

Ontario Chapter of The Wildlife Society
METHODS IN WILDLIFE RESEARCH
2023 Annual Conference



MARCH 24 - 26TH



Friday
315 Dublin St, Peterborough, ON
Trent University - Traill College

Saturday and Sunday
150 George St N, Peterborough, ON
Holiday Inn - Waterfront

PRESENTED BY ONTARIO CHAPTER OF THE WILDLIFE SOCIETY

OCTWS 2023 Annual General Meeting

table of contents

2	Directions
3	Sponsorship
4	Land Acknowledgement
5-10	Schedule
11	Members Survey
12	Appendix: Poster Presentations

DIRECTIONS



Friday 24th

TRAIL COLLEGE - TRENT UNIVERISTY



The workshops will take place at Trent University's Catherine Parr Trail College. This location is positioned in the North end of downtown. Once you have arrived direct yourself to Wallis Hall. This is where the workshops will delivered. There are two ways to access the building;

315 Dublin Street, Peterborough, ON

310 London Street, Peterborough, ON

Saturday 25th - Sunday 26th

HOLIDAY INN - WATERFRONT



The Holiday Inn - Waterfront is located just before the heart of downtown Peterborough. The venue is located approximately 20 minutes from Hwy 115 and approximately 10 minutes from Hwy 7. Once you have arrived at the location, enter the main doors. There will be volunteers waiting to register/direct you.

It should be noted that all events will be held in the Regency Ballroom, except for the poster presentations which will be located in the Garden Court.

150 George Street North, Peterborough, ON

SPONSORSHIP & DONATIONS



GOLD TIER

Lotek

advancing wildlife science



SILENT AUCTION DONATIONS



LAND ACKNOWLEDGEMENT



We Offer Our Gratitude

THE LAND ON WHICH TRENT SITS

Trent University, in Peterborough and Durham, is located on the treaty and traditional territory of the Mississauga (Michi Saagiig) Anishnaabeg, which includes Curve Lake First Nation, Alderville First Nation, Hiawatha First Nation, and the Mississaugas of Scugog Island First Nation. Specific to this region, Treaty 20 was signed in 1818, followed by the Williams Treaties in 1923.

We respectfully acknowledge that we are on the treaty and traditional territory of the Mississauga Anishnaabeg. We offer our gratitude to the First Nations for their care for, and teachings about, our earth and our relations. May we honour those teachings.

2023 Annual Conference



DAY 1

Friday, March 24th, 9am – 5:30 pm

WORKSHOPS:

Analysis / R workshops (hybrid)

Introduction to stable isotope assignments in R 9:30 - 11:30am

Introduction to movement ecology in R 12:30 - 2:30pm

Introduction to Bayesian inference for ecologists with R and JAGS 2:45 - 4:45pm

DAY 2

Saturday, March 25th, 8:30am – 10pm

REGISTRATION

8:30 – 9:00am

OPENING REMARKS

9:00 – 9:05am

PLENARY 1: METHODS IN WILDLIFE RESEARCH

9:05 – 10:20am

JESSICA LINTON

9:05 – 9:30am

PHIL DEWITT

9:30 – 9:55am

ERICA NOL

9:55- 10:20am

QUESTION PERIOD

10:20 – 10:45am

BREAK

10:45 – 11:00am

2023 Annual Conference



SESSION ONE: ENERGETICS & POPULATION DYNAMICS

11:00 - 12:30pm

LIBESHA ANPARASAN 11:00 - 11:15am

Fuel Use by *Mythimna unipuncta* During Flight: Advances with Bulk $\delta^{13}\text{C}$ and Fatty Acid Composition

CORRINE GÉNIER 11:15 - 11:30am

Aerial Insectivore Diets Inferred by Bulk Stable Isotopes, Fatty Acid Profiles, and Compound-Specific Isotopes

SARAH MUELLER 11:30 - 11:45am

Post-fledging Survival and Movement Patterns of Savannah Sparrows

REBEKAH PERSAD 11:45 - 12:00pm

Flying squirrel habitat use and mycophagy in the Kawartha Highlands, Ontario

GREG MELVIN 12:00 - 12:15pm

Muskrat Population Density Not Correlated with Invasive Hybrid Cattail *Typha x glauca* in Southern Ontario

MATTHEW FUIRST 12:15 - 12:30pm

Early-life sibling conflict in Canada jays has lifetime fitness consequences

LUNCH

12:30 - 1:30pm

SESSION TWO: BEHAVIOURAL ECOLOGY

1:30 - 3:15pm

CAITLIN MENZIES 1:30 - 1:45pm

A Look Inside The Net: Feeding Aggregations Provide Insight Into The Social Structure Of Turtles?

2023 Annual Conference



CONNOR THOMPSON 1:45 - 2:00pm

Behavioural state dependent habitat selection for dispersing eastern wolves (*Canis lycaon*) in Central Ontario

LAUREN HOOTON 2:00 - 2:15pm

Optimal Swarming Theory: Testing the Balance between Sex and Survival in Swarming Bats

ANDREW MCCARTHY 2:15 - 2:30pm

FAMILY MATTERS: Understanding the drivers of behavioural variation in Red Fox (*Vulpes vulpes*) kits

ANDREW BEAUCHAMP 2:30 - 2:45pm

Stopover Refuelling and Movement Behaviour: Evaluating the Interaction Between Individual and Environment

KELLY MCLEAN 2:45 - 3:00pm

Using satellite telemetry to examine assumptions about pair behaviour in a socially-monogamous species, sandhill cranes

