# **Brett Sweezey**

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# **Education**

# **Doctor of Philosophy (Marine Biology)**

2021 - Present

(Cumulative GPA: 4.00)

Texas A&M University, Galveston, TX

Evaluating the habitat requirements and ecological connectivity of elasmobranch species in the Flower Garden Banks National Marine Sanctuary

### **Master of Science (Marine Science)**

2015 - 2018

(Cumulative GPA: 3.71)

University of New England, Biddeford, ME

Estimating the discard mortality of Atlantic cod in the Gulf of Maine commercial lobster fishery

### **Bachelor of Science (Biology)**

2011 - 2013

(Cumulative GPA: 3.87, Major GPA: 3.88) Old Dominion University, Norfolk, VA

# **Skills & Certifications**

Competent in the statistical computing software R

Proficient in Geospatial Analysis with ArcGIS software

Experience with phlebotomy and blood analysis of marine fishes

Operation of small watercraft vessels with a USCG certified Operator's License

Certified AAUS Scientific Diver

# **Employment & Research Experience**

### Texas A&M University - Galveston, Texas

Aug 2021 – Present

Supervisor: David Wells, PhD. Position: Graduate Research Assistant

- Using acoustic and satellite telemetry to estimate spatiotemporal partitioning and ecological connectivity of shark species at the Flower Garden Banks National Marine Sanctuary (FGBNMS)
- Evaluating trophic ecology of shark species at the FGBNMS using a novel stable isotope technique combined with compound specific stable isotope analysis
- Teaching Assistant for Ichthyology lab

#### Virginia Institute of Marine Science – Gloucester Point, Virginia

Jan 2021 – July 2021

Supervisor: Emily Rivest, PhD. Position: Laboratory & Research Specialist

- Maintains experimental conditions among research aquaria by performing routine laboratory maintenance, monitoring water quality, and providing culturing support
- Performs standard operating procedures and data management for seawater chemistry analysis
- Operation and maintenance of oceanographic equipment in addition to efficiently collecting and analyzing collected water samples during field deployments

## Department of Environmental Quality - Washington, North Carolina

Jul 2018 – Jun 2019

Supervisor: Daniel Zapf. Position: Marine Technician II

- Collection of ageing structures and diet samples, species identification, and determining reproductive condition of crustacean and finfish species captured in the Pamlico and Neuse River systems
- Coding, data verification, and collection of landings information from fishery-independent and dependent sampling
- Lead field projects involving trawl samples, beach seining, fish tagging, and collection of biological samples from commercial fish houses
- Communicate efficiently and effectively with the public, recreational and commercial fisherman, and commercial stakeholders
- Operation and maintenance of outboard motorboats, trailers, and field and laboratory equipment

#### University of New England - Biddeford, Maine

Jun 2015 – Aug 2018

Advisor: James Sulikowski, PhD. Position: Research Assistant

- Used acoustic telemetry to determine the post-release mortality of Atlantic cod in the Gulf of Maine commercial lobster fishery
- Conducted research with pop-up satellite archival transmitting tags to determine the post-release mortality of dusky sharks within the western Atlantic pelagic longline fishery
- Responsible for field logistics, data organization and analysis, writing of annual reports, proposals, and outreach to local communities
- Responsible for outreach with the public, commercial shareholders, and local fisherman to maintain healthy relationships for current and future research
- Supervised and assisted with data collection and analysis for multiple undergraduate research projects

# Mote Marine Laboratory - Sarasota, Florida

Jan 2015 – May 2015

Advisor: Nick Whitney, PhD. Position: Internship

- Monitored lemon and nurse sharks within a flow tunnel respirometer to determine standard metabolic rate (SMR) and routine metabolic rate (RMR)
- Use of acceleration data loggers on lemon and nurse sharks in an effort to measure indirect energy consumption of wild individuals through SMR and RMR data
- Responsible for husbandry of laboratory elasmobranch species

#### Oceans Research - Mossel Bay, South Africa

Feb - Mar 2014

Advisor: Enrico Gennari, PhD. Position: Internship

- Collected data for the resident population of white sharks found in Mossel Bay through dorsal fin identification to assess the population dynamics within the ecosystem
- Monitored populations of pyjama shark, puffadder shyshark, and leopard catshark through trapping and rod-and-reel fishing
- Aided aquarium through local outreach programs and husbandry practices
- Used QGIS to monitor sightings for the resident population of white sharks within Mossel Bay

