Kimberly J. Gilbert — Ph.D. Candidate

CONTACT INFORMATION

Department of Zoology
The University of British Columbia
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EDUCATION

Ph.D. Zoology, University of British Columbia — 2011 – Present
Advisor: Dr. Michael C. Whitlock

B.Sc. Biology, University of Virginia — 2006 – 2010
Graduated with Distinction
Specialization in environmental & biological conservation

AWARDS & FUNDING

Zoology Graduate Fellowship, UBC	2014 – 2015
Zoology Graduate Student Travel Award, UBC	2014
Frieda Granot Graduate Scholarship in Interdisciplinary Research	2013 – 2014
Theodore E Arnold Fellowship	2013 – 2014
Patrick David Campbell Graduate Fellowship	2013 – 2014
Declined; Zoology Graduate Fellowship, UBC	2013 – 2014
Zoology Graduate Student Travel Award, UBC	2013
CIEE Synthesis Meeting Travel Grant, Landscape Genetics Graduate Seminar	2012
BRITE Fellowship, UBC	2011 – 2013

PUBLICATIONS

[1] Caplins SA, **KJ Gilbert**, C Ciotir, J Roland, SF Matter, N Keyghobadi (*In Press*) Landscape structure and the genetic effects of a population collapse. *Proceedings of the Royal Society B*.

[2] **Gilbert KJ**, MC Whitlock (*In Press*) Q_{ST}-F_{ST} comparisons with unbalanced half-sib designs. *Molecular Ecology Resources*.

[3] Vines TH, AYK Albert, RL Andrew, F Débarre, DG Bock, MT Franklin, **KJ Gilbert**, J-S Moore, S Renaut, DJ Rennison (2014) The availability of research data declines rapidly with age. *Current Biology*, 24, 94-97.

[4] Vines TH, RL Andrew, DG Bock, MT Franklin, **KJ Gilbert**, NC Kane, EJ Kleynhans, J-S Moore, BT Moyers, S Renaut, DJ Rennison, T Veen, S Yeaman (2013) Mandated archiving greatly improves access to research data. *FASEB Journal*, 27(4), 1304-1308.

[5] **Gilbert KJ**, RL Andrew, DG Bock, MT Franklin, NC Kane, J-S Moore, BT Moyers, S Renaut, DJ Rennison, T Veen, TH Vines (2012) Recommendations for utilizing and reporting population genetic analyses: The reproducibility of genetic clustering using the program STRUCTURE. *Molecular Ecology*, 21(20), 4925-4930.

[6] Keller SR, **KJ Gilbert**, PD Fields, DR Taylor (2012) Bayesian inference of a complex invasion history revealed by nuclear and chloroplast genetic diversity in the colonizing plant, *Silene latifolia*. *Molecular Ecology*, 21(19), 4721-4734.

[7] Whitlock MC, **KJ Gilbert** (2012) Q_{ST} in a hierarchically structured population. *Molecular Ecology Resources*, 12(3), 481–483.

Invited Seminars & Workshops

Duke University Pop Bio Seminar Series — December 2014
Invited Seminar: Gene flow, local adaptation, and effective population size

Reproducible Science Hackathon, NESCent Working Group — December 2014
A 20-member working group aiming to develop a curriculum and workflow for teaching reproducible science

SimBank, NESCent Catalysis Meeting — November 2014
A 25-member working group aiming to create a collection of openly available simulation results to facilitate testing of statistical population genetic and phylogeographic methods

Presentations

Evaluating methods for estimating effective population size in the presence of migration – KJ Gilbert & MC Whitlock

2014 *Talk:* Evolution 2014 Meeting, Raleigh, NC, USA

2014 *Talk:* Evo-WIBO Conference (Evolutionary Biology in the Pacific Northwest)

Estimating effective population size in natural populations: Are we making assumptions we should not be making? – KJ Gilbert, PD Fields, DR Taylor

2013 *Talk:* Evolution 2013 Meeting, Snowbird, Utah, USA

2013 *Talk:* Canadian Society for Ecology and Evolution (CSEE), Kelowna, BC

Local adaptation in the lodgepole pine (*Pinus contorta*). – KJ Gilbert & MC Whitlock

