# ELEANOR R. STERN
## Curriculum Vitae

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University of Melbourne: QAECO Lab
Google Scholar
Web Of Science

## EDUCATION

### Degrees

| Institution | Degree | Date | Field of Study |
|---|---|---|---|
| University of Alberta | Bachelor of Science *with Distinction* | May 2019 | Environmental and Conservation Sciences, Majoring in Conservation Biology |
| McGill University | Master of Science (Thesis) | October 2022 | Renewable Resources (Wildlife Biology) |
| University of Melbourne | Doctor of Philosophy in Science | Ongoing | Population Ecology |

## RESEARCH

### Research Experience

**University of Melbourne, School of Agriculture, Food, and Ecosystem Sciences.** PhD Student. **Supervisors:** Michael McCarthy, Peter Vesk, Chris Clements (University of Bristol, external supervisor). *Using Paramecium microcosms to experimentally test comparative performance of GLM, BRT, and DRM based Species Distribution Models in climate change and range-expanding conditions.*   2022-2026

**McGill University, Department of Natural Resources.** MSc Student. **Supervisors:** Murray Humphries, Jeffrey Cardille. *Mixed-methods, community-led project using quantitative methods to model moose habitat use in logged forests based on GPS collar data and Indigenous Knowledge from participatory mapping workshops.*   2022-2022

**University of Alberta, Department of Biosciences.** Undergraduate 
Researcher. **Supervisor:** Evelyn Merrill. *Modelling spread of Chronic Wasting Disease in mule deer using ALCES, a forecasting/backcasting software, based on population models, step selection functions, and resource selection functions.*

2018-2019

**University of Alberta, Department of Renewable Resources**. 
Undergraduate Researcher. **Supervisor:** Scott Neilsen. *Assessing the impact of seismic lines (narrow linear disturbances) on boreal forest sunlight and wind.*

2017-2018

**University of Alberta, Department of Geophysics.** Undergraduate Research Assistant. **Supervisor:** Jeffrey Gu. *Developing a MATLAB script to input seismic waveform data and isolate the coda and attenuation.*

2013

## Theses

Effects of narrow linear disturbances on light and wind in fragmented boreal forests in Northeastern Alberta

B.Sc.

Modeling effects of landscape changes on habitat carrying capacity and dispersal on population trajectories of mule deer (Odocoileus hemionus) population in Alberta, Canada

B.Sc.

Wildlife science inclusive of local priorities and knowledge co-production: moose habitat selection in the Adapted Forestry Regime of Eeyou Istchee, Northern Quebec
(online link – document preview)

M.Sc

## Publications

1. **Stern, E.R.,** Clements, C. F., Vesk, Peter A., McCarthy, Michael A. The Contribution of Microcosms to Conservation Biology. *In Review*.
2. Badry, N.A., MacMillan, G.A., **Stern, E.R**. et al. (2023).  Boundary Spanning Methodological Approaches for Collaborative Moose Governance in Eeyou Istchee. Environmental Management, 74: 132-147. URL: https://doi.org/10.1007/s00267-023-01918-6
3. **Stern, E.R.,** & Humphries, M.M. (2022). Interweaving local, expert, and Indigenous knowledge into quantitative wildlife analyses: a systematic review. Biological Conservation, 266, 109444. URL: https://doi.org/10.1016/j.biocon.2021.109444
4. **Stern, E.R.,** Riva, F., and Nielsen, S.E. Effects of narrow linear disturbances on light and wind in fragmented boreal forests in Northeastern Alberta. Forests, vol. 9, no. 8, 2018, pp. 486. URL: https://doi.org/10.3390/f9080486

## Grants, Scholarships, and Research Funding

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| $2,500 AUD | SAFES Travel Award, *University of Melbourne* | 2024 |
| $112,500 AUD | Research Training Program Scholarship, *Government of Australia* | 2022 - 2026 |
| $6,500 AUD | Rowden White Scholarship, *University of Melbourne* | 2022 |
| $33,000 CAD | M.Sc. Research Stipend, *McGill University* | 2020-2022 |
| $6,000 CAD | Undergraduate Student Research Grant, *University of Alberta* | 2018 |
| $6,000 CAD | Undergraduate Student Research Award, *Natural Sciences & Engineering Research Council of Canada* | 2017 |
| $1,000 CAD | The Suzanne Elizabeth Abele Memorial Award, *University of Alberta* | 2017 |
| $3,500 CAD | John & Eileen Jorgens Scholarship, *University of Alberta* | 2017 |
| $2,500 CAD | Alexander Rutherford Scholarship, *Government of Alberta* | 2012 |
| $1,000 CAD | Faculty of Science Academic Excellence Scholarship, *University of Alberta* | 2012 |
| $1,000 CAD | University of Alberta Academic Excellence Scholarship, *University of Alberta* | 2012 |