#### Bimini Biological Field Station - South Bimini, Bahamas

Sep – Dec 2013

Advisor: Tristan Guttridge, PhD. Position: Internship

 Aided with acoustic tracking and monitoring behavior of lemon sharks in response to external accelerometer attachment

- Collected data to examine personality differences of lemon sharks subjected to open field tests with respect to sensitization rate over multiple trial repetitions
- Monitored and deployed baited remote underwater video stations (BRUVS) throughout the island of North and South Bimini
- Operation and maintenance of small watercraft vehicles, field, and laboratory equipment

# Old Dominion University - Norfolk, VA

Jun 2012 - Aug 2013

Aug 2016

Adviser: Ian Bartol, PhD. Position: Undergraduate Research Assistant

- Used defocusing digital particle tracking velocimetry (DDPTV) to determine quantitatively distinct gaits of the black ghost knifefish
- Visualize 3D flow vectorization structures produced by body and appendage movements of marine animals
- Digitized swimming gait of green turtles within a water flow tunnel

release mortality of Atlantic cod within the Gulf of Maine lobster industry

Atlantic cod in the Gulf of Maine lobster fishery

**American Fisheries Society**. Kansas City, MO. *Estimating the post-release mortality of* 

Husbandry duties in addition to the operation and maintenance of laboratory equipment

<b>Professional Affiliations</b>	
American Elasmobranch Society	2020 – Present
Canadian Conference for Fisheries Research	2017 - Present
American Fisheries Society	2016 – Present
American Society of Ichthyologists and Herpetologists	2016 – Present
Awards	
Save Our Seas Foundation Keystone Grant (Awarded: \$16,989)	Jan 2023
<ul> <li>Vemco VR100 Student Offer (Awarded: \$6,000)</li> </ul>	Mar 2017
• Undergraduate Research Grant (Awarded: \$6,000)	Aug 2012
<ul> <li>Old Dominion University Transfer Scholarship (Awarded: \$16,000)</li> </ul>	Aug 2011
<b>Professional Presentations (Oral)</b>	
American Fisheries Society. Atlantic City, NJ. Estimating the discard mortality of Gadus	Jun 2018
morhua in the Gulf of Maine commercial lobster fishery	
11 <sup>th</sup> International Conference & Workshop on Lobster Bio. and Mgmt. Portland, ME.	Jun 2017
Estimating discard mortality of Atlantic cod in the southern Gulf of Maine commercial	
lobster fishery	
<b>Southern New England Chapter – American Fisheries Society</b> . Mystic, CT. <i>Determining</i>	Feb 2017
the post-release mortality of Atlantic cod within the Gulf of Maine lobster fishery	
Canadian Conference for Fisheries Research. Montréal, QC, Canada. Observing the post-	Jan 2017
release mortality for dusky sharks, Carcharhinus obscurus, captured in the U.S. pelagic	
longline fishery	
Canadian Conference for Fisheries Research. Montréal, QC, Canada. Determining the post-	- Jan 2017

# **Publications**

## 2020

- **Sweezey, B. B.**, Capizzano, C.W., Langan J.A., Benoît, H.P., Hutchins II, E.W., Mandelman, J.W., Koh, W.Y., Dean, M.J., Anderson, B.N., Sulikowski, J.A. 2020. Estimating the discard mortality of *Gadus morhua* in the Gulf of Maine commercial lobster fishery. *North American Journal of Fisheries Management*.
- Anderson, B. N., Weissman, A. M., **Sweezey, B.B.**, Mandelman, J., Rudders, D. B., Sulikowski, J. A. 2020. Bycatch in a commercial lobster fishery impacts on two benthic predators. Sea Raven and Longhorn Sculpin. *Marine and Coastal Fisheries*.

#### 2019

Sulikowski, J. A., Golet, W., Hoffmayer, E. R., Driggers III, W. B., Natanson, L. J., Carlson, A., **Sweezey, B. B.** 2019. Observing post-release mortality for dusky sharks, *Carcharhinus obscurus*, captured in the U.S. pelagic longline fishery. *Fisheries Research*. 221