# City of London - Application for Appointment to City of London Community Advisory Committees

# **Application**

Committee you are interested in serving on: Ecological Community Advisory Committee

If applying for the Accessibility Community Advisory Committee, please select:

If applying for the Ecological Community Advisory Committee, a professional designation, education or experience in related fields is a requirement based on the technical nature of the committee work. Please indicate your area(s) of expertise: **Biology; Ornithology; Zoology; Ecology** 

If you selected 'Other', please specify:

### **Contact Information**

Name: Peter Baker

City: London

Province: **ON** Postal Code: **N6G1G3** 

# **Experience and Qualifications**

If you have experience on a London Advisory Committee, please provide dates and details. (max. 250 characters): **NA** 

What do you hope to contribute or learn as part of a Community Advisory Committee? (max. 250 characters: I hope to contribute my strong background in ecology to help address important environmental challenges that face the city of London. I also hope to gain valuable experience in the policy-making process. Finally, this experience will help me to effectively serve on committees in the future.

How will you support the work of a Community Advisory Committee? (max. 250 characters): I will support the work of the ECAC by actively participating and contributing to discussions, applying the knowledge I've gained throughout my undergraduate and graduate studies to provide technical advice on environmental matters, and by being a responsive and proactive committee member.

Please describe additional experience, training, or community involvement that will help you in your role as a Community Advisory Committee Member. (max. 250 characters): I have extensive experience conducting environmental surveys in aquatic and terrestrial settings. I am an avid birder and naturalist and have a working knowledge of the ecology and biodiversity in London. I also serve as a Co-Chair on the Biodiversity Inventory Committee at Western University.

Attach resume or other document here, if needed: Resume 2022.pdf

Attach more files here, if needed: CV - Baker.pdf

# **Confirmations**

I declare the following: I am a resident of London.; I am at least 18 years old.; I am not a City employee or Council member.; I understand that the commitment may be up to 4 hours per month to attend meetings and prepare.; I understand that my application and any attachments will be included on a public agenda that is published on the City website.

To help inform our outreach activities, please tell us how you heard about this opportunity: (optional): **Professional or community organization** 

If you selected 'Other', please specify:

Submitted on: 4/2/2022 7:20:46 PM

#### **Peter Baker**

Owen Sound, ON, N4K 6E6

#### Master of Science, Biology (MSc)

September 2021 - present

The University of Western Ontario, London, Ontario

- Thesis: The effect of dietary thiaminase on the cardiorespiratory physiology of lake trout
- NSERC FishCAST Graduate Fellowship Award
- Western Graduate Scholarship

#### **Bachelor of Science, Honours Specialization in Biology (BSc)**

**April 2021** 

The University of Western Ontario, London, Ontario

- Minor in Environmental Science
- Primary focus: Animal Ecology, Evolution & Physiology
- Sub-GPA: 4.0
- Terence Laverty Memorial Gold Medal (highest average in program)
- Dean's Honor List Year II, III, & IV
- NSERC Undergraduate Student Research Award 2020
- UWO In-Course Scholarships Year IV
- Western Scholarship of Excellence

#### **WORK EXPERIENCE**

#### **Graduate Teaching Assistant**

**2021 - present** 

University of Western Ontario, London, ON

- Assisting professors with course activities including teaching course material, leading tutorials, proctoring exams, and grading assignments for undergraduate-level courses
- Course teaching experience: Bio2581 (Genetics), Bio2290 (Scientific Methods in Biology)

#### Western Undergraduate Research Internship

**Summer 2021** 

The University of Western Ontario

- Performed daily animal husbandry duties to maintain experimental groups of lake trout, Atlantic salmon, and guppies (feeding, cleaning tanks, preparing food etc.)
- Collected eDNA samples from Lake Ontario tributaries as part of a study examining Atlantic salmon reintroductions
- Conducted behavioral trials on guppies for a study examining the effect of arginine vasotocin on shoaling behavior

#### **NSERC Undergraduate Research Fellowship**

**Summer 2020** 

The University of Western Ontario, London, Ontario

• Studied bluegill sunfish at the Queen's University Biological Station (QUBS). Field experience included conducting nest surveys, taking blood samples, and participating in behavioral trials

- Lab experience included blood plasma extraction, androgen extraction, dissecting bluegill brain, liver, gill and muscle tissues, and data organization
- Additional experience included seine fishing and freshwater fish identification

#### **Environmental Field Worker**

**Summer 2019** 

Grev Bruce Public Health Unit

- Provided support for the Beach Management and Vector-Borne Disease Programs
- Independently organized the setup and retrieval of mosquito traps, orchestrated the monthly collection of water samples, and performed seasonal tick dragging techniques
- Participated in the evaluation of results, decisions regarding public communication, and modifications to the surveillance strategies

#### **Environmental Assistant**

Summer 2018

Ministry of the Environment and Climate Change

- Assisted environmental officers with field inspections and environmental monitoring
- Acted as a project manager for several conservation efforts for the Grey-Bruce region, including the Pollen Monitoring Network and the Bumblebee Diversity project
- Additional experience included quadrat sampling for freshwater mussels, and freshwater mussel identification

#### **VOLUNTEER EXPERIENCE**

#### Co-Chair/Academic Team Lead

**2022-pres** 

Western Biodiversity Inventory, University of Western Ontario

- One of three Chairs for the Western Biodiversity Inventory, a campus-wide initiative to quantify the biodiversity on Western's grounds
- Contributed to the organization and design of the initiative, led committee meetings, and participated in public outreach

#### **Biology Graduate Student Representative**

**2022-pres** 

Department of Biology, University of Western Ontario

• Represented the biology department at public events including future mustang day

