

ELIZA HEERY

University of Washington – Department of Biology

Box 351800 – Seattle, WA 98195

ehery@uw.edu

EDUCATION

2011 – present	PhD student – Biology, University of Washington GPA: 3.9	Seattle, WA
2004 – 2007	MS – Fisheries Science, Virginia Tech GPA: 3.9	Blacksburg, VA
2002 – 2004	BS – Biology, Emory University GPA: 3.8	Atlanta, GA
2001 – 2002	East/West Marine Biology Program, <i>Northeastern University</i> GPA: 3.6	Friday Harbor, WA Discovery Bay, Jamaica
2000 – 2001	Major: Marine Science / Biology, <i>University of Miami</i> GPA: 3.2	Miami, FL

COURSEWORK

Communicating Ocean Sciences	Cell Biology	Fish Population Dynamics
Oceanography	Genetics	Biology and Ecology of Fishes
Ocean and Coastal Processes	Conservation Genetics	Fisheries Management
Phycology	Introductory Chemistry	Simulation Modeling
Marine Biology	Organic Chemistry	Linear Algebra
Invertebrate Zoology	Introductory Physics	Bayesian Statistics
Reef Systems Through Time	Population Dynamics of	Statistics in Research
Biology and Ecology of Corals	Infectious Disease	Ecological Modeling
Grant Writing	Ecological Modeling	Analytical Methods for
Coupled Human and Natural Systems	Urban/Environmental Planning	Community Ecology

RESEARCH EXPERIENCE

University of Washington Dec 2010 – present
Graduate Student, Department of Biology Seattle, WA

Developed graduate research project on urban marine ecosystems. Designed initial survey plan and identified key hypotheses based on survey results. Developed experiments to test hypotheses in the field. Compiled results in manuscripts for publication. Developed collaborative relationships with researchers from outside institutions in California and Italy. Wrote grant proposals and received funding from a variety of sources. Developed a website for recreational divers to provide information regarding urban marine ecology research questions. Collaborated with education researchers to identify effective teaching tools for introductory biology classes.

Northwest Fisheries Science Center (NOAA)

Jan 2008 – Nov 2010

Statistician, Pacific States Marine Fisheries Commission

Seattle, WA

Analyzed bycatch and discard data from West Coast groundfish fisheries. Estimated total annual fishing mortality and evaluated trends in bycatch over time. Used generalized linear models, multidimensional scaling, and other quantitative techniques to identify bycatch trends in observational data. Produced annual reports and manuscripts for publication. Planned a quarterly seminar series for the NWFSC.

Friday Harbor Laboratories

Oct 2007 – Dec 2007

Research Technician, Sebens Lab

Friday Harbor, WA

Assisted with digital photography of quadrats along permanent subtidal transects, analyzed quadrat photographs, compiled data for analysis, drove university boats, tended other divers, and helped undergraduates with statistical analyses.

Virginia Tech

Aug 2004 – May 2007

Graduate Research Assistant

Blacksburg, VA

Examined impact of biased biological data on age-structured population models. Constructed simulations and population models in R, Visual Basic, and Excel. Published and presented findings at scientific conferences. Attended regional meetings for fishery managers.

Chulalongkorn University

Jun 2002 – Jul 2002

Research Intern

Bangkok, Thailand

Assisted in a study that evaluated the effect of sea cucumber density on chlorophyll concentrations in sediments in the Gulf of Thailand. Collected specimens along underwater transects and extracted and measured chlorophyll from sediment and gut samples. Also reviewed manuscripts.

East/West Marine Biology Program

Aug 2001 – Mar 2002

Student

Friday Harbor, WA; Discovery Bay, Jamaica

Performed diving research at Friday Harbor Labs and Discovery Bay Marine Lab. Used transects, quadrats, settlement plates, light traps, underwater cages, sediment coring, and CTDs.

TEACHING EXPERIENCE**Roosevelt High School – UW/NSF GK-12 Program**

Seattle, WA

Graduate Teaching Fellow: Introductory Biology, Precalculus (H)

Aug 2011 – present

Developed curriculum and taught five classes per day, two days per week, as part of the National Science Foundation's GK-12 program, which is aimed at getting graduate students into high school classrooms. Received intensive training on curriculum development and the learning cycle from the GK-12 program. Worked closely with Roosevelt teachers to integrate new curriculum with learning standards and to develop and implement effective assessment techniques.

University of Washington – Department of Biology

Seattle, WA

Graduate Teaching Assistant: Introductory Biology, Introductory Physiology, Invertebrate Zoology

Jan 2011 – Aug 2011

Led three lab sections of twenty to twenty four students each. Facilitated activities to accompany Introductory Biology lectures. Helped students complete in-class activities. Held office hours. Graded exams.

