Dana Morton

Curriculum Vitae

Ecology, Evolution, and Marine Biology University of California, Santa Barbara Santa Barbara, CA 93106 dana.morton@lifesci.ucsb.edu

RESEARCH INTERESTS

I am specifically interested in the ecology of parasitism in marine ecosystems. In particular, I seek to understand the relationship between parasite diversity and ecosystem health and food web stability, as well as the community level effects of host manipulation. I am also interested in the role of biogenic habitats (e.g. giant kelp forests) in population dynamics and community ecology, particularly concerning propagule dispersal and settlement success. I strive to conduct research that is integrative in nature, with strong linkages between ecology, evolution, and the physical environment, and that is also directly useful to conservation and management.

EDUCATION

University of California, Santa Barbara

Ph.D. Candidate, Graduation Expected June 2018

Ecology, Evolution, and Marine Biology

Advisors: Armand Kuris and Kevin Lafferty

GPA: 4.0

San Diego State University

M.S. in Biology

Advisor: Todd Anderson Received May 2012

GPA: 4.0

University of California, Santa Cruz

B.S. in Marine Biology with Highest Honors

Received June 2007

GPA: 3.9

PUBLICATIONS

- Morton, D. N., and T. W. Anderson. 2013. Spatial patterns of invertebrate settlement in giant kelp forests. *Marine Ecology Progress Series*. 485: 75-89.
- Morton, D. N., and J. S. Shima. 2013. Habitat configuration and availability influences the settlement of temperate reef fishes (Tripterygiidae). *Journal of Experimental Marine Biology and Ecology*. 449: 215-220.
- Morton, D. N., T. W. Bell, and Anderson T. W. Spatial heterogeneity of amphipods in giant kelp forests. In preparation for submission to *Marine Biology* in 2015.

HONORS AND AWARDS

- Lerner Gray Memorial Fund (\$2000) May 2014
- Lewis and Clark Fund for Field Exploration (\$4500) May 2014
- Ford Foundation Predoctoral Fellowship Honorable Mention 2013
- UC Santa Barbara Graduate Fellowship, September 2012 March 2013
- Fulbright Graduate Student Award, November 2011 September 2012
- COAST Student Travel Award, December 2010
- Jordan D. Covin Memorial Scholarship, September 2010
- Mabel Myers Memorial Scholarship, September 2009
- Highest Honors in Major, University of California, Santa Cruz, June 14, 2007
- Regent's Scholarship, University of California, Santa Cruz, September 2003-June 2007
- Member of Phi Beta Kappa Honor Society, Inducted June 2007

PREVIOUS RESEARCH EXPERIENCE

Fulbright Graduate Research

November 2011 – September 2012, Victoria University of Wellington, New Zealand Conducted a field study with Dr. Jeff Shima examining the influence of habitat configuration and availability on the settlement of endemic triplefin fish (Tripterygiidae) off the coast of New Zealand to assess the role of landscape architecture on recruitment dynamics.

Masters Thesis Research

August 2009 – Present, San Diego State University, San Diego, CA
Examined the effect of giant kelp forests on settlement of invertebrate larvae in a
field study. Artificial substrates were used to quantify relative abundances of
settling invertebrates in the Point Loma kelp forest. Processing samples involved
many hours of lab work, so in order to complete processing in a timely manner, I
trained and supervised 22 undergraduate volunteers (over the course of a 2 year
period) in invertebrate taxonomy and preservation techniques.

Scientific Research Diver

January 2009, SDSU Research Foundation, San Diego, CA
Performed surveys for benthic algae and invertebrates at multiple Southern
California sites for the CRANE long term monitoring project.

