

# Erik Dean – Curriculum Vitae

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## Education

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<b>PhD</b> 2018 – 2023	<b>University of Toronto, Scarborough</b> Physical and Environmental Sciences Advisors: Nicholas E. Mandrak, D. Andrew R. Drake
<b>MEnvSc</b> 2016 – 2017	<b>University of Toronto, Scarborough</b> Physical and Environmental Sciences
<b>HBSc</b> 2010 – 2015	<b>University of Toronto, St. George</b> Ecology and Evolutionary Biology

## Publications

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1. Non-linear effects on the population performance of Bighead Carp under different maturation schedules  
**Erik K. Dean**, D. Andrew R. Drake, Nicholas E. Mandrak.  
*Biological Invasions*, 2023
2. Assessing space use in meadow voles: the relationship to reproduction and the stress axis  
Phoebe D. Edwards, **Erik K. Dean**, Rupert Palme, Rudy Boonstra.  
*Journal of Mammalogy*, 2019

## Contributed Talks

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1. Bighead Carp overwintering under climate change — Spawning, survival, and implications for invasion  
*American Fisheries Society Ontario Chapter Annual General Meeting*  
Severn Bridge, Ontario, Canada  
March 2023
2. Out of the bottleneck: Bighead Carp spawning and overwinter survival in a warming climate  
*Society of Canadian Aquatic Sciences Annual Meeting*  
Montreal, Quebec, Canada  
February 2023

3. Population performance of Bighead Carp under different ages of maturity  
*Joint Aquatic Sciences Meeting*  
Grand Rapids, Michigan, USA  
May 2022
4. Bighead Carp in changing climates: Changing maturation ages and population performance  
*International Conference on Aquatic Invasive Species*  
Oostend, Belgium  
April 2022
5. Exploring establishment potential of Bighead Carp in the Canadian Great Lakes under climate change  
*American Fisheries Society Ontario Chapter Annual General Meeting*  
Orillia, Ontario, Canada  
February 2020

## Research Experience

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| 2018 | <b>Aquatic science biologist at Fisheries and Oceans Canada</b> , Burlington, ON.<br>Great Lakes Laboratory for Fisheries and Aquatic Sciences              |
| 2017 | <b>Independent contractor for Fisheries and Oceans Canada</b> , Burlington, ON.<br>Great Lakes Laboratory for Fisheries and Aquatic Sciences                |
| 2017 | <b>Research assistant at University of Toronto, Scarborough</b> , Toronto, ON.<br>Centre for Environmental Epigenetics and Development, Boonstra Laboratory |
| 2017 | <b>Research assistant at University of Toronto, Scarborough</b> , Toronto, ON.<br>Mandrak Laboratory  |
| 2014 | <b>Volunteer research assistant at University of Toronto, St. George</b> , Toronto, ON.<br>Agrawal Laboratory   |
| 2012 | <b>Volunteer research assistant at University of Toronto, St. George</b> , Toronto, ON.<br>Frederickson & Weis Laboratories                                 |

## Teaching Experience

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Teaching assistant at University of Toronto, Scarborough:

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| <b>Fall</b><br>2018 – 2022   | EES1111 – Freshwater Ecology and Biomonitoring<br>Field instructor, tutorial lecturer, lab demonstrator, coursework development, office hours |
| <b>Winter</b><br>2019 – 2023 | EES1137 – Quantitative Applications for Data Analysis<br>Assignment grading and feedback, tutoring by appointment                             |

## Awards

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- 2023      **E.J. Crossman Award for Best Student Talk**  
American Fisheries Society Ontario Chapter Annual General Meeting
- 2022      **Teaching Assistant Award, Department of Physical and Environmental Sciences**  
University of Toronto, Scarborough
- 2022      **Best Talk in Category, Applied Science and Technology**  
Doctoral Environmental Science Colloquium

## Skills and Certifications

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- R
- Python
- $LaTeX$
- Bash / Linux shell
- Data Visualization
- Class 2 Backpack Electrofishing
- SciNet Certificate in Data Science
- Ontario Benthos Biomonitoring Network Certificate
- Royal Ontario Museum Ontario Fish Identification Workshop

## Service, Leadership, and Professional Experience

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- 2022 – 2023      **Program ambassador** — Master of Environmental Science Information Session  
University of Toronto, Scarborough
- 2022 – 2023      **Web designer** — Mind and Spirit Youth Leadership 2019-2022 Impact Report  
Scarborough Centre for Healthy Communities
- 2022      **Aquatic ecology exhibitor** — Master of Environmental Science Program Open House  
University of Toronto, Scarborough
- 2020      **President** — Graduate Students Association at Scarborough  
University of Toronto, Scarborough
- 2020      **Mantis advisor** — Source to Sea, Great Lakes Untamed (Episode 1)  
TVO Today & Smithsonian Channel

<b>2019</b>	<b>Sports representative</b> — Graduate Students Association at Scarborough University of Toronto, Scarborough
<b>2019</b>	<b>Member</b> — Athletic Advisory Committee University of Toronto, Scarborough
<b>2019</b>	<b>Member</b> — Healthy Learning and Working Environment Working Group University of Toronto, Scarborough Strategic Plan 2019
<b>2018</b>	<b>Electrofishing crew leader, fish taxonomy survey</b> — Ontario BioBlitz
<b>2016</b>	<b>Technical lead</b> — Turnkey Aquaponics
<b>2013 – 2015</b>	<b>Volunteer coordinator</b> — English Language Program Ontario Institute for Studies in Education, University of Toronto, St. George
<b>2012 – 2013</b>	<b>Cultural assistant</b> — English Language Program Ontario Institute for Studies in Education, University of Toronto, St. George
<b>2012 – 2013</b>	<b>Executive and founding member</b> — Feminist Engagement with Men* and Masculinities University of Toronto, St. George

## Workshops:

1. R webseries for fisheries analysis  
Jacob Burbank, Justin Hubbard, **Erik Dean**  
American Fisheries Society Ontario Chapter Student Subunit, 2022
2. Student success workshop (four week introductory programming web series)  
Jacob Burbank, Justin Hubbard, **Erik Dean**  
American Fisheries Society Ontario Chapter Student Subunit, 2020

## Invited Talks and Guest Lectures:

1. Bighead Carp — Populations, invasion, and climate change  
BIO 3SS3 – Population Ecology, University of McMaster  
Invited by Phoebe Edwards  
March 29th, 2023

2. Ecologically conscious pickings: Foraging weeds and invasive plants  
CultureLink Settlement Services - Newcomer Gardening Workshop Series

Invited by Lily Krowiak

October 6th, 2021

3. Update on Canadian Asian Carp research: Potential effects of climate change  
2021 Ontario Invasive Species Virtual Forum

Hosted by Invasive Species Centre & Ontario Ministry of Natural Resources and Forestry

Invited by Rebecca Schroeder

March 3rd, 2021

4. The next step, and some tips to keep one step ahead (seminar for high school students preparing for university)

Woburn Collegiate Institute

Invited by Christina Mohan-Eustace

November 30th, 2018