

Chris Brimacombe

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Education

University of Toronto (UofT) PhD in ecology and evolutionary biology Supervisor: Fortin MJ	Toronto, Ontario 2019–Current
University of Western Ontario (UWO) BSc (Hons) in applied mathematics <i>with distinction</i> Supervisors: Zamir M and Corless R	London, Ontario 2015–2018
University of Ottawa BSc (Hons) in biology with a specialization in ecology Supervisors: Leroux S and Findlay CS	Ottawa, Ontario 2008–2012

Honours and Awards

Ontario Graduate Scholarship (\$15,000)	2023
Queen Elizabeth II Graduate Scholarship (\$15,000)	2022
Ontario Graduate Scholarship (\$15,000)	2021
A. Murray Fallis Graduate Award In Zoology (\$3,617)	2020
Minns Family Bursary In Ecology and Evolution (\$196)	2020
Canada Graduate Scholarship-Master's (\$22,333)	2020
Frederick P. Ide Award In Ecology And Evolutionary Biology (\$870)	2019
Best poster at Undergraduate Applied Math Research conference (\$100)	2018
UWO Science undergraduate pre-thesis award (\$4,500)	2016

Publications

Under Review

Shortcomings of reusing species interaction networks created by different sets of researchers

Brimacombe C, Bodner K, Michalska-Smith MJ, Poisot T, and Fortin MJ

Articles

No strong evidence that modularity, specialization, or nestedness are linked to seasonal climatic variability in empirical bipartite networks

Brimacombe C, Bodner K, Michalska-Smith MJ, Gravel D, and Fortin MJ

Global Ecology and Biogeography

How network size strongly determines trophic specialization: a technical comment on Luna et al. (2022)

Brimacombe C, Bodner K, and Fortin MJ

Ecology Letters, 2022, 25(8): 1914–1916, doi:10.1111/ele.14029

Why body size matters: how larger fish ontogeny shapes ecological network topology

Bodner K, Brimacombe C, Fortin MJ, and Molnár P

Oikos, 2022, 2022(3):e08569, doi: 10.1111/oik.08569

Computation and applications of Mathieu functions: A historical perspective

Brimacombe C, Corless RM, and Zamir M

SIAM Review, 2021, 63(4): 653–720, doi: 10.1137/20M135786X

Network ecology in dynamic landscapes

Fortin MJ, Dale MRT, and Brimacombe C

Proceedings of the Royal Society B, 2021, 288(1949): 20201889, doi: 10.1098/rspb.2020.1889

Inferred seasonal interaction rewiring of a freshwater stream fish network

Brimacombe C, Bodner K, and Fortin MJ

Ecography, 2021, 44(2): 219–230, doi: 10.1111/ecog.05452

Ten simple rules for tackling your first mathematical models: A guide for graduate students by graduate students

Bodner K, Brimacombe C, Chenery ES, Greiner A, McLeod AM, Penk SR, and Vargas Soto JS

PLOS Computational Biology, 2021, 17(1): e1008539, doi: 10.1371/journal.pcbi.1008539

Legislative correlates of the size and number of protected areas in Canadian jurisdictions

Leroux SJ, Brimacombe C, Khair S, Benidickson J, and Findlay CS

Biological Conservation, 2015, 191: 375–382 doi: 10.1016/j.biocon.2015.07.016

Book Chapters

Network framework for forest management

Filotas É, Aquilué N, Brimacombe C, Drapeau P, Keeton W, Kneeshaw D, Messier C, Witté I, and Fortin MJ

Springer, 2022

Teaching (TA)

Ecology and Evolutionary Biology (UofT)

2019–2021

EEB365H1 S: Topics in Applied Conservation Biology

Ecology and Evolutionary Biology (UofT)

Fall 2019

EEB430H: Modeling in Ecology and Evolutionary Biology

Department of Biology (UWO)

2014–2015

BIO2244: Analysis and Interpretation of Biological Data

Talks and Posters

Talk: Empirical networks are messy: Inferential networks and their use across space and time

Ecological Society of America, 2022

Talk: Are modularity, specialization, or nestedness linked to seasonal climatic variability in bipartite networks across large spatial extents?

Ecological Society of America, 2022

Talk: Do bipartite networks exhibit structural patterns across large spatial extents?

Canadian Society for Ecology and Evolution Annual Meeting, 2021

Talk: The importance of ecological networks

Atwood graduate research conference, 2021

Poster: Seasonal interactions and rewiring in freshwater stream fish networks

Ecological Society of America, 2020

Poster: Blood flow in elliptic tubes

UWO Undergraduate Applied Math Research Conference, 2018

Poster: Blood flow in elliptic tubes

UWO Undergraduate Applied Math Research Conference, 2017

Reviewer

Methods in Ecology and Evolution

Skills

Programming: Maple, R, Matlab, and Python

Document presentation: Microsoft Office, \LaTeX , and the Adobe suite