

# ELIZABETH T. BORER

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## EDUCATION

- 2002 Ph.D. in Ecology, Evolution, and Marine Biology, UC Santa Barbara, CA  
2000 MA in Ecology, Evolution, and Marine Biology, UC Santa Barbara, CA  
1991 BA in Biology, Oberlin College, Oberlin, OH

## GRANTS AND COMPETITIVELY FUNDED PROPOSALS

- 2003-2006 USDA NRI Grant, "Productivity and intraguild predation in orchard crop systems" \$31,521 subcontract on a \$200,000 grant to Cheryl J. Briggs at UC Berkeley.  
2003-2004 Postdoctoral Fellowship, National Center for Ecological Analysis and Synthesis, Santa Barbara, CA "Synthesizing intraguild predation theory and data"  
2001-2003 USDA NRI Grant, "Maximizing biological control: one or multiple natural enemies?" \$140,594, Co-PI with William W. Murdoch  
2001 Development Grant to create an EEMB Academics and Research Facilities Website for graduate students, \$4,200  
1998-2000 NSF Research and Training Grant, Competitive Funding Award, \$18,204

## AWARDS AND FELLOWSHIPS

- 2003 Lancaster Award for Best Dissertation in the Biological Sciences at UC Santa Barbara for the period 2001-2003  
2002 Charles A. Storke II Graduate Fellowship, Univ. of Calif., Santa Barbara, CA  
2002 Ellen Schamberg Burley Graduate Scholarship, EEMB, UC Santa Barbara  
2001, 2002 NSF Research and Training Grant, Fellowship Award  
2001, 2002 UC Regents Special Fellowship, EEMB, UC Santa Barbara, CA  
1997-2000 NSF Research and Training Grant, Fellowship Award (with \$5,000 for research)

## RESEARCH

Assistant Professor, Department of Zoology, Oregon State University, Corvallis. 9/2004 - present.  
Academic Visitor, Centre for Population Biology, Imperial College, England. 1/2004 - 2/2004.  
Postdoctoral Fellow, National Center for Ecological Analysis and Synthesis. 9/2003 - 8/2004.  
Visiting Research Fellow, Dep't of Integrative Biology, UC Berkeley. 11/2002 - 5/2003.  
Postdoctoral Researcher, Dep't of Ecology, Evolution & Marine Biology, UCSB. 7/2002 - 8/2003.  
Graduate Fellow, Department of Ecology, Evolution and Marine Biology, UCSB. 1997-2002.  
Research Assistant, Department of Forestry, Iowa State University. 1996-1997.  
Bioassessment Biologist, Environmental and Conservation Services, Austin, TX. 1994-1996.  
Research Intern, Committee for the National Institutes for the Environment (CNIE). 1992-1993.  
Minnesota Clean Rivers Project Assistant, Minnesota Department of Natural Resources. 1992.

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### PUBLICATIONS AND PAPERS IN PRESS

