses and/or long-term research studies. During lunch time, these researchers and workshop leaders may deliver quick presentations on their topic of study. This will expose participants to the variety of research questions being asked in EEB and show how the data they collect and techniques they learn can be used to answer those questions.

Fire Side Chat - Career, Research, and Personal Experience Discussion:

Discussion led by participant questions to workshop leaders

This event will dedicate time for participants to ask workshop leaders questions about their academic careers and research opportunities. By hosting this event at the end of the week, we

hope that participants will be able to ask more targeted questions based on what workshops they enjoyed the most. This time will also allow time for workshop leaders and participants to share experiences that they had because they were underrepresented groups in science. Such a discussion will validate these experiences and assure sharers that they are not alone. We will also be extending an invitation to senior park biologists and student naturalists who can offer different perspectives and career advice outside the scope of academia.

Introduction to Aquatic Ecology Field Methods:

Led by Rachel Giles, a PhD student from the University of Toronto

Participants will learn about aquatic ecological field sampling methods including water quality, river assessments, zooplankton, and benthic invertebrate collection. Participants will learn basic benthic invertebrate identification, based on the Ontario Benthic Biomonitoring Network classification. The workshop will close with a statistical analysis of benthic invertebrate data and how it can be used in conjunction with environmental data to make decisions about environmental management.

Non-Academic Workshops

Algonquin (Peoples) History Talks & Guided Walks:

Led by Christine McRae, Waaseyaa Consulting

Discover almost 12,000 years of the unique cultural history of the Madaoueskarini Algonquin people. This program is designed to share the living history of those Indigenous to the Algonquin Park region, intertwined with a general scope of Canada's Indigenous people's history. Talks may include the use of tactile items to enhance the telling of this history. Items may include birch bark baskets, artifacts approximately 2,000 to 5,000 years old, beadwork, etc.

Tour of Visitor Centre (VC) and Naturalist Collections:

Led by David Legros, Natural Heritage Education Specialist in Algonquin Park

Participants will get a one-hour tour that will take participants through the visitor centre building, and highlight the work that happens from this facility, such as educational programs, interpretive publications, and research. The tour ends in our collections room, where we have a look at the specimens used for educational programs.

Beaver Pond Trail:

Led by David Legros, Natural Heritage Education Specialist in Algonquin Park

We will meet at the Beaver Pond trail, at 10:00 am for a 1.5 hour walk and dipnet session. Participants are encouraged to wear rubber boots, or water shoes. We will use dip nets to capture aquatic invertebrates and identify them using simple charts and keys. Morning is best, up to 15 students.

Remote Camping Experience:

In partnership with Ontario Parks based off their program 'Learn to Camp', we will spend one night camping at a campsite in Algonquin Park. Throughout this event participants will learn basic navigation skills, campsite set up, cooking skills, and campsite takedown. This event will also serve as a great bonding experience for both participants and workshop leaders.

Presentation/Workshop from Algonquin Park Biologists:

Led by Algonquin Park Biologist (TBD)

A huge part of ecology and evolutionary biology research is informing conservation practices. In partnership with Ontario Parks participants will learn about conservation management and efforts that occur within the park from park biologists.

Wolf Howl:

Led by David Legros, Natural Heritage Education Specialist in Algonquin Park

Wolves can be a polarizing animal on our landscape, however Algonquin has been instrumental in educating Ontarians about the role of predators. For over 50 years, Algonquin Park naturalists have been delivering presentations about wolves, and then taking people out to hear wild wolves. We will visit a number of likely sites by vehicle and try howling for wolves. Maybe they will respond

Introduction to Interpretive Principles:

Led by David Legros, Natural Heritage Education Specialist in Algonquin Park

Appreciating what and how parks protect the landscape, natural and cultural heritage is a key pillar of Ontario Parks mandate. Rather than using strictly educational principles and practices, we use interpretation, which is a mission-based process that tells the emotional and intellectual stories of our site. Anytime, in the theatre at the Visitor Centre. Up to 30 students, 1-hour presentation.

A morning with Kevin: Troubleshooting, problem solving, and thinking critically in the field:

Led by Kevin Kemmish, Manager of the Algonquin Wildlife Research Station.

Kevin will lead a workshop that reviews practical skills, knowledge, tools, outlooks, and resources that are important considerations when heading into the field. Topics will include: understanding your field vehicle, personal tools for self-preservation, importance of understanding first aid, and critically approaching your landscape. These topics are meant to emphasize the importance of maintaining safety and self-sufficiency in dynamic and remote environments.

Scavenger Hunt:

As one of the final activities of the week, the scavenger hunt will serve as a review and friendly competition between groups. Participants will be given a series of tasks to accomplish based on the topics covered during the week such as 'collect 1 leaf from a silver birch', or 'find this item that is marked on the map without using GPS'. Groups will receive points for completing task, and the group with the most points at the end of the scavenger hunt will be crowned victorious.