

Sarah E. Grasty

College of Marine Science
University of South Florida
830 1st St SE
St. Petersburg, FL 33701

Education

2012 B.S. Environmental Science, Mar. Sci. Minor, *Magna cum laude*, Univ. of South Carolina
2014 M.S. Marine Science (Marine Resource Assessment), Univ. of South Florida

Work Experience

Senior Biological Scientist & Project Manager

Univ. of S. Florida, College of Marine Sci. | St. Petersburg, FL | April 2015 – Present

Primary work is funded by the National Fish and Wildlife Foundation's (NFWF) Gulf Environmental Benefit Fund (GEBF) via the grant "Restoring Fish and Sea Turtle Habitat on the West Florida Continental Shelf: Benthic Habitat Mapping, Characterization and Assessment."

- General project management tasks, including supervising the \$4.4 million project budget, reporting, delegating tasks, monitoring progress to ensure products are completed in accordance with the project's timeline, scope, and budget, and organizing regular internal project meetings as well as periodic meetings with the project's Steering Committee.
 - Serve as the central point-of-contact for the project interface with the general public (e.g. data requests, information inquiries) as well as project partners and stakeholders
 - Generate peer-reviewed publications, reports, blogs, and outreach articles based on the project's data, findings, and activities.
 - Content development and maintenance of the project website & GIS portal (<http://www.marine.usf.edu/scamp>; <https://scampgis.marine.usf.edu/>)
 - Oversee two direct report project members (biological technicians)
 - Budget oversight and project management of several other grants which total an additional ~\$1 million in funds.
 - End-to-end planning and coordination of the project's research cruises.
-

Research Experience

Co-Principal Investigator

Univ. of S. Florida, College of Marine Sci. | St. Petersburg, FL | September 2019 – Present

Project funded by the National Oceanic and Atmospheric Administration's Marine Fisheries Initiative (MARFIN)

- Funded to complete fieldwork and analyses which will compare mobile and stationary video surveys in partnership with the Florida Fish and Wildlife Research Institute. The outcomes of this work seek to investigate analytical approaches for improving reef-fish abundance indices for multiple species in the Gulf of Mexico utilizing data from two video survey techniques.

Graduate Research Assistant

University of South Florida | St. Petersburg, FL | August 10, 2012 – April 12, 2015

- Completed coursework and research for Master's thesis focused on using data from a custom-made towed camera sled to determine its viability as a sampling approach for estimating habitat-specific densities of reef fishes in the eastern Gulf of Mexico.
-

Education and Outreach Experience

Program Manager and Education Lead

Guardians of the Gulf | St. Petersburg, FL | May 2019 – present

Start-up coastal resiliency education and STEAM workforce development program for underserved youth (ages 7 – 17) that emphasizes equity, inclusion, and empowerment through a partnership with the Boys and Girls Clubs of the Suncoast. In collaboration with fellow University of South Florida Colleagues, Ms. Kristen Kusek and Dr. Teresa Greely.

Lab Instructor

Oceanography Camp for Girls | St. Petersburg, FL | July 2015 & 2016

Developed and taught two full day labs based around the C-BASS project for campers aged 13-14. The lab went through Gulf of Mexico reef fish identification, fisheries management, how to survey reef fish populations using video from a camera system, and using a GIS to view and analyze spatial data.

Teaching Assistant

Dept. of Biol. Sci., Univ. of S. Florida | St. Petersburg, FL | August – December 2014

Instructed undergraduate laboratory section for introductory ecology which included teaching in a classroom setting and leading activities in the field.

Science Mentor

Oceanography Camp for Girls | St. Petersburg, FL | June – July 2014

Instructed lessons on Tampa Bay marine ecology and completed extensive mentor training sessions in order to better communicate various scientific concepts to a young audience. Included a week-long training session prior to the start of camp.

Instructor

Mad Science of West and South Tampa Bay | St. Petersburg, FL | Sept. 2013 – May 2014

Taught two to three weekly, hour-long science lessons as part of an afterschool program for 10-20 elementary (K-5) students. This required classroom management skills and the ability to communicate complex scientific concepts to elementary-aged students.

Leadership Experience

Communications & Outreach Coordinator

Amer. Fisheries Soc., Fisheries & Information Technology Section | June 2018 – Present

- Responsible for managing the FITs website and Facebook pages as well as generating content for these platforms.

- Coordinator and author for Unit's contributions to Fisheries Magazine focused on how advanced technology is being used to solve fisheries research and management questions.