## Awards

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|---|---|
| School of Agriculture, Food, and Ecosystem Sciences Community Award ($500) | 2024 |
| School of Agriculture, Food, and Ecosystem Sciences Leadership Award ($500) | 2024 |
| Deans List & First Class Standing | 2019 |
| First Class Standing | 2018 |

| Deans List & First Class Standing | 2017 |
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| AP National Scholar | 2012 |

## Committees, Leadership, and Service

| Research and Graduate Research Committee, *Graduate Researcher Representative*, University of Melbourne | 2024-2025 |
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| Graduate Researchers of Agriculture, Food, and Ecosystem Sciences (Graduate Student Union), *Chair,* University of Melbourne | 2024 - 2025 |
| Grade 10 Work Experience Program, *Guest Speaker*, University of Melbourne | 2024 |
| School of Agriculture, Food, and Ecosystem Sciences Graduate Research Conference, *Planning Committee Chair*, University of Melbourne | 2024 |
| Graduate Researchers of Agriculture, Food, and Ecosystem Sciences (Graduate Student Union), *Secretary,* University of Melbourne | 2023-2024 |
| McGill Natural Resource Sciences Virtual Art Show, *Planning Committee*, McGill University | 2020 |

## Peer Review

Conservation Biology, Global Change Biology, Conservation Science and Practice

## Field Experience

| **Northern Quebec, Canada.** 6 week duration, included expert elicitation with Indigenous land-users in Nemaska and Mistassini. | 2021 |
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| **Wainright, Canada.** 1 week duration, included transects and pellet counts for deer, moose, elk, and coyote. | 2019 |
| **Northern Alberta, Canada.** 6 week duration, included site selection and scoping, data collection, deploying and recovering data loggers at study sites. | 2017 |
| **Lac La Biche, Canada.** 4 week duration, field intensive course. | 2015 |
| **Alberta, Canada.** Multiple day-trips including retrieving data from below-ground seismic stations across Alberta. | 2013 |

## Posters and Presentations

**Contributed Oral Presentation,** "Testing big models with small systems: using experimental microcosms to assess species distribution models", *Victorian Biodiversity Conference*

Melbourne, Australia, 2024

**Contributed Oral Presentation,** "Microcosms for Macro-problems: the contribution of miniature experimental systems to conservation biology research", *Ecological Society of Australia*

Melbourne, Australia, 2024

**Contributed Oral Presentation,** "Microcosms for Macro-problems: the contribution of miniature experimental systems to conservation biology research", *Ecological Society of America*

Long Beach, USA, 2024

**Poster Presentation.** "Testing big models with small systems: using experimental microcosms to assess species distribution models". *Ecological Society of Australia*

Darwin, Australia, 2023

**Contributed Oral Presentation**, "Interweaving local, expert, and Indigenous knowledge into quantitative wildlife analyses: a systematic review". *Ecological Society of America*

Montreal, Canada, 2022

**Poster Presentation,** "Modeling Sensitivity of Mule Deer Populations to Landscape Changes," *The Alberta Chapter of the Wildlife Society Conference*

Canmore, Canada, 2019.

**Poster Presentation,** "Modeling Spread of Chronic Wasting Disease in Mule Deer," *The Wildlife Society 25th Conference*

Cleveland, USA, 2018.

## PROFESSIONAL EXPERIENCE

Research Associate, University of Melbourne. **Supervisor:** Chris M. Baker. *Assisted with grant material preparation including writing and editing project summaries and personal profile material for Australian Research Council Discovery Grant and Center of Research Excellence grant. Assisted with preparation of academic lecturer job application material.*

2024

Research Associate, University of Melbourne & Plant Health Australia, **Supervisor:** Emma Hudgins. *Research and preparation of Dutch Elm Disease*

2024

*Surveillance Protocol for Australia, including data collection and summarisation, analyses and writing.*

