

Catherine Chamberlain

Phone: 248 953 0189

cchamberlain@g.harvard.edu

EDUCATION

Harvard University <i>Ph.D. in Organismic and Evolutionary Biology</i>	Cambridge, MA Expected 2021
Trinity College Dublin <i>M.S. in Biodiversity and Conservation</i>	Dublin, Ireland 2015
Michigan State University <i>B.S. in Zoology, Concentration in Ecology Evolution and Organismal Biology</i> <i>Minor in Spanish</i>	East Lansing, MI 2013

EXPERIENCE

Freelance Consultant The Nature Conservancy, Northampton, MA	2018-
<ul style="list-style-type: none">• Developing machine learning tool to identify camera trap images with a 12-member team• Coordinating with camera trap users nationwide to implement a standardized output for collaboration• Drafting landowner and forester handbooks for the New England <i>Family Forest Carbon Program</i>	
Data Scientist for Tree Spotters Citizen Science Project Harvard University - Arnold Arboretum, through the National Phenology Network	2016-
<ul style="list-style-type: none">• Analyzing data for 75 individuals across 15 tree species at the Arnold Arboretum• Accessing climate change impact on tree phenology• Prepare reports and deliver results to 5-member team and to active volunteers	
Research Technician Harvard University - Arnold Arboretum	Summer 2016
<ul style="list-style-type: none">• Developed models to investigate the effects of climate change on temperate trees	
Researcher Gorongosa National Park, Mozambique	Summer 2015
<ul style="list-style-type: none">• Assisted the research team with various vegetation surveys• Aided other researchers with behavioral studies of antelope in the park• Contributed samples to the herbarium	

PRESENTATIONS

Ecological Society of America <i>Climate change reshapes the major drivers of false spring risk across European trees</i> <i>New Tools for Analyzing and Sharing Wildlife Camera Images: Machine Learning and Online Databases to Minimize Time and Maximize Impact</i>	August 2020
European Geosciences Union, Talk <i>Climate change reshapes the major drivers of false spring risk across European trees</i>	May 2020
Extreme Climate Event Symposium, Talk <i>Climate change reshapes the major drivers of false spring risk across European trees</i>	February 2020
Canadian Society for Ecology and Evolution, Poster <i>The effects of false spring events on foliate phenophases and the duration of vegetative risk</i>	May 2017
Public Lectures: 12 public lectures in the Boston area	2016-

1 lecture series at the Arnold Arboretum

TEACHING

Mentor

Arnold Arboretum, Erin Wright, Darin Butz Summer 2019

Harvard University Alissandra Ayala, REU Program Summer 2019

Teaching Fellow, Harvard University

Introduction to Organismic and Evolutionary Biology Summer 2020

Biology of Plants Spring 2019

Understanding Darwinism Fall 2018 & Fall 2019

Teaching Assistant Trinity College Dublin, Dublin Ireland

Spring 2016

Field Skills in Conservation – Study Abroad in South Africa

PUBLICATIONS

Chamberlain, C. J., Cook, B. I., García de Cortázar-Atauri, I. & Wolkovich, E. M. 2019.

Rethinking false spring risk. *Global Change Biology*.

Chamberlain, C. J., Cook, B. I., Morales-Castilla, I. & Wolkovich, E. M. (*in review*).

Climate change reshapes the drivers of false spring risk across European trees.

Ettinger, A. K., **Chamberlain, C. J.**, Morales-Castilla, I., Buonaiuto, D. M., Flynn, D. F. B., Savas, T., Samaha, J. A. & Wolkovich, E. M. (*in review*). Chilling dominates spring phenological responses to warming.

Ettinger, A. K., Buonaiuto, D.M., **C. J. Chamberlain**, Morales-Castilla, I., Wolkovich, E.M. (*in review*). Spatial and temporal shifts in photoperiod with climate change

Wolkovich, E.M., **Chamberlain, C.J.**, Buonaiuto, D.M., Ettinger, A.K., Morales-Castilla, I., Gelman, A. & Auerbach, J., (*in review*). A simple explanation for declining temperature sensitivity with warming

SKILLS

Quantitative: Mixed-effects including Bayesian approaches, meta-analysis statistics, climate change analyses and model building

Computer languages: Git, LaTeX, R, Stan, Sweave, RMarkdown, Microsoft Office Suite, Machine Learning skills, basic Python and Shell skills

Field and Mapping skills: ArcGIS and QGIS, Trimble and Garmin GPS units, field surveys, ecological sampling methodologies, camera traps

Languages: basic knowledge of Spanish

Miscellaneous: CPR/First Aid Certified