Hawksbill Turtle Recovery Project Volunteer

June, 2007 – September, 2007, Hawaii Volcanoes National Park, Volcano, HI Monitored nesting beaches until 2 am each night for Hawksbill sea turtle nesting activity. When turtles arrived, nesting activity was documented and turtles were checked for tags. Tags were applied if none were present. Also monitored nests to insure that hatchlings reached the ocean and to collect data on nest success. In addition, introduced predators were trapped and euthanized humanely. Worked closely with a small group that rotated every few weeks, and participated in public outreach.

Ecology Lab Assistant

September 2006 – June 2007, UC Santa Cruz, Santa Cruz, CA Identified and counted insects collected by malaise traps in various farms and restoration areas. Also used Adobe Photoshop to quantify the area of leaf samples eaten by insects in order to analyze herbivore damage.

Summer Lab Assistant

July – September 2005, Lawrence Livermore National Laboratory, Livermore, CA Prepared soil samples for combustion to carbon dioxide, graphitized carbon dioxide samples, used hydrogen torch to vacuum seal samples and make sample tubes. Also cleaned lab areas and prepared lab materials.

PRESENTATIONS

- Annual Meeting of the American Society of Parasitologists, New Orleans, LA, July 2014
- Annual Meeting of the Western Society of Naturalists, Seaside, CA, November 2013
- Annual Meeting of the Western Society of Naturalists, Seaside, CA, November 2012
- Benthic Ecology Meeting, Mobile, Alabama, March 2011
- San Diego State University Student Research Symposium, San Diego, CA, March 2011
- Annual Meeting of the Western Society of Naturalists, San Diego, CA, November 2010

PROFESSIONAL ASSOCIATIONS

- Student member, Western Society of Naturalists
- Student member, American Academy of Underwater Sciences

TEACHING EXPERIENCE

Teaching Assistant

April 2013 – Present, UC Santa Barbara, Santa Barbara, CA

Taught two lab sections per week for EEMB 111 (Parasitology), 112 (Invertebrate Zoology), and 116 (Higher Invertebrates). Also served as a TA for EEMB 2 (Introduction to Ecology and Evolution, T. Even) during Summer Session B. In addition to running sections, lab courses require extensive set-up and clean-up twice per week, coordination of live demonstration material, and preparation of lab practical exams. EEMB 2 differed in that I briefly reviewed weekly lecture material, and guided a single group of ~150 students through problem sets utilizing the iClicker system.

Teaching Assistant

September 2008 – May 2011, San Diego State University, San Diego, CA

Taught two lab sections per week for undergraduate courses. Courses included a
biology lab for non-majors, an upper division course in ecology and the

environment, and biostatistics lab. Prepared and graded assignments, wrote exams, and instructed students in the use of statistical software and application of concepts learned in lecture.

Teaching Assistant

June – July 2005, UC Davis; Edward Teller Center, Livermore, CA
Assisted in a Crime Scene Investigation summer program for 6th graders.
Prepared materials for daily activities and instructed students in DNA extraction and electrophoresis.

SPECIALIZED SKILLS

- AAUS certified scientific diver (to 60 feet), California boat operator, New Zealand skipper certification, and have led many dive trips in the execution of my research.
- Proficient in SYSTAT and PRIMER-E statistical packages, as well as Sigma-Plot graphing software. Also familiar with Matlab.
- Trained and supervised a team of undergraduate volunteers in invertebrate identification and preservation techniques.

ADDITIONAL BACKGROUND

Study Abroad

Spring 2006, UC Education Abroad Program, Costa Rica

Took coursework in tropical ecology, botany, zoology, Spanish, and agroecology. Researched, designed and conducted an independent research project on the syconia (fig) selection criteria of the fig wasps *Pegoscapus mariae*, *P. carlosi*, and a non-pollinating species on *Ficus tuerckheimii*. The final project was presented at a student symposium.

Competitive Swimmer (NCAA Div III)

2003-2007, UCSC Swimming and Diving Team, Santa Cruz, CA Swam competitively for all four years at UCSC. Held several school records, qualified for NCAA Division III National Championships two years, and was cocaptain my senior year.