

BIOGRAPHICAL SKETCH

BRIAN REED SILLIMAN

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Duke University

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PROFESSIONAL PREPARATION

- 2004 Brown University, Ph.D., Ecology and Evolutionary Biology.
1999 University of Virginia, M.S., Environmental Science.
1995 University of Virginia, B.A. *Highest Distinction*. History and Environmental Science.

APPOINTMENTS

- 2013-present Rachel Carson Associate Professor of Marine Conservation Biology, Nicholas School of the Environment, Duke University.
2012-2013 Associate Professor, Department of Biology, University of Florida.
2010-present Director, Sea Horse Key Marine Laboratory, University of Florida.
2005-2012 Assistant Professor, Department of Biology, University of Florida.
2010-2011 Visiting Assistant Professor, Royal Netherlands Society of Arts and Sciences.
2007 Visiting Assistant Professor, Edith Cowan University, Perth, Australia.

RESEARCH HONORS

- 2011 NSF CAREER AWARD
2010 Royal Netherlands Society of Arts and Sciences Fellow.
2008 Top Performer - Alan T. Waterman Award, National Science Foundation.
2007 Young Investigator Speaker, Department of Fisheries, University of Washington.
2006 Young Investigator Prize, American Society of Naturalists.
2004 David Smith Post-Doctoral Conservation Fellow, That Nature Conservancy
2003 Walter B. Jones and NOAA Award for Excellence in Marine Graduate Study.
2000 STAR Graduate Research Fellowship, EPA.

EDUCATION HONORS

- 2006 Distinguished Lecturer, Department of Biology, University of Toronto.
1999 Seven Society Outstanding Teaching Award, University of Virginia.

FIVE PUBLICATIONS (101 total) RELEVANT TO THIS PROPOSAL

Silliman, B. R., J. van Koppel, M. Bertness, L. Stanton, and I. Mendelsohn. 2005 Drought, snails, and large-scale die-off of southern U.S. salt marshes. **Science** 310:1803-1806.

Silliman, B. R. and M. D. Bertness. 2002. A Trophic Cascade Regulates Salt Marsh Primary Production. **PNAS** 99: 10500-10505.

Hensel, M. J. S. and B. R. Silliman. *In press*. Cross-kingdom consumer diversity enhances multifunctionality of a coastal ecosystem. **PNAS**.

Barbier E., E. Koch, B. R. Silliman, S. D. Hacker, E. Wolanski, J. Primavera, E. Granek, S. Polasky, S. Aswani, L. Cramer, D. Stoms, C. Kennedy, D. Bael, C. Kappel, G. Perillo and D. Reed. 2008. Coastal Ecosystem-Based Management with non-linear ecological functions and values. **Science** 319: 321-323.

Cheong, S. M., B. R. Silliman, P. P. Wong, B. Wesienback, C.K. Kim, and G. Guannel. 2013. Coastal Adaptation Defense with Ecological Engineering. **Nature Climate Change** 3, 787-791.

FIVE OTHER PUBLICATIONS

Silliman, B. R., J. Diller, M. McCoy, K. Earl, J. von de Koppel, and A. Zimmerman. 2012. Degradation and resilience in Louisiana salt marshes following the BP-DHW oil spill. **PNAS** doi: 10.1073.

Tjisse, H., L. L. Govers, J. de Fouw, H. Oloff, M. van der Geest Marieke, M. van Katwijk, T. Piersma, J. van de Koppel, B. R. Silliman, A. J. P. Smolders, and J. A. van Gils. 2012. Three-stage symbioses forms the foundation of seagrass ecosystems. **Science** 319: 321-323.

Silliman, B. R. and S. Y. Newell. Fungal-farming in a snail. 2003. **PNAS** 100:15643-15648.

Bertness, M. D., J. Bruno, B.R. Silliman, and J.J. Stachowicz. *In press*. Marine Community Ecology and Conservation. Sinauer Press.

Silliman, B. R., T. Grosholtz, and M. D. Bertness, editors. 2009. Human Impacts on Salt Marshes: A Global Perspective. University of California Press.

SYNERGISTIC EDUCATION ACTIVITIES and ACCOMPLISHMENTS THAT INTEGRATE RESEARCH and/or SOCIETY

- 2009 Founder and organizer for 1st annual UF Marine Biology Symposium. This meeting focuses on undergraduate education by: (1) providing research overviews of UF marine labs and (2) the opportunity for undergrads to present their results. Over 60 students attend and present annually
- 2009 Lecture to and conduct mentored research with at-risk high school students (4-8 students for lectures, 1-2 for research) through the UF Whitney Lab Outreach Program. In addition, for one wk/yr, I involve high school teachers in my field research (NSF-School Yard Program).
- 2008 Faculty Mentor for Marine Biology Club at UF. Over 2 years, we have published a web site, and organized bi-monthly field trips and a research seminar series. Our 5-year goal is to establish a **Marine Science Minor** at UF, a Florida University without a formal marine program.
- 2008 Lecture to and conduct mentored research with Tampa Bay Boy Scouts on marsh restoration. Results from this ongoing work are now in manuscript form and will be submitted to **Con. Bio.** with 4 scouts as co-authors. One boy scout I mentored was awarded the 2010 USA TODAY Academic All-American Scholarship Award for his work on this project.
- 2007 Developed a 2-week Tropical Marine Ecology field course at UF for undergraduates; half of the class is devoted to mentored research and a formal symposium. Students have already published results from research completed in this class in **MEPS**, with 4 students as co-authors.

SYNERGISTIC RESEARCH ACTIVITIES and ACCOMPLISHMENTS THAT INTEGRATE SOCIETY NEEDS

- 2009 Think Tank Organizer: *Conservation Answers for Society* (Funded by TNC).
- 2009 Symposium co-organizer at CERF meeting “Anthropogenic impacts on tidal wetlands services.”
- 2009 Invited Participant: The Packard Foundation’s workshop on Ecosystem Based Management.
- 2007 NCEAS Participant: “Measuring ecological, economic, and social values of coastal habitats.”
- 2003 Symposium organizer at ESA meeting: “Anthropogenic modification of marsh function.”

SELECTED INVITED TALKS (46 Total)

- 2012 Duke University, Nicholas School, Beaufort, North Carolina.
- 2011 Stanford University, Hopkins Marine Lab, Pacific Grove, California.
- 2010 University of California at Santa Barbara, Department of EE&MB.
- 2007 U. C. Davis, Bodega Bay Marine Lab, Bodega Bay, California.
- 2006 Yale University, Department of Ecology and Evol. Biology, New Haven, Connecticut.
- 2006 University of Chicago, Chicago, Illinois.