

Ivan C. Phillipsen

Department of Zoology
Oregon State University
Corvallis, OR 97331-2914

philliiv@science.oregonstate.edu
www.science.oregonstate.edu/~philliiv

CURRENT POSITION

Postdoctoral Scholar, Oregon State University, Corvallis. 2010-present

“Hydroecology of intermittent and ephemeral streams: will landscape connectivity sustain aquatic organisms in a changing climate?”

Advisor: David Lytle

EDUCATION

Ph.D. Zoology, Oregon State University, Corvallis. 2010

Dissertation research: Population genetics of ranid frogs— Investigating effective population size and gene flow

Advisor: Michael S. Blouin

M.S. Biology, California State University, San Bernardino. 2005

Thesis research: Phylogeography of a stream-dwelling frog (*Pseudacris cadaverina*) in southern California

Advisor: Anthony E. Metcalf

B.S. Zoology, California State Polytechnic University, Pomona. 2000

RESEARCH INTERESTS

Population genetics

Conservation genetics

Phylogeography

PUBLICATIONS

Phillipsen, IC, and DA Lytle. 2012. Aquatic insects in a sea of desert: population genetic structure is shaped by limited dispersal in a naturally fragmented landscape. *Ecography*. DOI: 10.1111/j.1600-0587.2012.00002.x

Daly-Engel, TS, RL Smith, DS Finn, ME Knoderbane, IC Phillipsen, and DA Lytle. 2012. 17 novel polymorphic microsatellite markers for the giant water bug, *Abedus herberti* (Belostomatidae). *Conservation Genetics Resources*. 4: 979-981

Phillipsen, IC, WC Funk, EA Hoffman, KJ Monsen, and MS Blouin. 2011. Comparative analyses of effective population size within and among species: ranid frogs as a case study. *Evolution*. 65: 2927-2945

Blouin, MS, IC Phillipsen, and KJ Monsen. 2010. Population structure and conservation genetics of the Oregon spotted frog, *Rana pretiosa*. *Conservation Genetics*. 11:2179-2194

Phillipsen, IC, J Bowerman, and MS Blouin. 2010. Effective number of breeding adults in the Oregon spotted frog (*Rana pretiosa*): genetic estimates at two life stages. *Conservation Genetics*. 11:737-745

Phillipsen, IC, and AE Metcalf. 2009. Phylogeography of a stream-dwelling frog (*Pseudacris cadaverina*) in southern California. *Molecular Phylogenetics and Evolution* 53:152–170

TEACHING EXPERIENCE

2010 – Guest lecturer: BI 545 Evolution

2010 – Guest lecturer: Z 577 Aquatic Entomology

2010 – Guest lecturer: MCB 530 Population Genetics

2007-2010 — Teaching Assistant, Oregon State University: BI 341,342,343 Anatomy and Physiology Laboratory

2006 — Teaching Assistant, Oregon State University: BI 211,212,213 General Biology Laboratory

2005, 2008 — Teaching Assistant, Oregon State University: BI 311 Genetics

2005 – Guest lecturer: BI 311 Genetics

2005 – Guest lecturer: GEN 530 Population Genetics

2003, 2005 — Teaching Assistant, Cal State San Bernardino: BIOL 202 General Biology Laboratory

2002-2005 — Laboratory Assistant, Cal State San Bernardino: BIOL 421 Genetics Laboratory, BIOL 400 Molecular Biology Laboratory

PROFESSIONAL EXPERIENCE

2006-2007— Research Assistant, Blouin Lab, Oregon State University

Performed laboratory crosses of freshwater snails (*Biomphalaria glabrata*) and genotyped the offspring to determine rate of recombination between two loci hypothesized to influence resistance to infection by schistosome parasites.

2001-2002 — Field Biologist, San Bernardino County Museum, California

Collected data on wild reptiles and amphibians on a daily basis, at numerous trapping locations, for a county-wide habitat conservation plan.

