

CURRICULUM VITAE

Andrew Harlan Altieri

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ACADEMIC PREPARATION

- 2007-Present Brown University, Department of Ecology and Evolutionary Biology
Postdoctoral Research Associate and Instructor
- 2006-2007 Northeastern University, Marine Science Center
Postdoctoral Research Associate and Instructor
- 2006 Brown University
Ph.D. in Ecology and Evolutionary Biology
- 1999 University of California Santa Cruz
B.A. in Marine Biology (Honors in the Major)

FELLOWSHIPS AND AWARDS

- 2006 Presidential Award for Excellence in Teaching (Honorable Mention), Brown University.
- 2005 John G. Peterson Fellowship, Brown University. Merit-based award to one graduate student in the Division of Biology and Medicine annually.
- 2004 Faculty Scholar Award, Brown University. Merit-based award to three students in the Graduate School annually.
- 2003 Best Student Paper Award, 84th Annual Western Society of Naturalists Meeting.
- 2003 Luce Graduate Environmental Fellowship, Watson Institute for International Studies, Brown University.
- 2003 Best Student Paper Award, 32nd Annual Marine Benthic Ecology Meeting.
- 2001 Graduate Research Fellowship, National Estuarine Research Reserve System, National Oceanic and Atmospheric Administration.
- 1999 Dean's Award for Undergraduate Research, Division of Natural Sciences, University of California Santa Cruz (UCSC).
- 1999 Honors in the Major, Department of Biology, UCSC.
- 1999 Senior Thesis Honors, Department of Biology, UCSC.
- 1998 President's Undergraduate Fellowship, University of California.
- 1998 Student Research Award, Long Marine Laboratory, UCSC.

PUBLICATIONS

Altieri, A.H. (in press) Dead zones enhance key fisheries species by providing a predation refuge. *Ecology*.

Van Wesenbeeck, B.K., C.M. Crain, **A.H. Altieri**, and M.D. Bertness (2007) Distinct habitat types arise along a continuous hydrodynamic stress gradient due to the interplay of competition and facilitation. *Marine Ecology Progress Series* 349: 63-71.

Altieri, A.H., B.R. Silliman, M.D. Bertness (2007) Hierarchical organization via a facilitation cascade in intertidal cordgrass bed communities. *American Naturalist* 169: 195-206.

—Subject of an article by Bob Holmes, *New Scientist* (When Co-operation is the Key to Survival, 2/7/07).

Zabin, C.J. and **Altieri, A.** (2007) A Hawaiian limpet facilitates recruitment of a competitively dominant invasive barnacle. *Marine Ecology Progress Series* 137: 175-185.

Altieri, A.H. (2006) Inducible variation in hypoxia tolerance across the intertidal-subtidal distribution of the blue mussels *Mytilus edulis*. *Marine Ecology Progress Series* 325: 295-300.

Altieri, A.H. and J.D. Witman (2006) Local extinction of a foundation species in a hypoxic estuary: integrating individuals to ecosystem. *Ecology* 87: 717-730.

—Subject of an article by Ray Henry, *Associated Press* (Algae Blooms Kill One of Narragansett Bay's Best Natural Filters, 4/11/06). Featured by *Boston Globe*, *Knoxville News Sentinel*, *Scripps Howard News Service*, *Westerly Sun*.

—Subject of an article by *United Press International* ("Dead Zone" Kills Billions of Mussels, 4/11/06). Featured by *Science Daily*, *NewKerala.com*, *DailyIndia.com*.

—Subject of an article by Peter Lord, *Providence Journal* (Study: Bay Lost Billions of Mussels, 4/12/06).

—Subject of a television news feature by R.J. Heim, *NBC-Affiliate WJAR* (4/12/06).

—Subject of a staff editorial, *Providence Journal* (Bay's Warning Siren, 4/14/06).

—Subject of an article by Elizabeth Williamson, *Washington Post* (R.I. Shellfish Offer Clue to Health of Chesapeake, 5/8/06). Featured by *Seattle Times*.

Van de Koppel, J., **A. H. Altieri**, B.R. Silliman, J. F. Bruno, and M. D. Bertness (2006) Scale-dependent interactions and community structure on cobble beaches. *Ecology Letters* 9: 45-50.

Lindsey, E. L., **A.H. Altieri**, J.D. Witman (2006) Influence of biogenic habitat on the recruitment and distribution of a subtidal xanthid crab. *Marine Ecology Progress Series* 306: 223-231.