Dean's Advisory Council Staff Representative

Univ. of S. Florida, College of Marine Sci. | October 2017 – October 2020

- Attends monthly council meetings which functions as a formal interface between the Dean and the rest of the College.

Technical & Special Skills

- Extensive experience with the **ArcGIS** suite, including Storymaps and Enterprise; moderate experience with **QGIS**; completed University of South Florida, St. Petersburg Campus's course Fishery Applications of GIS I & II (2015)
- Website content development and design in **Google Sites, Wordpress, and Joomla**
- Skilled in **Adobe** Photoshop, Illustrator, and Acrobat; experience with **Canva**
- Moderate experience with data analysis in **Matlab**, beginner in **R**
- **Certified Research Administrator** through the University of South Florida; working towards PMP Certification; completed semester-long **course in Leadership & Management Concepts** via the University of South Florida (MAN 6147)
- Advanced use of the **Microsoft Office Suite**
- Over 100 days at-sea on oceanographic research vessels between 2013 and 2019 as a participating scientist and chief scientist
- Limited/Beginner experience in **Linux** command line language
- Extensive experience in meeting organization and facilitation as well as event planning and management

Publications

Grasty, S., Messina, M., & Bryan, J. "Fish Passage Improvement – Exciting Applications of Advanced Fisheries Technologies to Modernize Fish Passage and improve Data Collection." *Fisheries Magazine*. [accepted]

Grasty, S. "How many fish are really in the sea? Investigating Fisheries Management Concepts by Estimating Reef Fish Abundance using Trawl and Underwater Video Data." *The Science Teacher, April/May 2020 Issue*. The National Science Teaching Association.

Broadbent, H.A., **Grasty, S.E.**, Hardy, R.F., Lamont, M.M., Hart, K.M., Lembke, C., Brizzolara, J.L., and Murawski, S. (2020). "West Florida Shelf pipeline serves as sea turtle benthic habitat based on *in situ* towed camera observations." *Aquatic Biology*. 10.3354/ab00722.

Grasty, S. E., Wall, C. C., Gray, J. W., Brizzolara, J., & Murawski, S. (2019). "Temporal Persistence of Red Grouper (*Epinephelus morio*) Holes in the Steamboat Lumps MPA and the Analysis of Associated Fish Assemblages from Towed Camera Data." *Transactions of the American Fisheries Society*. 10.1002/tafs.10154.

- Grasty, S.E.**, Taylor, J.C., & Janssen, J. (2019) "Pushing the sampling boundaries: Advanced technology is allowing us to survey deeper, longer, and in harder to reach areas of our oceans, lakes, and rivers." *Fisheries Magazine*. 10.1002/fsh.10317.
- Grasty, S.E.** & Campbell, M.D. (2019) "Understanding and Quantifying Bias in Visual Fisheries Surveys Using Advanced Technology." *Fisheries Magazine*. 10.1002/fsh.10236.
- Brizzolara, J.L., **Grasty, S.E.**, Ilich, A.R., Gray, J.W., Naar, D.F., & Murawski, S.A. (2019) Characterizing Benthic Habitats in two Marine Protected Areas on the West Florida Shelf. *Seafloor Geomorphology as Benthic Habitat: GeoHab Atlas of seafloor geomorphic features and benthic habitat, 2nd Edition.* Elsevier. Chapter 36.
- Grasty, S.E.** What's underneath it all? Investigating the Seafloor below the Surface of the Eastern Gulf of Mexico. *Guy Harvey Magazine*. Fall 2018 Issue.
- Lembke, C., **Grasty, S.**, Silverman, A., Butcher, S., Broadbent, H., & Murawski, S. (2017). The Camera-Based Assessment Survey System (C-BASS): A Towed Camera Platform for Reef Fish Abundance Surveys and Benthic Habitat Characterization in the Gulf of Mexico. *Continental Shelf Research*. 151. 10.1016/j.csr.2017.10.010.
-

Select Volunteer Experience

- Project PUP Therapy Dog Program, Tampa Bay, FL, August 2019 – April 2020
- The Dancing Goat's Farm and Milking Team, Tampa, FL, January 2018 – April 2020
- Marine Technology Outreach Tours, USF College of Marine Science, 2016 – June 2020
- St. Petersburg Science Festival, Activity Coordinator and Volunteer, annually in October from 2012 – 2018
- Outreach Coordinator, Marine Science Advisory Council, University of South Florida's College of Marine Science, August 2013 – May 2014