KRISTEN CYR 3:00 - 3:15pm

Technoscience In Aquatic Ecosystems: Integrating Underwater Video/Camera With Tracking Technology To Characterize Spatial Behavioural Ecology

COFFEE BREAK

3:15 - 3:30pm

SESSION THREE: HUMAN IMPACTS & CITIZEN SCIENCE

3:30 - 5:15pm

CLAIRE KEMP 3:30- 3:45pm

Prioritizing Indigenous Knowledge and Values Through Community-based wildlife Monitoring with Magnetawan First Nation

2023 Annual Conference



DANIELLE ETHIER 3:45 - 4:00pm

Maximizing the impact of citizen science data: NatureCounts

ELLE BUCKVOLD-BEIRNE 4:00- 4:15pm

Walking Potatoes & Wilder-beasts: an Examination of Socio-Ecological Relationships in Urban Agriculture, Toronto, ON

ANA HERNANDEZ MARTINEZ DE LA RIVA 4:15- 4:30pm

Re-imagining methods to detect rare plants

ASHLEY GREW 4:30- 4:45pm

Electric Fence Protects Nesting Common Terns From Predation

MATTHEW POPPLETON 4:45- 5:00pm

The optimisation of Canada goose population surveys within the Hudson Bay Lowlands

SAMANTHA MORIN 5:00- 5:15pm

Landscape-scale Inferences from Edge Effects: A Literature Review

POSTER SESSION

5:15 - 6:45pm (garden room)

DINNER

6:45 - 7:45pm

STUDENT PROFESSIONAL MIXER

8:00 - 9:00pm

Dedicated mentor / mentee time with mixer activities

9:00 - 10:00pm

Social time

2023 Annual Conference



DAY 3

Sunday, March 26th, 8:00am - 1:00pm

BREAKFAST / COFFEE

8:00 - 8:30am

OCTWS - ANNUAL GENERAL MEETING

8:30 - 9:30am

BREAK

9:30 - 9:45am

KEYNOTE SPEAKER

9:45 - 10:45am

Delivered by Dr. Brad Fedy

BREAK

10:45 - 11:00am

SESSION FOUR: WILDLIFE METHODS - NON-STUDENT SESSION

11:00 - 12:45pm

JOSIE HUGHES 11:00 - 11:15am

Next Steps in the Evolution of Methods for Forecasting Cumulative Effects on Boreal Caribou in Ontario?

MATTHEW SCRAFFORD 11:15 - 11:30am

A wolverine abundance estimate for Red Lake and northern Ontario

JUSTIN KESTLER 11:30 - 11:45am

The Hair Scale Guide to Terrestrial Mammalian Carnivores of Canada

AMY COCKSEGE 11:45 - 12:00pm

Maximizing Camera Trap Detections Using an Experimental Approach

2023 Annual Conference



KARI GUNSON 12:00 - 12:15pm

Key Findings from 13 Years of Monitoring Road Crossing Structures for Large Animals and Reptiles

FRANK MALLORY 12:15 - 12:30pm

Interactions of Bottom-Up and Top-Down Impacts with Climate Change: An Ungulate/Wolf Population Analysis

CLOSING REMARKS

12:30 - 1:00pm



help us help you!

fill out our new
**members
survey**

(2-5 minutes)

scan here



or visit octws.ca

Appendix: Poster Presentations

1: Zachary Moore

Human point counts and ARUs produce different habitat selection results for obligate grassland birds.

2: Valentin Lucet

Using Camera Traps and Computer Vision to Quantify Wildlife Diversity and Co-Occurrence across Ontario's Far North

3: Sarah Babaei

Optimization of Multiplex PCR to Determine Heterozygosity in New Zealand Pukeko

4: Levi Bettencourt

Hemiptera (Family Pentatomidae) Dispersal and Species Richness in Trent University Nature Areas

5: Kiaunna Lee

Breeding Habitat Selection of Sandhill Cranes in Canada's Boreal Forest

6: Megan Schwegel

Decrease in Social Position Predicts Human-Related Disappearances in Wild Population of Vervet Monkeys

7: Spencer Kielar

Mark-recapture estimates of survival and abundance of sympatric northern and southern flying squirrels

8: Mary Atkinson

Diel Variation in Sociality: A Role for Nighttime Ecology

9: Nathan Lewis

Automating Eastern Gray Squirrel Morphotype Identification to Test Selective Pressures in North America

10: Sheyda Zand

Landscape and demographic predictors of fisher home range size in an Albertan working landscape

11: Brennan F. Stanfield

Caribou Summer Habitat Selection Influenced by Insect Harassment

12: Thomas Hossie

Non-native White River Crayfish in Ontario: Habitat Use and Possible Threats to Imperilled Taxa

13: Taylor Fane

Characterizing Dominance Hierarchies to Understand Reproductive Strategies of Wild Male Vervet Monkeys at Lewa-Borana Conservancy, Kenya

14: Christa Wise

Sources of Variation in the University of Guelph Arboretum Winter Bird Count Data: 1980-2023

15: Emma Byers

Where do all the dead birds go? An examination of the fate of birds killed by window collisions

16: Jennifer Claus

DNA Metabarcoding as a Method to Characterize Avian Diet

17: Eva Visscher

Dietary Niches of Colonial Waterbirds Breeding on the Great Lakes Established with Stable-isotope Analysis

18: Justine Kaseman

Estimating road crossing hotspots and movement rates of endangered Jefferson salamanders (*Ambystoma jeffersonianum*)

19: Jonathan Cole

Monitoring changes in landscape structure in the Adirondack-to-Laurentians (A2L) transboundary wildlife linkage between 1992 and 2018: Identifying priority areas for conservation and restoration