1999-2000 — President of Biological Sciences Club, Cal Poly Pomona

1999 — Research Assistant at the American Museum of Natural History's Southwestern Research Station, Arizona

Assisted Ronald D. Quinn (Cal Poly Pomona) by collecting field data for a study on the fire ecology of aspen trees in the Chiricahua Mountains of Arizona.

ADDITIONAL TRAINING

2006 — *Coalescent Theory and Markov Chain Monte Carlo Methods in Genetics* courses at Summer Institute in Statistical Genetics at University of Washington, Seattle

2002 — *Molecular Phylogenetics* course at the Summer Institute in Statistical Genetics at North Carolina State University, Raleigh

OTHER SKILLS

Geographic Information Systems (GIS)

Python programming

Statistical analysis using R

Scientific illustration

GRANTS and AWARDS

2009 — OSU Zoology Department Research Fund Award (ZoRF), \$500

2007 — Society of Wetland Scientists Student Grant, \$1000

2004 — Best Student Presentation in Evolution and Ecology, Southern California Academy of Sciences Annual Meeting

2004 — Conservation Biology and Natural Resources Fellowship, CSUSB, \$7,500

2004 — Joshua Tree National Park Association's Annual Competitive Research Grant, \$4,500

2003 — Associated Students Incorporated Research Grant CSUSB, \$1,300

2003 — Associated Students Incorporated Travel Grant CSUSB, \$600

2002 — Associated Students Incorporated Research Grant CSUSB, \$1,200

PRESENTATIONS

Presentation: Phillipsen, I.C., and M.S. Blouin. 2010. A landscape genetics evaluation of connectivity among Cascades frog (*Rana cascadae*) populations in Olympic National Park. Evolution Annual Meeting. Portland, Oregon.

Presentation: Phillipsen, I.C., and A.E. Metcalf. 2009. Phylogeography of a stream-dwelling frog (*Pseudacris cadaverina*) in southern California. Joint Meeting of Ichthyologists and Herpetologists. Portland, Oregon.

Presentation: Phillipsen, I.C., K.J. Monsen, and M.S. Blouin. 2009. Genetic evidence of historical demography in the Oregon spotted frog (*Rana pretiosa*): declines predate European settlement in the Pacific Northwest. Evolution Annual Meeting. Moscow, Idaho.

Poster: Phillipsen, I.C., J. Bowerman, and M.S. Blouin. 2008. Effective number of breeding adults in a population of the Oregon spotted frog, *Rana pretiosa*. EVO-WIBO. Port Townsend, Washington

Presentation: Phillipsen, I.C., and A. E. Metcalf. 2004. Molecular ecology of a riparian amphibian in southern California: The California treefrog. Southern California Academy of Sciences. Long Beach, California.

Presentation: Phillipsen, I.C. 2004. Treefrogs of Joshua Tree National Park. The Desert Institute: Second Friday Old Schoolhouse Lecture Series. Twentynine Palms, California.

Presentation: Phillipsen, I.C. 2004. Frogs and Toads of the Desert. 24th Annual Natural Science Symposium at the Palm Springs Desert Museum. Palm Springs, California.

Poster: Phillipsen, I.C., and A.E. Metcalf. 2004. Molecular Ecology of the California Treefrog: Genetic diversity among watersheds in southern California. Water Resources Institute. Ontario, California.

Poster: Phillipsen, I.C., and A.E. Metcalf. 2002. The California treefrog as an indicator of biological linkage among watersheds in southern California. Water Resources Institute. Ontario, California.

SERVICE and OUTREACH

2010— Winter Wonderings precollege program for 3rd-6th graders
Organized and presented a lesson on amphibians.

2007 — Graduate Student-Faculty Relations Committee, Department of Zoology, Oregon State University

Manuscript reviewer for *Molecular Ecology*, *Journal of Zoology*, and *Molecular Phylogenetics and Evolution*

SOCIETY MEMBERSHIP

Society for the Study of Evolution
Ecological Society of America