Research Assistant 2019-2020

The University of Western Ontario, London, Ontario, Dr. Bryan Neff's Lab

- Assisting a graduate student with her work on bluegill sunfish (*Lepomis macrochirus*)
- Lab experience includes running and troubleshooting PCR and gel electrophoresis, androgen extraction, DNA extraction, and data organization

Research Assistant 2018-2019

The University of Western Ontario, London, Ontario, Dr. Graham Thompson's Lab

- Assisting a graduate student with her work on fruit flies (*Drosophila melanogaster*).
- Preparing fly food and housing vials on a weekly basis to maintain populations for study
- Participating in the behavioral analysis of various genetically modified populations and discussing results with The UWO Social Biology Group

Summer 201

# **CERTIFICATIONS & TRAINING**

<ul> <li>Advanced Statistics in Fisheries Conservation &amp; Management</li> </ul>	March 2022
<ul> <li>Learn to Lead Leadership Certificate</li> </ul>	March 2022
<ul> <li>Introduction to Evidence Synthesis</li> </ul>	November 2021
<ul> <li>Introduction to GIS &amp; Digital Mapping</li> </ul>	August 2021
<ul> <li>How to Consider EDI in Navigating the Academic Landscape</li> </ul>	August 2021
<ul> <li>Lifesaving Society First Aid &amp; CPR 'HCP'</li> </ul>	February 2021
<ul> <li>Animal Ethics &amp; Regulations Certification</li> </ul>	
<ul> <li>Basic Animal Care and Use – Field Studies</li> </ul>	May 2020

# Peter M. Baker

Curriculum vitae

University of Western Ontario, Department of Biology,

### **Education**

M.Sc. Biology 2021 – Present

Department of Biology, University of Western Ontario

Thesis: The effect of dietary thiaminase on the cardiorespiratory physiology of lake trout

Supervisor: Dr. Bryan Neff

B.Sc. Biology (Hons) 2017 – 2021

Department of Biology, University of Western Ontario; Sub-GPA: 4.0 Thesis: Using genetic tools in a diet analysis of Lake Huron salmonids

Supervisor: Dr. Bryan Neff

# **Research Interests**

Restoration Biology, Fisheries Science, Aquatic Ecology, Wildlife Management

My current research focuses on lake trout restoration efforts in Lake Ontario with respect to how invasive species have hindered their restoration success. In particular, I am exploring the effects of a thiamine deficiency on the cardiorespiratory physiology of two strains of lake trout currently targeted for reintroduction in Lake Ontario.

# **Honours and Awards**

L. Margolis Scholarship for Fisheries Biology	2021 - 2022
NSERC FishCAST Graduate Fellowship Award	2021 - 2023
Western Graduate Scholarship	2021 - 2022
Terence Laverty Memorial Gold Medal	2020 - 2021
UWO In-Course Scholarships	2020 - 2021
Dean's Honour Roll	2018 - 2021
NSERC Undergraduate Student Research Award	2019 - 2020
Western Scholarship of Excellence	2017 - 2018

# **Academic Work**

Fisheries Biologist Intern Ontario Ministry of Natural Resources & Forestry	2022 – present
Graduate Teaching Assistant University of Western Ontario	2021 – present
Undergraduate Student Research Intern University of Western Ontario	Summer 2021
NSERC USRA Research Fellowship University of Western Ontario	Summer 2020
Environmental Field Worker  Grey-Bruce Public Health Unit	Summer 2019
Environmental Assistant Ontario Ministry of the Environment, Conservation & Parks	Summer 2018

# **Volunteer Work**

Co-Chair/Academic Team Lead Western Biodiversity Inventory	2022 – present	
University of Western Ontario, London, ON		
Biology Graduate Student Representative Department of Biology University of Western Ontario, London, ON	2022 – present	
Research Assistant	2019 – 2020	
University of Western Ontario, London, ON		
Skills experience: PCR, gel electrophoresis, androgen extraction, DNA extraction, data collection and		
organization		
Supervisor: Dr. Bryan Neff		

Research Assistant 2018 – 2019

University of Western Ontario, London, ON

Skills experience: conducting behavioural trials, study population maintenance, data collection and organization

Scientific Methods in Biology (Bio2290)

# **Credentials**

Advanced Statistics in Fisheries Conservation & Management	2022
Great Lakes Institute for Environmental Research	
Learn to Lead Leadership Certificate	2022
University of Western Ontario	
Introduction to Evidence Synthesis	2021
Canadian Centre for Evidence Based Conservation	
Introduction to GIS & Digital Mapping	2021
University of Western Ontario	
How to Consider EDI in Navigating the Academic Landscape	2021
University of Western Ontario	
First Aid & CPR 'HCP'	2021
Lifesaving Society	
Animal Ethics & Regulations: Basic Animal Care & Use	2020
University of Western Ontario	

# **Oral and Poster Conference Presentations**

<u>Baker PM</u>, Therrien CAT, Garner SR, & Neff BD (2021). The effect of dietary thiaminase on two strains of lake trout (*Salvelinus namaycush*) currently stocked in Lake Ontario. Poster presentation at the Western Undergraduate Student Research Internship Conference, London, ON, Canada.

<u>Baker PM</u>, Garner SR, & Neff BD (2021). Using genetic tools in a diet analysis of Lake Huron salmonids. Oral Presentation at Western Biology Day, London, ON, Canada.

# **Student Mentorships**

NSERC USRA Research Mentor	2022 – present
Undergraduate Volunteer Lab Mentor	2021 - 2022
Undergraduate Work Study Mentor	2021 - 2022
<b>Teaching Assistantships</b>	
Genetics (Bio2581)	2022 - 2022

2021 - 2021