Altieri, A.H. (2003) Settlement cues in the locally dispersing temperate cup coral *Balanophyllia elegans*. *Biological Bulletin* 204: 241-245.

Silliman, B.R., C.A. Layman, and **A.H. Altieri** (2003) Symbiosis between an alpheid shrimp and a xanthoid crab in salt marshes of mid-Atlantic states, U.S.A. *Journal of Crustacean Biology* 23: 876-879.

MANUSCRIPTS IN PREPARATION

Altieri, A.H. and D.E. Warren (in prep) Metabolic basis for widely differing anoxia tolerance in three North Atlantic bivalves. For *Marine Biology*.

Altieri, A.H. and M. Carrel (in prep) Hypoxia and predation: a review. For *Oikos*.

(Underline indicates undergraduate author)

GRANTS

- 2005 American Museum of Natural History, Lerner-Gray Fund for Marine Research, “Quantifying the full impact of oxygen depletion on the dynamics and community composition of a temperate estuary”, \$1,800.
- 2005 Quebec-Labrador Foundation/Atlantic Center for the Environment, Sounds Conservancy, Assessing the full impact of oxygen depletion on the Narragansett Bay estuarine community”, \$2,200.
- 2003 Rhode Island Sea Grant, “Quantifying the impact of hypoxia on the benthic community of Narragansett Bay”, \$66,500, with Jon D. Witman.
- 2002 U.S Environmental Protection Agency, New England Interstate Water Pollution Control Commission, “The effects of water quality degradation on the foundation species blue mussel and the associated benthic community of Narragansett Bay”, \$18,200, with Jon D. Witman.
- 2001 National Oceanic and Atmospheric Administration, “Structuring of the estuarine community by the blue mussel *Mytilus edulis*”, \$51,500.

PROFESSIONAL AFFILIATIONS

American Association of Underwater Scientists.
 Ecological Society of America.
 Estuarine Research Federation.
 New England Estuarine Research Society.
 Sigma Xi.
 Western Society of Naturalists.

INVITED PRESENTATIONS

- 2007 San Diego State University, Department of Biology
- 2007 NOAA – Ecological Impact of Hypoxia on Living Resources Symposium & Workshop
- 2007 University of California Davis, Center for Population Biology
- 2007 University of Rhode Island, Graduate School of Oceanography
- 2006 Save the Bay (SE New England’s largest restoration and outreach NGO)
- 2006 U.S. Environmental Protection Agency, Regional Office - New England
- 2006 University of Rhode Island, Department of Biological Resources
- 2006 University of New Hampshire, Department of Natural Resources
- 2005 University of California Davis, Bodega Marine Laboratory
- 2005 Duke University Marine Laboratory
- 2004 2nd Annual Science Symposium on Rhode Island Coastal Ecosystems
- 2002 Northeastern University, Marine Science Center

SELECTED CONTRIBUTED PRESENTATIONS

Altieri, A.H. (2007) Dead zones – good or bad? Hypoxia provides a predation refuge for a vital fisheries species. 92nd Annual Ecological Society of America Meeting.

Altieri, A.H., B.K. van Wesenbeeck, B.R. Silliman, and M.D. Bertness (2007) A facilitation cascade boosts invasive crab populations. 36th Annual Marine Benthic Ecology Meeting.

Altieri, A.H., B.R. Silliman, M.D. Bertness (2005) *Spartina alterniflora* facilitates rocky shore mussel reefs through a hierarchy of positive interactions. 90th Annual Ecological Society of America Meeting.

Altieri, A.H., B.R. Silliman, M.D. Bertness (2005) Facilitation of intertidal mussel reefs by cordgrass (*Spartina alterniflora*) on New England cobblestone beaches. 34rd Annual Marine Benthic Ecology Meeting.

Altieri, A.H. and J.D. Witman (2004) Predator-prey interactions along a mesoscale environmental stress (hypoxia) gradient in a New England estuary. 89th Annual Ecological Society of America Meeting.

Altieri, A.H. (2004) Tolerance of mussels to an environmental stress (hypoxia) is a plastic trait that varies across their depth range. 33rd Annual Marine Benthic Ecology Meeting.

Altieri, A.H., M.S. Parikh, D.E. Warren, and J.D. Witman (2003) Hypoxia as a physiological stress in the benthic food web of a New England Estuary. 84th Annual Western Society of Naturalists Meeting.

Altieri, A.H., M.S. Parikh, D.E. Warren, and J.D. Witman (2003) From physiology to food webs: Integrating large-scale field studies with comparative physiology to predict the impact of coastal hypoxia on benthic communities. 17th Biennial Estuarine Research Federation Meeting.

