Elise A. Larsen

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Washington D.C., 20057

Education

Ph.D., Biology, University of Maryland (UMD) 2013
- Advisor: Bill Fagan. Dissertation Topic: Avian community responses to ecological disturbance and recovery at Mount St. Helens

M.S., Biology, College of William and Mary (W&M) 2008
- Advisor: Bryan Watts, Center for Conservation Biology. Thesis Topic: Effects of Urban Development on Breeding Bird Diversity: the role of diet and migration

B.S., Zoology, Concentration in Environmental Biology, Michigan State University (MSU) 2001
- Phi Beta Kappa, Golden Key, Honors College

Publications

E.A. Larsen, C.M. Crisafulli, and W.F. Fagan. Local and regional colonization patterns identified using a novel approach to defining regional species pools. Submitted to **Ecography**.

J. Thorson, J. Ianelli, **E. Larsen**, M. Scheuerell, C. Szuwalski, and E. Zipkin. 2016. Joint dynamic species distribution models: a tool for community ordination and spatiotemporal monitoring. **Global Ecology and Biogeography.**

K.A. Olson**, E.A. Larsen**, T. Mueller, P. Leimgruber, T.K. Fuller, G.B. Schaller and W.F. Fagan. 2014. Survival probabilities of adult Mongolian gazelles**. Journal of Wildlife Management *78*(1): 35-41.**

K.R.B. Schmitt*, **E.A. Larsen*,** M.W. Miller, A. Andrew, A.H.A. Badaway, M. Dougherty, K. Hrapczynski, B. . Robertson, A. Taylor, A. Williams, S. Kramer, and S. Benson. 2013. A survey tool for assessing student expectations early in a semester. **Journal of Microbiology and Biology Education *14*(2): 255.** *co-first-authors

W.F. Fagan, Y. Pearson, **E. Larsen**, J.B. Turner, H.J. Lynch, H.Staver, J. Turner, A. E. Noble, S. Bewick, and E. Goldberg. 2013. Phylogenetic prediction of the maximum per capita rate of population growth. **Proceedings of the Royal Society, Series B 280: 20130523**

K.R.B. Schmitt, A.H.A. Badaway, S. Kramer, K. Hrapczynski, **E. Larsen**, A. Andrew, A. Taylor, A. Williams, S. Benson, M. Dougherty, M. Miller, and B. Robertson. 2013. Student expectations from CS and other stem courses: they aren't like CS- majors! or (CS !=Stem-CS). ***J. Comput. Sci. Coll.* 28(6): 100-108.**

E.A. Larsen, W.F. Fagan, J.M. Calabrese and M. Rhainds. 2013. Female mating failure in nonautonomous spatial population models with protandry. **Entomologia Experimentalis et Applicata 146: 130-140. #Invited Paper**

W.F. Fagan, C. Cosner, **E.A. Larsen** and J.M. Calabrese. 2010. Reproductive Asynchrony in Spatial Population Models: How Mating Behavior Can Modulate Allee Effects Arising from Isolation in Both Space and Time. **The American Naturalist 175: 362-373.**

Working Groups and Research Networks

Invited Member, Models for Citizen Science Insect Data, SESYNC 2014-Present
Member, Phenotype Research Coordination Network 2014-Present
Invited Member, ABI Development: Access, visualization and statistical tools for the analysis of butterfly monitoring data, NSF 2012

Research Experience

Post Doctoral Fellow, Georgetown University 2016-Present
- Mentor: Leslie Ries
- Tools for analysis of citizen science butterfly monitoring data
- Species physiological traits database including OCR and image analysis
- Thermal ecology, phenology, and population dynamics of N. American butterflies

Postdoctoral Research Associate, SESYNC 2013-2016
- Mentor: Leslie Ries (see above)

Graduate Student and Research Assistant, Fagan Biology Lab, UMD 2007-2013

- Successional dynamics and bird community composition at Mount St. Helens
  - Spatial analysis of regional dispersal and "regional species pool" scaling
  - Test of community assembly hypotheses
  - Field transect surveys of birds, nest monitoring, vegetation sampling
- Phylogenetic analysis of maximum population growth rate [RA 2010-2012]
- Theoretical modeling of populations with reproductive asynchrony and voltinism

Researcher, Oceanites Inc. 2008 - 2013

- Surveying penguin & seabird colonies in the Antarctic Peninsula region
- Biologist ambassador to Antarctic tourists including research lectures

Graduate Student, Center for Conservation Biology, W&M 2005-2007

- Spatial analysis of land use and human population on avian diversity

Volunteer, Fairfax County Stream Monitoring Program 2004-2005

Volunteer / Contract Employee, Patuxent Wildlife Research Center, USGS 1999-2001

- Field work, sample preparation for contaminant exposure and effects in Osprey
- Contaminant database http://www.pwrc.usgs.gov/CEETV/

Other Professional Experience

AIMS Coordinator, American Bird Conservancy 2002-2005

- Managed the Avian Incident Monitoring System (AIMS) including pesticide research trial and web-accessible database of pesticide poisonings in wild birds in the U.S.

