

CURRICULUM VITAE

Bonnie J. Ripley

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EDUCATION

- 1998 Ph.D. Massachusetts Institute of Technology/Woods Hole Oceanographic Institution Joint Program, Biological Oceanography.
1992 B.A. Occidental College, Biology/Marine Emphasis, French minor, *Phi Beta Kappa*, *Summa cum laude*

EMPLOYMENT HISTORY

- 9/14—current **Associate Professor of Biology w/ Tenure**
Teaching Excellence Award Spring 2015
Grossmont College, El Cajon CA
- 9/11—8/14 **Assistant Professor of Biology w/ Tenure**
Grossmont College, El Cajon CA
- 9/07—5/11 **Biology Instructor**
Grossmont College, El Cajon CA
- 9/06—8/07 **Staff Biologist**
TAIC, San Diego CA
- 6/05—7/06 **Post-Doctoral Research Scientist**
Southwest Fisheries Science Center, La Jolla, CA 92037
- 9/01—8/05 **Visiting Assistant Professor of Biology**
University of San Diego, San Diego CA
- 2003—2004 **Environmental Scientist**
BRG Consulting, Inc., San Diego CA
- 5/99—8/01 **SBIR Grant Writer & Sponsored Research Officer**
Botanical Enclosures, Spring Valley CA
- 2/98—4/99 **Environmental Scientist**
JSA Environmental, Long Beach CA

1989—1992

Undergraduate Research Assistant

Vantuna Research Group, Occidental College, Los Angeles CA

COURSES TAUGHT

Grossmont College

Evolution, Ecology and Organismal Bio w/ Lab (Bio240)

Zoology Laboratory (Biology 211)

Biostatistics (Biology 215)

Principles of Biology w/ Lab (Biology 120)

Environmental Biology Laboratory (Biology 110L)

University of San Diego

Population Biology Laboratory (Biology 416L)

Conservation Biology (Biology 364)

Biostatistics (Biology 301)

Graduate Statistics (Marine Science 520)

San Diego State University

Biology of Organisms--Invertebrates (Biology 204)

PUBLICATIONS

(undergraduate co-authors underlined, graduate student co-authors with asterisk)

Archer, F. I., K. M. Martien, B. L. Taylor, R. G. LeDuc, **B. J. Ripley**, G. H. Givens, and J. C. George (2010) A simulation-based approach to evaluating population structure in non-equilibril populations. *Journal of Cetacean Research and Management* 11(2): 101-113.

Ripley, Bonnie J. and Marie A. Simovich. (2009) Species richness on islands in time: variation in ephemeral pond crustacean communities in relation to habitat duration and size. *Hydrobiologia* 617: 181-196.

Ripley, Bonnie J. and Hal Caswell. (2008) Contributions of growth, stasis, and reproduction to fitness in brooding and broadcast spawning marine bivalves. *Population Ecology* 50: 207-214.

Ripley, Bonnie J. and Hal Caswell. (2006) Recruitment variability and population growth of the soft-shell clam, *Mya arenaria*. *Ecological Modeling* 193: 517-530.

Ripley, Bonnie J., Holtz, Janette* and Simovich, Marie A. (2004) Cyst bank life-history model for a fairy shrimp from ephemeral ponds. *Freshwater Biology* 49(3): 221-231.

Ripley, Bonnie J., Kirsten C. Davis, B. J. Carter, and Marie A. Simovich. (2002-2003) Toxicity of malathion and Roundup® to the San Diego fairy shrimp. *Transactions of the Western Section of the Wildlife Society* 38/39: 13-21.

McDowell, J.E., Lancaster, B.A., Leavitt, D.F., Rantamaki, P., and **Ripley, B. J.** (1999) The effects of lipophilic organic contaminants on reproductive physiology and disease processes in marine bivalve molluscs. *Limnology and Oceanography* 44: 903-909.

Parker, E.D., Jr., Forbes, V.E., Nielsen, S.L., Ritter, C., Barata, C., Baird, D.J., Admiraal, W., Levin, L., Loeschcke, V., Lyytikainen-Saarenmaa, P., Høgh-Jensen, H., Calow, P., and **Ripley, B.J.** (1999) Stress in ecological systems. *Oikos* 86:179-184.

Ripley, Bonnie J. (1998) Life history traits and population processes in marine bivalve mollusks. Ph. D. Thesis, Massachusetts Institute of Technology and Woods Hole Oceanographic Institution 98-05.