2012 *Talk:* SFU-UBC-UVic Ecology and Evolution Retreat, Brackendale, BC

Effective population size estimates in a demographically and genetically monitored metapopulation of *Silene latifolia*. – KJ Gilbert, PD Fields, DR Taylor

2012 *Poster:* Evolution Ottawa, 1st Joint Congress on Evolutionary Biology

Range expansion and adaptation across heterogeneous environments.
– KJ Gilbert & MC Whitlock

2012 *Talk:* Landscape Genetics Symposium, CIEE Graduate Mini-Course, Toronto

2012 *Poster:* Evo-WIBO Conference (Evolutionary Biology in the Pacific Northwest)

Inferred invasion history of *Silene latifolia* into North America utilizing population genetic data and approximate Bayesian computation.
– KJ Gilbert, SR Keller, PD Fields, DR Taylor

2011 *Poster:* 13th Congress of the European Society for Evolutionary Biology, Tuebingen, Germany

2011 *Poster:* SFU-UBC-UVic Ecology and Evolution Retreat, Brackendale, BC

Teaching Experience

Fundamentals of Evolutionary Biology, BIOL 336
Fall 2012, Spring 2013
- Discussion-based tutorial covers natural selection, population genetics, quantitative genetics, systematics, and classical and molecular approaches to the study of evolution.
- Three discussion sections of 45 students total per semester

Fundamentals of Biostatistics, BIOL 300
Fall 2013, Fall 2014
- Statistical procedures for biological research; estimation, hypothesis testing, goodness of fit, analysis of variance and regression; use of computers for statistical analysis.
- Two sections of 70 students total in 2013, one section of 36 students and served as lab coordinator in for 250 students enrolled in course in 2014

Volunteer & Outreach

Reviewer for *Molecular Ecology Resources*, *Ecology and Evolution*, *Tree Genetics & Genomes*

Graduate Student Council Member, American Society of Naturalists 2013 – 2016

- Organized the student-mentor mixer at the 2014 Evolution Meeting in Raleigh, NC
- Serve on the workshops committee for ASN-sponsored workshops

Faculty Search Committee: Graduate Student Representative 2014

- Evolutionary biology CRC2 job search for the Department of Zoology, University of British Columbia

Volunteer mist-netting and bird banding with Wild Research 2013 – Present

- Participate in winter, spring migration, and fall migration bird monitoring at Iona Island Bird Observatory, Vancouver, BC
- Teach proper bird handling, aging, data collection, and mist net extraction techniques to new volunteers
- Assist in teaching other volunteers and visitors to the station about the species conservation and monitoring, and the general tasks of running a banding station

Previous Research Experience

Independent Study & Research Technician September 2009 – June 2011

- Taylor Lab, University of Virginia – Evolution and Population Genetics Laboratory
- Genetic analysis of metapopulation processes in the Silene-Micobotryum host-pathogen system
  Supervisors:
  - Dr. Douglas R. Taylor, Professor, Dept. of Biology, Univ. of Virginia
  - Peter D. Fields, Ph.D. Candidate, Dept. of Biology, Univ. of Virginia
  - Dr. Janis Antonovics, Lewis and Clark Professor of Biology, Dept. of Biology, Univ. of Virginia

Field Technician & Research Assistant May 2009 – August 2009

- Blandy Experimental Farm – The University of Virginia
- Field research on effects of tropospheric ozone on native vs. invasive tree species
  Supervisors:
  - Dr. David E. Carr, Research Associate Professor, Dept. of Environmental Sciences; Director, Blandy Experimental Farm, Univ. of Virginia
  - Eric E. Elton, Ph.D. Candidate, Dept. of Environmental Sciences, Univ. of Virginia

Bird Banding Intern May 2008 – August 2008

- Monitoring Avian Productivity and Survivorship (MAPS) – The Institute for Bird Populations
- Extracted, banded, and processed passerines and near-passerines during summer breeding season to monitor populations of local species
  Supervisory Biologist:
  - James Junda