

CONTACT INFORMATION	<p>Department of Zoology The University of British Columbia 6270 University Boulevard Vancouver, BC V6T 1Z4, Canada</p>	<p>E-mail: kgilbert@zoology.ubc.ca Website: http://kjgilbert.github.io/</p>
EDUCATION	<p>Ph.D. Zoology, University of British Columbia <i>Advisor: Dr. Michael C. Whitlock</i></p> <p>B.Sc. Biology, University of Virginia Graduated with Distinction Specialization in environmental & biological conservation</p>	<p>2011 – Present</p> <p>2006 – 2010</p>
AWARDS & FUNDING	<p>Affiliated Fellowships, UBC</p> <p><i>Declined</i>; Zoology Graduate Fellowship, UBC</p> <p>Ann and William Messenger Graduate Fellowship, UBC</p> <p>Zoology Graduate Fellowship, UBC</p> <p>Zoology Graduate Student Travel Award, UBC</p> <p>Frieda Granot Graduate Scholarship in Interdisciplinary Research</p> <p>Theodore E Arnold Fellowship</p> <p>Patrick David Campbell Graduate Fellowship</p> <p><i>Declined</i>; Zoology Graduate Fellowship, UBC</p> <p>Zoology Graduate Student Travel Award, UBC</p> <p>CIEE Synthesis Meeting Travel Grant, Landscape Genetics Graduate Seminar</p> <p>BRITE Fellowship, UBC</p>	<p>2015 – 2016</p> <p>2015 – 2016</p> <p>2015</p> <p>2014 – 2015</p> <p>2014</p> <p>2013 – 2014</p> <p>2013 – 2014</p> <p>2013 – 2014</p> <p>2013 – 2014</p> <p>2013</p> <p>2012</p> <p>2011 – 2013</p>
PUBLICATIONS	<p>[1] Gilbert KJ, MC Whitlock (<i>In Press</i>) Evaluating methods for estimating local effective population size with and without migration. <i>Evolution</i>.</p> <p>[2] Santiso X, L Lopez, KJ Gilbert, R Barreiro, MC Whitlock, R Retuerto (<i>In Press</i>) Patterns of genetic variation within and among populations in <i>Arbutus unedo</i> and its relation with selection and evolvability. <i>Perspectives in Plant Ecology, Evolution and Systematics</i>, doi: 10.1016/j.ppees.2015.02.006.</p> <p>[3] Gilbert KJ, MC Whitlock (2015) <i>Q_{ST}-F_{ST} comparisons with unbalanced half-sib designs</i>. <i>Molecular Ecology Resources</i>, 15(2), 262-267.</p> <p>[4] Caplins SA, KJ Gilbert, C Ciotir, J Roland, SF Matter, N Keyghobadi (2014) Landscape structure and the genetic effects of a population collapse. <i>Proceedings of the Royal Society B</i>. 281: 20141798; doi: 10.1098/rspb.2014.1798</p> <p>[5] 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. <i>Current Biology</i>, 24, 94-97.</p> <p>[6] 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. <i>FASEB Journal</i>, 27(4), 1304-1308.</p>	

- [7] **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.
- [8] 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.
- [9] Whitlock MC, **KJ Gilbert** (2012) Q_{ST} in a hierarchically structured population. *Molecular Ecology Resources*, 12(3), 481-483.

INVITED SEMINARS & WORKSHOPS

Invited Seminar: Estimating effective population size and the reproducibility of science

[Monash University](#) - Melbourne, VIC, Australia

February 2015

[Duke University Pop Bio Seminar Series](#) - Durham, NC, USA

December 2014

Reproducible Science Hackathon, [NESCent](#)

December 2014

21-member working group aiming to develop a curriculum and workflow for teaching reproducible science

[SimBank](#), [NESCent](#) Catalysis Meeting

November 2014

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

Validating SNP loci underlying local adaptation in lodgepole pine – KJ Gilbert, S Yeaman, KE Lotterhos, KA Hodgins, H Suren, JA Holliday, S Nadeau, SN Aitken, MC Whitlock

2015 *Poster:* 15th Congress of the European Society for Evolutionary Biology, Lausanne, Switzerland

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 254 students enrolled in course in 2014

VOLUNTEER & OUTREACH

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

Society member: American Society of Naturalists, Society for the Study of Evolution

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

- Evolution and Population Genetics Laboratory, University of Virginia
- 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