

# Rachel Decker

Phone: 305.348.1556 Email: [decker.rachel@gmail.com](mailto:decker.rachel@gmail.com)

## EDUCATION

---

### University of South Carolina

Columbia, SC

Thesis Advisor: Dr. Blaine Griffen

August 2009 – May 2011

*Master of Science in Biology, Emphasis in Ecology*

- Thesis: Correlating behavior and physiological condition of sand fiddler crabs, *Uca pugnator*
- Courses completed include Population Biology, Marine Ecology, Theoretical Ecology, Statistics for Marine Science, Animal Behavior and Invertebrate Zoology.

### Oberlin College

Oberlin, OH

*Bachelor of Arts in Biology, Minor in Rhetoric and Composition*

2001-2005

- Courses completed include Developmental Biology, Cell and Molecular Biology, Organic Chemistry, Biological Anthropology, Vertebrate Zoology, Biological Statistics, and Writing in the Sciences.
- Participated in Woods Hole Semester at Sea (Fall 2004). Courses completed include Oceanography, Maritime Studies and Nautical Science. Designed and executed an individual research project investigating the dynamics of the shallow oxygen maximum along our cruise track from Boston, Massachusetts to St. Croix, U.S. Virgin Islands.

## RESEARCH EXPERIENCE

---

### Seagrass Ecosystems Research Laboratory

Miami, FL

*Laboratory Manager*

May 2011 – Present

- Major responsibilities include conduction of bruan blanquet surveys and sample collection of seagrass species *T. testudinum*, *S. filiforme* and *H. wrightii* throughout South Florida for variety of monitoring programs, planning and management of field operations, hiring and supervision of undergraduate technicians, and accounting of grant funds.
- Additional duties include maintenance and operation of FlashEA 1112 elemental analyzer. Plant and animal tissue, as well as soils are assessed for carbon, nitrogen, phosphorous and/or complex carbohydrates.

### National Audubon Society

Tavernier, FL

*Research Technician*

January 2009 – July 2009

- Sampled fish species eaten by Roseate Spoonbill *A. ajaja* and other wading birds at 19 sites throughout the Everglades and Biscayne Bay.
- Responsibilities included sample collection and processing, bird and fish identification, data entry, boat driving and navigation, and maintenance of field equipment and boats.

### Shark Bay Ecosystem Research Project

Monkey Mia, Western Australia

*Research Technician*

March 2007-February 2008, September-December 2008

- Assisted PhD candidates in research on seagrass beds and local megafauna. Efforts focused on tiger shark *G. culvier*, sea turtles *C. caretta* and *C. mydas*, and a wide variety of local seagrass species.
- Duties included collection and preparation of samples for stable isotope analysis, management of volunteers, boat driving and navigation, data entry, maintenance of equipment and boats, and bi-weekly public outreach presentations.

### Bimini Biological Field Station

South Bimini, The Bahamas

*Research Assistant*

January-February 2007

- Assisted international graduate students in the collection of data on lemon shark species *N. brevirostris*.
- Research methods included bi-monthly long-line fishing, hydrophone tracking of tagged adolescents, gill-netting, PIT tagging, and field observation.

## PUBLICATIONS

---

---

- Decker R.A. and Griffen B.D. 2012. Correlating context-specific boldness and physiological condition of female sand fiddler crabs (*Uca pugilator*). *Journal of Ethology* 30:403-412.

## TEACHING EXPERIENCE

---

---

### University of South Carolina

*Graduate Teaching Assistant*

Columbia, SC

August 2009 – May 2011

- Taught weekly laboratory courses for undergraduate students associated with Biology 301: Ecology and Evolution.

### Sally Ride Science Camp

*Lead Marine Science Instructor*

California Institute of Technology

July 2008

- Designed and taught a two week introductory marine science course to young women, ages 10-15.

### Newfound Harbor Marine Institute

*Intern/Instructor*

Big Pine Key, FL

January-May, September-December 2006

- Taught a variety of hands-on marine science programs to visiting students, grades 4-12.
- Responsibilities included field trip safety to local snorkel sites and maintenance of lab/classroom facilities.

## ADDITIONAL SKILLS

---

---

- American Academy of Underwater Sciences certified SCUBA Diver. Over 200 scientific dives completed.
- Proficient in statistical software program SPSS, as well as Microsoft Word, Access and Excel. Experience with R.