Grants, Awards, and Fellowships (Awarded to E. Larsen unless otherwise noted)

Jacob K. Goldhaber Travel Grant, UMD Graduate School. $500 2012

DC Lilly Conference Grant, UMD Center for Teaching Excellence. [Expenses] 2011, 2012

Graduate Lilly Fellowship, UMD Center for Teaching Excellence. $1000 2011-2012

Exploration and Field Research Grant, Explorers Club Washington Group. $2400 2010

Departmental Excellence & Innovation in Undergraduate Teaching Award, UMD Center for Teaching Excellence. Awarded to the Interdisciplinary Math 130/131 Team. 2008-2009

Graduate Student Summer Research Fellowship, UMD. $5000 2009

Eloise Gerry Fellowship, UMD Biology Department. [tuition and stipend] 2007

Honorable Mention for Excellence in Scholarship, W&M Graduate Research Symposium 2007

Bill Sheehan Ornithology Research Grant, Williamsburg Bird Club. $500 2007

Outstanding Teaching Assistant Award, W&M Biology Department. $200 2006

U.S. Environmental Protection Agency Cooperative Agreement. Awarded to American Bird Conservancy, Avian Incident Monitoring System (ABC-AIMS). $61,104 2005

U.S. Environmental Protection Agency Cooperative Agreement. Awarded to ABC-AIMS. $50,000 2004

Teaching Experience

TA, Calculus for Life Sciences I & II, UMD 2008-2010

- Prepared teaching materials including biology modules and quizzes. Fall 2012
- Instructed students in calculus and its applications in biology.
- Facilitated student review sessions, tutoring. Graded coursework and exams.

GA, Calculus for Life Sciences I & II, UMD 2007-2008

- Developed course materials for biological applications of math skills

Guest Lecturer, Integrative Biology II, W&M 2007

- Topic: Embryogenesis in Plants. Wrote corresponding exam material.

TA, Integrative Biology I and II, W&M 2005-2007

- Prepared teaching materials including handouts, question sets, and quizzes.
- Instructed and supervised animal identification, dissections, and other course material.
- Responsible for course content and student evaluation for 40-50 students.
- Facilitated student review sessions, tutoring. Graded coursework and exams.

Small group and individual GED and ESOL instruction, BEACON Program 2003-2005

Curriculum development

Calculus for Life Sciences I & II, UMD 2007-2010

- Developed weekly modules and assignments using biological applications of math skills

TA, Integrative Biology I and II, W&M 2005-2007

- Prepared teaching materials including handouts, question sets, and quizzes.

Advising and Mentoring

Jessica Turner, UMD M.S. Student	2010-2011
High School Senior Research Project: Butterfly Ecology	2011
UMD Undergraduate, Bird Community Ecology	2011
REU from Univ. of Kentucky, Bird Community Ecology at Mount St. Helens	2010

Presentations, 2007-2014 (* indicates presenter)

Larsen, E.A.* "Estimating trends for North American butterflies using Citizen Science" Invited Talk, Institute of Environmental Sciences, Jagiellonian University, Poland. 2014

Larsen, E.A.* "Butterfly Population Trends: Insights from Citizen Science" SESYNC Seminar. 2014

Larsen, E.A.* "Avian community responses to ecological disturbance and recovery at Mount St. Helens, WA". Invited Talk, UMD, BEES Departmental Seminar. 2013

Larsen, E.A.*, A.H. Badaway*. "The Student-Faculty Chasm: Looking at where student and faculty expectations meet and diverge". DC Lilly Conference, Bethesda, MD. 2013

Larsen, E.A.*, C. Crisafulli, and W.F. Fagan**. "**Avian community assembly processes during primary succession". Talk, ESA Annual Meeting, Portland, OR. 2012

Larsen, E.*, K. Schmitt*, A. Andrew, A.H. Badawy, M. Dougherty, K.M. Hrapczynski, M. Walker Miller, B. Robertson, A. Taylor, A. Williams, S. Kramer, S. Benson. "From seed to STEM: Cultivating understanding of student and faculty classroom expectations" Invited Talk, UMD Center for Teaching Excellence Lilly Showcase, College Park, MD. 2012

Andrew, A., A.H. Badawy, M. Dougherty*, K.M. Hrapczynski*, **E. Larsen***, M. Walker Miller, B. Robertson, K. Schmitt, A. Taylor, A. Williams, S. Kramer, S. Benson. "Building a Tool for Pre-assessing Student Expectations" Poster, UMD GRID, College Park, MD. [Best Poster Award] 2012

Larsen, E.A.*"What we can learn from birds at Mount St. Helens?" Invited Talk, Explorer's Club Washington Group, Washington, D.C. 2011

E.A. Larsen* and B.D. Watts. "The impacts of urbanizing landscapes on bird diversity in the Mid-Atlantic Coastal Plain: the role of dietary guild." Poster, ESA Annual Meeting, San Jose, CA. 2007

Professional Service

Webmaster, Fagan Lab, UMD	2007 - 2013
Representative, Graduate Student Government, UMD	2008 - 2010
Graduate Student Representative, Conservation Biologist Search Committee, W&M	2007
Representative, Graduate Student Association, W&M (Treasurer in 2006-2007)	2005 - 2007

Professional Development

EOL-BHL Research Sprint	2013
Software Carpentry Workshop	2013
Ontologies for Evolutionary Biology, NESCent Workshop	2013
University Teaching and Learning Program, UMD Center for Teaching Excellence	2011 - 2013