- Borer**, E. T., E. W. Seabloom, J. B. Shurin, K. E. Anderson, C. A. Blanchette, B. Broitman, S. D. Cooper, B. S. Halpern. *In press*. What determines the strength of a trophic cascade? *Ecology*.
- Borer**, E. T., W.W. Murdoch, and S.L. Swarbrick. 2004. Parasitoid coexistence: Linking spatial field patterns with mechanism. *Ecology* 85(3):667-678.
- Gram, W. K., E. T. **Borer**, K. L. Cottingham, E. W. Seabloom, V. L. Boucher, L. Goldwasser, F. Micheli, B. E. Kendall, and R. S. Burton. 2004. Distribution of plants in a California serpentine grassland: are rocky hummocks spatial refuges for native species? *Plant Ecology* 172(2):159-171.
- Borer**, E. T., C. J. Briggs, W.W. Murdoch, and S.L. Swarbrick. 2003. Testing intraguild predation theory in a field system: Does numerical dominance shift along a gradient of productivity? *Ecology Letters* 6: 929-935.
- Seabloom, E. W., E. T. **Borer**, V. Boucher, K. L. Cottingham, W. K. Gram, B. E. Kendall, L. Goldwasser, F. Micheli, and R. S. Burton. 2003. Competition, seed limitation, disturbance, and reestablishment of California native annual forbs. *Ecological Applications* 13: 575-592.
- Borer**, E. T. 2002. Larval competition of guild members: implications for coexistence via intraguild predation. *Journal of Animal Ecology* 71: 957-965.
- Borer**, E. T., K. Anderson, C. A. Blanchette, B. Broitman, S. D. Cooper, B. Halpern, E. W. Seabloom, J. B. Shurin. 2002. Topological approaches to food web analyses: a few modifications may improve our insights. *Oikos* 99: 398-403.
- Shurin, J. B., E. T. **Borer**, E. W. Seabloom, K. Anderson, C. A. Blanchette, B. Broitman, S. D. Cooper, B. Halpern. 2002. A cross-ecosystem comparison of the strength of trophic cascades. *Ecology Letters* 5:785-791.
- Collins, J. P., A. P. Kinzig, N. B. Grimm, W. F. Fagan, D. Hope, J. Wu, and E. T. **Borer**. 2000. A new urban ecology. *American Scientist* 88: 416-425
- Chance, B., E. **Borer**, A. Evans, G. Holtom, J. Kent, M. Maris, K. McCully, J. Northrop, M. Shinkwin. 1988. Optical and nuclear magnetic resonance studies of hypoxia in human tissue and tumors. *Annals of the N.Y. Academy of Science* 551: 1-16.
- Weiss, J., E. **Borer**, and E. Brozyna. 1988. The use of MRI (Magnetic Resonance Imagery) in diagnosis of TMJ disease. *Florida Dental Journal* 59(4): 9-11.

### MANUSCRIPTS IN REVIEW OR IN REVISION

- Briggs, C.J. and E. T. **Borer**. Why short-term experiments may not allow long-term predictions about intraguild predation. In revision for *Ecological Applications*.
- Halpern, B. S., E. T. **Borer**, E. W. Seabloom, J. B. Shurin. Predator effects on ecosystem stability.
- Malmstrom, C. M., A. J. McCullough, H. A. Johnson, E. T. **Borer**. Can invasive plant species alter vector dynamics? Aphid host preference and fecundity/birth rate on introduced and native California grassland species.
- Snyder, R. E., E. T. **Borer**, P. Chesson. Examining the relative importance of spatial and non-spatial coexistence mechanisms.

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## DISSERTATION

Borer, E. T. 2002. How do resource specialists coexist? Evidence from a biological control community. Ph.D. Dissertation. University of California, Santa Barbara, CA.

## TECHNICAL REPORT

Bioassessment strategies for non-point source polluted creeks - Final Report. Section 12: Data analysis and conclusions. August 1996.

## WORKSHOPS

*Seasonality of Infectious Diseases*, National Center for Ecological Analysis and Synthesis, 2003-2004. Group participant.

*Food Webs and Trophic Cascades Working Group*, Department of Ecology, Evolution, and Marine Biology, 2001-2002.

Group leader. See publications: Borer et al. 2002, Shurin et al. 2002, and Borer et al., *in press*.

*Grant Proposal Writing Workshop*, Department of Ecology, Evolution, and Marine Biology, 1999.

Organizer. Prepared workshop schedule, invited faculty and Office of Research representative.

*Urban Modeling Working Group*, National Center for Ecological Analysis and Synthesis, 1998.

Group participant. See publication: Collins et al. 2000.

## TEACHING

2002 Teaching Assistant - Advanced Biostatistics (graduate/undergraduate), UCSB.

2002 Teaching Assistant - Ecological Systems (graduate modeling course), UCSB.

2000, 2001 Coordinator/leader - Introduction to Faculty Research, Dep't. of Ecology, UCSB.

1999, 2000 Teaching Assistant - Biological Statistics (undergraduate), UCSB.