Altieri, A.H. (2003) Interactions between life-history stages in a self-recruiting solitary cup coral. 32nd Annual Marine Benthic Ecology Meeting.

Parikh, M.S., **A.H. Altieri,** D.E. Warren (2003) Anoxia tolerance in three bivalve species of New England estuaries. 32nd Annual Marine Benthic Ecology Meeting.

Altieri, A.H. and J.D. Witman (March 2002) De-coupling of top-down and bottom-up regulation due to hypoxic disturbance in Narragansett Bay, Rhode Island. 31st Annual Marine Benthic Ecology Meeting.

Lindsey, E.L., **A.H. Altieri,** and J.D. Witman (2002) Patterns of benthic community structure and differential recruitment in Narragansett Bay, Rhode Island. 31st Annual Marine Benthic Ecology Meeting.

Altieri, A.H. (March 2001) Variation across physical gradients in the trophic interactions of mussels. 30th Annual Marine Benthic Ecology Meeting.

(Underline indicates undergraduate author)

TEACHING EXPERIENCE

- Present Instructor, *Marine Ecology*, Brown University.
- Present Instructor, *Invertebrate Zoology*, Brown University.
- Present Mentor to undergraduate senior thesis research, Brown University. Students: Emily Lindsey (2001), Mahir Parikh (2002), Nicholas Horton (2004), Marc Carrel (Present), William Goldenheim (Present).
- 2007 Lecturer & Coordinator, *Marine Protected Areas Workshop*, Northeastern University (Field site: Moorea, French Polynesia)
- 2006 Instructor, *Marine Invertebrate Zoology*, Northeastern University.
- 2005,2006 Co-instructor, *Tropical Marine Biology*, with Dr. Fred Diehl, University of Virginia (Field site: Bahamas).
- 2005 Co-instructor, *Tropical Biology*, with Dr. Mark Bertness, Brown University (Field site: Belize).
- 2005 Guest Lecturer, *Principles of Ecology*, Dr. Jon Witman, Brown University.
- 2004,2005 Guest Lecturer, *Conservation Biology*, Dr. Jennifer Martiny, Brown University.
- 2004 Teaching Certificate in Higher Education, Sheridan Center, Brown University.
- 2004 Teaching Assistant, *Conservation Biology*, Dr. Jennifer Martiny, Brown University.
- 2001-2005 Teaching Assistant, *Principles of Ecology*, Dr. Jon Witman, Brown University.
- 2001 Teaching Assistant, *Invertebrate Zoology*, Dr. Mark Bertness, Brown University.
- 2000 Teaching Assistant, *Animal Behavior*, Dr. Jonathan Waage, Brown University.
- 1996 Intern, Public Education & Outreach Program, Long Marine Laboratory, University of California Santa Cruz.

WORK EXPERIENCE

- 2000 Research Assistant for Dr. Michael Hadfield, University of Hawaii. Field site: Oahu, Hawaii. Intertidal ecology of invasive organisms.
- 1999-2000 Research Assistant for Drs. Robin Ross and Langdon Quetin, University of California Santa Barbara. Field site: Antarctic Peninsula. Climate change and productivity of pelagic food-webs.
- 1999 Intern with Dr. Richard Wahle, Bigelow Laboratory for Ocean Sciences. Field site: Coastal New England. Habitat as a bottleneck for lobster populations.
- 1998 Research Assistant for Drs. Mark Carr and Mark Hixon, University of California Santa Cruz and Oregon State University. Field site: Bahamas. Regulation of reef fish populations by functional diversity.

- 1997 Research Assistant for Dr. Peter Raimondi, University of California Santa Cruz. Field site: Bonaire, Netherland Antilles.
Life-history ecology of endangered reef-building corals.
- 1997 Research Assistant for Dr. Diana Steller, University of California Santa Cruz. Field site: Baja California Sur, Mexico. Rhodolith beds as foundation species.

REFERENCES

Dr. Mark Bertness (Present Postdoc Advisor)

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Dr. Geoffrey Trussell (Previous Postdoc Advisor)

Marine Science Center, Northeastern University

430 Nahant Rd., Nahant, MA 01908 USA

Email: g.trussell@brown.edu Phone: 781-581-7370 ext. 300 Fax: 781-581-6076

Dr. Jon Witman (Major Ph.D. Advisor)

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Email: jon_witman@brown.edu Phone: 401-863-3936 Fax: 401-863-2166