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| Research Assistant, McGill University. **Supervisor:** Murray Humphries. *Preparing teaching material for online delivery for Advanced Fish and Wildlife Management, including debugging lab/practical scripts, digitising material, and updating teaching material.* | 2020 |
| Contract Researcher, EnviroStats Canada. **Supervisor:** Stefan Schreiber. *Performing systematic review of water quality monitoring methods.* | 2020 |
| Research Assistant, University of Alberta, **Supervisor:** Evelyn Merrill. *CWD Management Project, involved modelling spread of CWD in mule deer in collaboration with the software company ALCES to develop new uses for their forecasting software.* | 2019 |
| Contract Researcher, Alberta Environment and Parks, **Supervisor:** Anne Hubbs. *CWD Management Project, involved modelling spread of CWD in mule deer in collaboration with the software company ALCES to develop new uses for their forecasting software.* | 2018-2019 |

## TEACHING

### Course Design

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| NRSC 401 (Advanced Fish and Wildlife Management – McGill University). *Adapted lab material for online learning. Rewrote and expanded lab material, wrote new modules, created exercises and assessment questions, & created data for exercises.* | 2020 |
| NRSC 684 (Science Communication Special Course – McGill University). *Co-designer of Science Communication course along with Supervisor Murray Humphries, including course framework, objectives, and outcomes, lecture material, assignment planning, & organizing guest lectures.* | 2021 |

### Teaching Experience

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| BIOL 10010/10008 (*Foundational Biology: Life's Complexity*) **Practicals,** University of Melbourne. Demonstrator, Lead Demonstrator, Technical Lead. *Responsible for delivering prac/lab content; organising, coordinating, and training casual demonstrators; involved in planning and preparation of practical materials; and supervising students and demonstrators during outdoor practicals.* | 2023-2024 |

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|---|---|
| BIOL 10010/10008 (*Foundational Biology: Life's Complexity*) **Workshops and Tutorials**, University of Melbourne. Demonstrator, Lead Demonstrator. *Responsible for delivering workshop/tutorial material.* | 2023-2024 |
| BIOL 10002 (*Biomolecules and Cells*) **Practicals**, University of Melbourne. Demonstrator. | 2023-2024 |
| BIOL 10002 (*Biomolecules and Cells*) **Workshops and Tutorials,** University of Melbourne. Demonstrator. | 2023-2024 |
| EVSC 90014 (*Environmental Risk Assessment Masters Level*) **Practicals**, University of Melbourne. Demonstrator | 2024 |
| EVSC 30003 (*Environmental Risk Assessment*) **Practicals**, University of Melbourne. Demonstrator | 2023-2024 |
| BIOL 20025 (*Second Year Ecology*) **Practicals**, University of Bristol. Guest demonstrator. | 2023 |
| NRSC 401 (*Advanced Fish and Wildlife Management*) **Practicals**, McGill University. Lead Teaching Assistant / Demonstrator. *Responsible for delivering lab/prac material, making lab/prac instructional presentations, creating rubrics for assignments, creating assignments and assignment questions, marking assignments, grading written assignments and oral presentations, making groups for group assignments, and providing help sessions.* | 2021 |

# TRAINING, EDUCATION, AND SKILLS

## <u>Workshop Attendance</u>

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| The Association of Graduate Students Employed at McGill (AGSEM) Teaching Assistant Training | 2021 |

   i. Fostering Equity Centred Classroom Environments
   ii. Planning/Leading Effective Conferences/Discussions
   iii. Designing and Delivering Effective Lectures
   iv. Grading in the Sciences
   v. Promoting Student Engagement
   vi. Accessibility in the Classroom: How to be an Inclusive TA

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| McGill University T-Pulse Graduate Teaching Assistant Workshop | 2020 |

   i. Module 1: Learning Objectives and Teaching Strategies
   ii. Module 2: Grading and Feedback
   iii. Module 3: Diversity & Inclusion

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| Winter Tracking and Telemetry, Alberta Chapter of the Wildlife Society | 2019 |

## Professional Training

Wilderness First Aid, St. John Ambulance & University of Alberta                     2019

Standard First Aid, St. John Ambulance & University of Alberta                        2018

Class 5 Electrofishing                                                                                  2016

## Computational Skills

Programming:       R (Intermediate-Advanced), Python (Intermediate), Matlab
                            (Introductory), ArcPy (Intermediate)

GIS:                     ESRI ArcGIS (Advanced), R-based GIS (Intermediate-Advanced)

Software:             ALCES (Advanced), Marxan (Introductory), Maxent (Introductory),
                            Zonation (Introductory)

Applications:        Adobe Photoshop (Intermediate), Microsoft Excel (Advanced),
                            Microsoft Word (Advanced), Microsoft Terminal, MacOSX Terminal