Wildlands Studies – California State University Monterey Bay Washington and Belize
Instructor: Pacific Northwest Ecology Program Sep 2009 – Oct 2009
Instructor: Belize Tropical Ecology Program Jun 2007 – Aug 2007
Co-instructed undergraduate field courses in temperate and tropical ecology and ecological research techniques. Designed lectures, developed laboratory activities, selected reading assignments, and facilitated field exercises that familiarized students with marine ecology field research. Managed budget, planned travel logistics, and supervised 9-16 students.

Virginia Tech – Department of Fisheries and Wildlife Blacksburg, VA
Graduate Teaching Assistant: Marine Conservation Biology Seminar Aug 2005 – Dec 2005
Graduate Teaching Assistant: Marine Resource Population Dynamics Jan 2005
Developed syllabus and compiled readings and discussion topics for graduate seminar discussions. Presented background life history information for species used as population modeling case studies. Assisted professors with logistical planning and supervised computer lab activities.

Kittredge School – Summer School Program San Francisco, CA
Extended Day Instructor May 2004 – Aug 2004
Supervised Extended Day activities for elementary and middle school students, including study hall, outdoor programs, field trips, and organized sports. Worked with summer school teachers to ensure that students were getting the attention and assistance they needed to complete homework assignments effectively and grasp new concepts.

PRISM Program – Emory University Atlanta, GA
Undergraduate Teaching Fellow Jan 2004 – May 2004
Participated in weekly trainings on problem-based learning (PBL) and its application in science and math classrooms at the middle-school, high-school, and college level. Facilitated PBL case studies in local middle schools.

California Academy of Sciences – Education Department San Francisco, CA
Intern May 1999 – Aug 2001
Conducted teaching and outreach activities on the museum floor and at local elementary and middle schools. Developed curriculum materials for interactive museum teaching stations, supervised summer camps, and participated in weekly teaching trainings hosted by the Education Department.

HONORS

National Honors Society, Phi Kappa Phi, Dean's List (*Virginia Tech*), Dean's List (*Emory University*), International Scholars Grant (*Emory Institute for Comparative and International Studies*), Robert Jones Scholarship Finalist (*Emory University*), Ethics and Servant Leadership Fellow (*Emory Center for Ethics*), Academic Scholarship (*University of Miami*)

GRANTS AND FELLOWSHIPS AWARDED

R.T. Paine Experimental and Field Ecology Award (2013)
NSF Integrative Graduate Education and Research Traineeship Fellowship (2012)
NSF Graduate Teaching Fellowship in K-12 Education (2011)

SKILLS, CERTIFICATIONS & ACTIVITIES

Computer Skills	R, Tinn-R, SAS, Visual Basic, Matlab, WinBUGS, Microsoft Excel, Word, PowerPoint, Adobe Photoshop, Illustrator, and Framemaker, ImageJ, Coral Point Count, Google SketchUp.
Diving Certifications	Divemaster (NAUI – 2004), Scientific diver (AAUS – 2001), Rescue (PADI – 2001), Advanced Open Water (PADI – 1999), Open Water (PADI – 1998)
Volunteer Experience	Youth Tutoring Program, Tutor (2008: <i>Seattle, WA</i>) Refugee Family Services, Tutor (2002-2004: <i>Atlanta, GA</i>) Hands On Atlanta, Intern (2003: <i>Atlanta, GA</i>) California Academy of Sciences, Intern (1998-2001: <i>San Francisco, CA</i>) Romberg Tiburon Center, Volunteer technician (1998-2000: <i>Tiburon, CA</i>)
Community Involvement	VamoLa! Community Samba Band, Percussionist (2008-present: <i>Seattle, WA</i>) Delridge Day, Volunteer (2012: <i>Seattle, WA</i>)

PUBLICATIONS & PRESENTATIONS

Heery, E. and J. Cope. In Review. Co-occurrence of bycatch and target species in the U.S. west coast groundfish demersal trawl fishery.

Bellman, M. and E. Heery. 2013. Discarding and fishing mortality trends in the U.S. west coast groundfish demersal trawl fishery. *Fisheries Research* 147: 115-126.

Heery, E. and J. Berkson. 2009. Systematic errors in length frequency data and their effect on age-structured stock assessment models and management. *Transactions of the American Fisheries Society* 138: 218-232.

Heery, E. and J. Berkson. 2007. The impact of biased length frequency data on age-structured stock assessment models. Presented at the 137th annual meeting of the American Fisheries Society, San Francisco, CA.

Heery, E. and J. Berkson. 2006. The impact of biased length frequency data on marine population models. Presented at the 91st annual meeting of the Ecological Society of America, Memphis, TN.

Chavanich, S., V. Viyakam, E. Heery and C. Raksataub. 2003. Effect of densities of the sea cucumber, *Holothuria atra*, on chlorophyll concentrations in sediments. Presented at the 32nd annual Benthic Ecology Meeting, Groton, CT.

References available upon request

University of Washington, Department of Biology

Box 351800, Seattle, WA 98195

ehery@uw.edu