SCIENTIFIC PRESENTATIONS

- 2005** Simovich, M. A. and **B. J. Ripley.** Survey and checklist of San Diego County vernal pool crustacean fauna (poster), Western Section of the Wildlife Society, Sacramento.
Ripley, B. J., A. J. Bohonak, M.A. Simovich. Magnitude of environmental variation and mechanisms of hatching in ephemeral pool crustaceans (oral), Society for Integrative and Comparative Biology, San Diego, CA
Frost, A., **B. J. Ripley**, S. Valero*, and M. A. Simovich. Apparent disequilibrium and reproductive isolation in an endangered fairy shrimp (poster), Society for Integrative and Comparative Biology, San Diego, CA
- 2003** **Ripley, B. J.**, M. A. Simovich. Vernal pool crustacean community variation over space and time (oral), Western Section of the Wildlife Society, Irvine, CA.
Simovich, M. A., **B. J. Ripley.** Sampling design and management for Southern California vernal pools (oral), Western Section of the Wildlife Society, Irvine, CA.
Davis, K. C., **B. J. Ripley**, and M. A. Simovich. Acute toxicity of malathion and Round-up to the endangered San Diego fairy shrimp, *Branchinecta sandiegonensis* (oral), Western Section of the Wildlife Society, Irvine, CA.
- 2002** **Ripley, B. J.**, L. Vergara, J. Torres, J. Holtz*, and M.A. Simovich. 2002. Cyst size in relation to female size in the San Diego fairy shrimp *Branchinecta sandiegonensis* (poster), Society for Integrative and Comparative Biology, Anaheim CA.
- 2001** **Ripley, B. J.**, Holtz, J.* and Simovich, M. A. Cyst bank life-history model for a fairy shrimp from ephemeral ponds (oral), American Society for Limnology and Oceanography, Albuquerque, NM
- 2000** Owens, C., **B. J. Ripley**, and M. A. Simovich. Toxicity of malathion to the endangered vernal pool branchiopod, *Branchinecta sandiegonensis* (poster), The Crustacean Society, Puerto Vallarta, Mexico
Holtz, J.*, **Ripley, B. J.**, and Simovich, M. A. Relationship of fecundity to survivorship and growth in *Branchinecta sandiegonensis* under different temperature regimes (poster), The Crustacean Society, Puerto Vallarta, Mexico
- 1998** **Ripley, B. J.** and K. D. Jenkins. Fish injury at CERCLA sites: evaluating population impacts (oral), Society for Environmental Toxicology & Chemistry Charlotte, NC

- Ripley, B. J.** Making the connection between individual physiological changes due to contaminant exposure and population changes is not yet routine in ecotoxicology (poster) Society for Environmental Toxicology and Chemistry, Ecosystem Vulnerability Workshop, Seattle, WA
- 1997** Chester, C. M., **B. J. Ripley**, and L. G. Harris. 1997. Dietary effect on life history in the estuarine nudibranch *Tenellia adspersa* (poster), Benthic Ecology Meeting Portland, ME.
- Ripley, B. J.** and H. Caswell, The role of recruitment variability in determining population growth rate of the steamer clam, *Mya arenaria* (oral), Ecological Society of America Athens, GA.
- Ripley, B. J.** and J. E. McDowell. The interaction of ecological factors and chronic contaminant exposure in population processes of an infaunal clam: results from a matrix model (oral), Studying Stress in Ecological Systems Workshop, Roskilde, Denmark
- 1996** **Ripley, B. J.** and H. Caswell. A theoretical analysis of the role of recruitment variability in structuring populations of the steamer clam, *Mya arenaria* (oral), Benthic Ecology Meeting, Columbia, SC
- 1995** **Ripley, B.** Measuring recruitment of *Mya arenaria* (the steamer clam) for use in matrix population models (oral), Population Biologists of New England, Storrs, CN
- Ripley, B.,** D. Leavitt, and J. E. McDowell, Seeking a biomarker in clam populations for exposure to lipophilic contaminants (poster) American Society of Zoologists, Washington, DC.
- 1994** **Ripley, B.** A comparison of bivalve life history strategies using matrix population models (poster), Ecological Society of America, Knoxville, TN

INVITED SEMINARS

- 2006** **Occidental College**, Los Angeles AND
- 2005** **Columbus State University**, Columbus GA
 “Coping with environmental change: dispersal and dormancy strategies in aquatic invertebrates.”
- 2002** **University of San Diego**, San Diego CA
 “Cyst bank life-history model for a fairy shrimp from ephemeral ponds.”
- 1999** **Scripps Institution of Oceanography**, La Jolla CA, AND
University of San Diego, San Diego CA
 “Dietary effect on life history in the estuarine nudibranch *Tenellia adspersa*”
- 1996** **Accidental Matrix Modeling Symposium**, Woods Hole, MA
 “The role of recruitment variability in determining population growth rate of the steamer clam, *Mya arenaria*.”
W.H.O.I. Biology Departmental Seminar, Woods Hole, MA
 “Contamination is only one of many factors regulating population processes in the steamer clam.”
- 1994** **Accidental Matrix Modeling Symposium**, Woods Hole, MA
 “A comparison of bivalve life history strategies using matrix population models.”