1997-1999 Classroom Scientist, Los Marineros/Kids do Ecology, National Center for Ecological Analysis and Synthesis, UCSB.

## SERVICE AND OUTREACH

2002- Ad hoc reviewer for the National Science Foundation, *American Naturalist*, *Biological Control*, *Ecological Entomology*, *Journal of Animal Ecology*, and *Nature*

2003 Session Presider, Ecological Society of America Meeting, Savannah, GA.

2003 Judge, Pielou Award for Best Student Presentation, ESA Meeting, Savannah, GA.

2002 Judge, Braun Award for Best Student Presentation, ESA Meeting, Tucson, AZ.

2000-2002 University TA Awards review panelist, Graduate Student Association, UCSB.

2001 Scientist presenter, Women in Science and Engineering, UCSB.

1999-2001 Graduate Student Advisory Committee to the EEMB Department Chair, UCSB.

1999-2001 UCSB Campus Graduate Student Association Representative, UCSB.

1997-1998 Chair of the EEMB Departmental Research Seminar Series, UCSB.

1997-1999 Research Training Grant Speakers Committee Representative, UCSB.

1995-1996 Mentor, Experiential Internship (2 undergrads), St. Edward's Univ., Austin, TX.

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## INVITED SEMINARS

York University, Department of Biology, Heslington, England. February 2004  
Imperial College at Silwood Park, Centre for Population Biology, Ascot, England. January 2004  
InterACT Workshop (European Union), Linköping, Sweden. August 2003  
Oregon State University, Department of Zoology, Corvallis, OR. April 2003  
USDA Forest Service Northeastern Research Station, Morgantown, WV. March 2003  
National Center for Ecological Analysis and Synthesis, Santa Barbara, CA. February 2003  
Victoria Univ. of Wellington, School of Biological Sciences, Wellington, New Zealand. Oct. 2002  
University of Melbourne, Department of Zoology, Melbourne, Australia. Oct. 2002  
University of California, Ecology, Evolution, and Marine Biology, Santa Barbara, CA. July 2002

## CONFERENCE PRESENTATIONS

Borer, E. T., E. W. Seabloom, J. B. Shurin, K. Anderson, C. A. Blanchette, B. Broitman, S. D. Cooper, and B. Halpern. 2003. Within- and among-system differences in the strength of trophic cascades: methodology or biology? *Bulletin of the Ecological Society of America* 84(3): 39.  
Borer, E.T. 2002. Spatial vs. non-spatial mechanisms of parasitoid coexistence: Experimentally linking field pattern and mechanism. *Bulletin of the Ecological Society of America* 83(3): 81-82.  
Borer, E.T. 2000. Larval competition between two parasitoids in the California red scale system: Implications for coexistence and biological control. *Bulletin of the Ecological Society of America* 81(3): 59.  
Borer, E.T. and E.W. Seabloom. 1999. Scales of spatial, temporal, and biotic variability in stream algal communities. *Bulletin of the Ecological Society of America* 80(3): 56.  
Borer, E., R. Hansen, and M. Scoggins. 1996. Spatial and temporal variation of phytoenthos distribution in two intermittent Central Texas Hill Country streams. *Bulletin of the Ecological Society of America* 77(3): 45.  
Borer, E., R. Hansen, and M. Scoggins. 1996. Assessing the effectiveness of diatom and benthic macroinvertebrate bioassessment techniques in an intermittent Central Texas Hill Country stream. *Bulletin of the North American Benthological Society* 13(1): 255.

## ARTICLES ABOUT BORER'S WORK

Editor's Choice, Ecology/Evolution: Of Cascades and Connectance. 2002. *Science* 298(5598):1517.  
Research Briefs: Rethinking Cities as 'Ecosystems'. *UC Santa Barbara Today*, Winter 2001, p.5.

## PROFESSIONAL MEMBERSHIPS

Ecological Society of America  
Sigma Xi  
Women in Science and Engineering - Santa Barbara chapter