

Macnamara Field Naturalists' Club

Speakers Report – 2017

John McEwen

In April, Jessica Forrest, an Assistant Professor of Biology at the University of Ottawa, presented on The Private Lives of our Native Bees. Dr. Forrest gave an overview of the natural history of bees, with a focus on the Canadian fauna. She summarized some of her lab's findings on the factors affecting wild bee populations—including flowers, parasites, and temperatures—and discuss ways to support local pollinator communities. Of the approximately 4000 species of bees native to North America, none produces marketable honey—but all have fascinating, and usually solitary, private lives.

Wild-Growing Trees of Eastern Ontario in a Globalized World: Observations, Trends, and Outlook was the title of our May presentation given by Owen Clarkin. We learned that although the treed landscape of Eastern Ontario often gives us an impression of dynamic stability due to the potential of trees for relatively long lives, the landscapes are responding to a rapidly-changing natural environment through rapid changes themselves. Owen discussed the many factors causing this, including higher mortality of and indifference to indigenous species, changes in habitat, and the unprecedented large-scale introduction of alien trees and pests.

In June, Patty McLaughlin discussed the activities of the Wild Bird Care Centre with her presentation, Sparrow, Warblers, and Hawks - Taking a "peep" at the Wild Bird Care Centre. The Centre is the only place in the Ottawa Valley Area dedicated to the care, treatment, and release of sick, injured, and orphaned wild birds. Patty provided a firsthand experience of what it is like to care for over 120 different species of wild birds each year through pictures, video and facts. She shared with us how the birds are kept comfortable while in captivity, their unique personalities, and in many cases, their miraculous recoveries. She was accompanied by her sidekick, Indigo, an American kestrel.

Last September, Troy McMullin, a research scientist specializing in lichenology at the Canadian Museum of Nature, gave a presentation on the often overlooked, but beautiful and fascinating world of lichens, titled, The Secret Life of Lichens. We learned about the role of lichens in different ecosystems and how they are used in medicine, science, and space, commercially. Dr. McMullin talked about rare lichens occurring in south-eastern Ontario, including the only species in the region that is federally listed as endangered, Pale-Bellied Frost Lichen (*Physconia subpallida*), which is known from the Arnprior area.

Steven Cooke, a Professor of Biology and Environmental Science and the Canada Research Chair in Fish Ecology and Conservation Physiology at Carleton University, talked about his research on fish in his presentation, Fish on the Move, in October. Dr. Cooke described how fish live in dynamic environments and they respond by moving at varying space and time scales. For centuries these movements have been the basis of folk lore but only in the last few decades have we had the tools to study fish across ocean basins, between the Laurentian Great Lakes, and up/down thousand kilometer river systems. He described through the use of telemetry we have a window on this elusive underwater world.

Last November, we learned about how flowering plants evolved over geological timescales in a presentation, Diversity and Evolution of Flowering Plants, given by Lynn Gillespie, a Research Scientist in Botany at the Canadian Museum of Nature and an Adjunct Professor of Biology at the University of Ottawa. Flowering plants evolved to become the most diverse and abundant group of plants. She discussed how new ways of studying plants, such as DNA analyses, are changing our understanding of their evolution and hence their classification.

In December, Michael Runtz, an Arnprior native, a well-known naturalist and nature communicator, and with the Department of Biology at Carleton University gave a presentation titled, Why the World Needs Beavers. We learned that beavers are greatly misunderstood animals. Although the ability of beavers to cut down trees and flood land, often puts them in less favourable light through human eyes, these skills empower beavers to create entire ecosystems. We learned through a highly visual presentation the fascinating life of beavers and the important roles they play in the lives of other animals as diverse as dragonflies and moose.