TECHNICAL REPORTS

South Sacramento Habitat Conservation Plan, Chapter 8: Adaptive Management and Monitoring Plan. Prepared for Sacramento County Department of Planning by TAIC. In draft 2007

Ripley, B.J., Martien, K. and Taylor, B.L. A simulation approach to understanding non-equilibrial dynamics in a recovering long-lived species: the bowhead whale. SC/58/BRG13. Presented to the Scientific Committee of the International Whaling Commission, St. Kitts, West Indies, May 24-June 4, 2006.

Final Report. Vernal Pool Crustacean Faunal Survey and Monitoring at Marine Corps Air Station, Miramar 1997-2003. Prepared for the Department of Defense. 2004.

Final Report. Hydrogeomorphic Model for San Diego Vernal Pools: Vernal Pool Crustacean Faunal Survey Results. Prepared for the Environmental Protection Agency. 2004.

Biological Impacts. Final Environmental Impact Report for the Proposed Mason/Hage Area Elementary School. Prepared for BRG Consulting, Inc. 2003.

Habitat Conservation Plan for the Endangered San Diego Fairy Shrimp, *Branchinecta sandiegonensis* at the Proposed Mason/Hage Area Elementary School. Prepared for the US Fish and Wildlife Service. 2003.

Final Report. Mason/Hage School Property Vernal Pool Crustacean Survey. Prepared for BRG Consulting, Inc. 2002.

PROFESSIONAL, UNIVERSITY, AND COMMUNITY SERVICE

- Starting FA13, Co-chair of Institutional Excellence Council and member of Academic Program Review Committee, Student Services Program Review Committee and Institutional Research & Planning Committee and Workgroup
- Grossmont College Accreditation Steering Committee, Standard IIC Co-chair 2011-2013
- Volunteer, Grossmont College 50th Anniversary Open House, Science Festival, WOW!
- *Henrietta Lacks* Project(FA11), *Silent Spring* Project (FA12) and *Emperor of All Maladies* Project (FA13) Biology Department liaison
- Basic Skills Initiative Project: Student Success in Bio 120 and Reading Grade Level
- Course Coordinator: Principles of Biology (Biology 120)
- US Delegate to 2006 International Whaling Commission Scientific Committee Meeting, St. Kitts, West Indies
- Advisor, USD Math Department Faculty Evolution Study Group, Summer 2006

- Reviewed manuscripts for *Toxicological and Environmental Chemistry*, *Hydrobiologia*, *Limnetica*, *Freshwater Biology*, *Journal of Crustacean Biology*; *Wetlands*; *Aquatic Living Resources*; *Estuarine, Coastal and Shelf Science*; and *Proceedings of the Sixth California Island Symposium*
- Reviewed book chapters from Baldi and Moore, *The Practice of Statistics in the Life Sciences*, 3rd edition (W.H. Freeman), R. Halliburton 2004, *Introduction to Population Genetics* (Prentice Hall) and J. Phelan 2010, *What is Life?* (W.H. Freeman)
- Advised 4 Summer Undergraduate Research Experience students at USD
- Served on the committees of 5 USD Marine Studies department master's degree students
- Provided statistical consultation for USD biology and marine studies faculty and students 2000-2006
- Consulted on City of San Diego Vernal Pool Inventory, 2003
- Organized departmental seminars and hosted speakers for USD biology department, 2002
- Statistical curriculum advisory committee for UCSD Extension Biosciences 2001
- Commented on fairy shrimp-related federal, state, and local documents for consultants and agencies 1999-2006
- Volunteer, Friends of Ruffin Canyon habitat vegetation restoration project, since 2002
- Member Sigma Xi, Sierra Club, Surfrider, and The Nature Conservancy
- Volunteer, Big Brothers/Big Sisters 1992-1999
- Judge, Falmouth Academy Science Fair, 1995-97

OCEANOGRAPHIC CRUISE EXPERIENCE

- *RV Atlantis/DSV Alvin*, Hydrothermal Vent Ecology 4/95 (4 weeks)
- *RV Polar Duke*, Survey of Antarctic Benthic and Pelagic Invertebrates 10/94 (4 weeks)
- *SSV Corwith Cramer*, Joint Program Orientation Cruise: Woods Hole to Sargasso Sea Transect 6/92 (10 days)

OTHER EXPERIENCE AND SKILLS

- San Diego County natural history, especially coastal sage scrub habitats
- Certified by USFWS to identify fairy shrimp by Dr. Denton Belk, February 2000
- PADI SCUBA certification 1990; Advanced Open Water 1992
- Power boat operation for diver support and plankton net tows and trawls/seines
- Boating safety, navigation, sailing, rowing, canoeing, kayaking (Mariner Scout 1985-88)
- Computer skills: Arlequin, Blackboard, C++, LaTeX, Matlab, MS Office, R, SPSS, Unix
- Language skills: excellent French, intermediate Spanish and Italian
- Hobbies: Tennis, surfing, gardening, bird watching, knitting