

Vita

Candidate's name: Hannah Ada Brazeau

Universities
Attended: Algoma University (2018)
Bachelors of Science
Honours Biology

University of New Brunswick (2020)
Masters of Science
Biology

Conference Presentations:

Brazeau HA, Parachnowitsch AL, Schamp BS. November 7, 2020. Temporal dynamics of functional overlap in an old-field plant community. Contributed talk – Canadian Society of Plant Biologists Meeting. Online.

Brazeau HA, Vézina L, Schamp BS, Parachnowitsch AL. November 7, 2020. Manipulation of a floral landscape did not alter pollen transfer. Poster – Scandinavian Association for Pollination Ecology Meeting. Online.

Brazeau HA, Schamp BS, Parachnowitsch AL. August 19, 2019. Effects of pollinator sharing on floral traits in *Chamerion angustifolium*. Poster – Joint Meeting of the Canadian Society for Ecology and Evolution, the Entomological Society of Canada, and the Acadian Entomological Society. Fredericton, NB.

Brazeau HA, Schamp BS, Parachnowitsch AL. April 12, 2019. Does competition for pollination alter pollinator-mediated selection on floral traits? M.Sc. Proposal Presentation. Fredericton, NB.

Brazeau HA, Schamp BS. July 20, 2018. Testing the link between negative co-occurrence and competition. Contributed talk – Canadian Society for Ecology and Evolution Meeting. Guelph, ON.

Temporal dynamics of functional trait overlap in an old-field plant community

UNIVERSITY OF NEW BRUNSWICK

THESIS DEFENCE AND EXAMINATION

in Partial Fulfillment

of the Requirement for the Degree of
Master of Science

by

Hannah A. Brazeau

in the Department of Biology

U.N.B., Fredericton, N.B.

**Friday, December 11th, 2020
12:00 p.m.**

Via MS TEAMS

Examining Committee

Dr. Amy Parachnowitsch

Dr. Brandon Schamp

Dr. Mark Sherrard

Dr. Cameron Wagg

Dr. Shawn MacLellan

Co-Supervisor

Co-Supervisor

Internal Examiner

External Examiner

Chair of Oral Examination

Abstract

Studies of trait-based plant community dynamics typically rely on null model analyses of functional trait and plot-level composition data from a single growing season. The inclusion of community-level temporal dynamics, however, is vital in investigations of community dynamics as the type and strength of biotic and abiotic filters shaping the structure of plant communities may change through time. Oscillations between filter types may help explain the conflicting findings of previous single-year studies and provide a more accurate picture of how plant communities form and persist. Here, we use multivariate and univariate approaches to determine functional overlap in a long-term herbivore exclusion experiment in Ontario, Canada. We found that functional overlap changed across time without direction, differed between individual traits, was sensitive to herbivory, and varied within pollination systems. Our findings highlight the importance of using long-term data in trait-based community dynamics studies.