# Amanda E. Jefferson

## **Extension Associate**

Mississippi State University Coastal Research and Extension Center 1815 Popps Ferry Road Biloxi, MS 39532 amandajefferson@verizon.net

#### Education

University of South Alabama & Dauphin Island Sea Lab Fisheries Ecology Lab Master of Science in Marine Sciences December 2017

Advisors: Dr. J. Marcus Drymon & Dr. Sean P. Powers GPA: 3.8

#### **Relevant coursework:**

- Biological Oceanography
- Chemical Oceanography
- Physical Oceanography
- Field Marine Science
- Marine Experimental Ecology
- Marine Resource Management

University of North Carolina Wilmington Bachelor of Science in Marine Biology Summa Cum Laude With Honors in Marine Biology December 2013 GPA: 3.9

#### **Relevant coursework:**

- Animal Physiology
- Genetics
- Herpetology
- Ichthyology
- Ecology
- Marine Biology
- Marine Botany
- Oceanography
- Principles of Biology: Cells
- Principles of Biology: Biodiversity
- Basic Calculus I
- Introduction to Statistics
- Elementary College Physics
- General Chemistry I & II
- Organic Chemistry I & II
- Vertebrate Diving Seminar

### Research Experience

Graduate Research Assistant Fisheries Ecology Lab Dauphin Island Sea Lab Dauphin Island, AL

**August 2015 – December 2017** 

- Assist with offshore and inshore fishery-independent surveys including vertical and bottom longline, trawls, gillnets, and seines
- Process reef fishes for otolith and gonad analysis
- Hand-section and age Red Snapper otoliths

#### Coral Reef Ecosystem Research Program Internship Mote Marine Laboratory Sarasota, FL

#### November 2014 – January 2015

- Maintained ocean acidification system (OASys) and coral aquaria
- Monitored OASys water quality twice daily and performed bimonthly nutrient tests
- Analyzed coral reef photographs using Coral Point Count program
- Conducted laboratory assays such as DNA extractions, PCR, and gel electrophoresis
- Measured buoyant weight of corals bimonthly

## Research Internship Dolphin Research Center Grassy Key, FL January – May 2014

- Collected behavioral data by performing fifteen-minute calf independence studies
- Obtained respiration rates by observing each dolphin calf for five-minute periods
- Assisted with cognitive research sessions
- Operated and maintained research cameras, hydrophones, and apparatuses

# **Departmental Honors Project**

**UNCW Department of Biology & Marine Biology** 

Wilmington, NC

January 2013 – December 2013

Title: Quantifying Marine Protected Area Effectiveness: "Filling In" the Older, Larger Size Classes

- Continuation of DIS project from Fall 2012 supervised by Dr. J. Wilson White
- Measured California marine protected area (MPA) success in kelp forest fishes
- Investigated how fished age classes fill in after MPA implementation as the populations progress towards the stable size distribution
- Gained experience in theoretical population ecology and Matlab
- Wrote and defended a thesis

Herpetology Research Project UNCW Department of Biology & Marine Biology Wilmington, NC Spring 2013

Title: Swimming behavior of semi-aquatic freshwater turtles in varying flow rates

- Supervised by Dr. Amanda Southwood Williard
- Wrote a research report and presented findings to the class

### Directed Independent Study UNCW Department of Biology & Marine Biology Wilmington, NC Fall 2012

- Supervised by Dr. J. Wilson White
- Analyzed fish populations in and out of California MPAs to compare data to theoretical model predictions

# **Conference Presentations**

# American Fisheries Society 147th Annual Meeting

Tampa, FL

August 23, 2017

Title: Age and Growth of Gray Triggerfish in the Alabama Artificial Reef Zone

**Bays and Bayous Conference** 

Mississippi Alabama SeaGrant Consortium

Biloxi, MS

**November 30, 2016** 

Title: Preliminary analysis of Gray Triggerfish life history and distribution in the Alabama Artificial Reef Zone

#### Poster Presentations

# **University of South Alabama Graduate Research Forum**

**University of South Alabama** 

Mobile, AL April 13, 2017

Title: Gray Triggerfish Distribution and Abundance in the Alabama Artificial

Reef Zone

## Outreach Experience

Girls Exploring Math and Science University of South Alabama

Mobile, AL

November 4, 2017, November 5, 2016, & October 24, 2015

- Educated middle school girls about fisheries science

Coastal Cleanup Dauphin Island, AL

September 16, 2017, September 15, 2016, & September 19, 2015

- Assisted with volunteer check-in and distributed and collected data sheets

Shark Week Alabama Department of Conservation and Natural Resources Gulf State Park Pier Gulf Shores, AL July 27 & 28, 2017

Educated the public about shark biology and conservation

Alabama Deep Sea Fishing Rodeo Dauphin Island, AL July 21-23, 2017 & July 15-17, 2016

- Sampled anglers' fish for Sea Lab scientific research purposes

Roy Martin Young Anglers Tournament Dauphin Island, AL July 15, 2017 & July 9, 2016

- Sampled anglers' fish for Sea Lab scientific research purposes

Discovery Day Dauphin Island Sea Lab Dauphin Island, AL April 8, 2017 & April 9, 2016

 Welcomed visitors to the Sea Lab and educated them about current Fisheries Ecology Lab research

Rabbit Creek Clean-Up Theodore, AL April 1, 2017 & June 11, 2016

Kayaked in Rabbit Creek and cleaned the creek of trash and debris

Exhibit Guide National Aquarium in Baltimore Baltimore, MD Summer 2011

- Continued many responsibilities from the Student Summer Program
- Worked on the front line while explaining and interpreting exhibits for visitors
- Completed 30 volunteer hours

Student Summer Program National Aquarium in Baltimore Baltimore, MD February – August 2010

- Required to have in-depth knowledge about all aquarium exhibits
- Passed exam at the end of the training process before working in the aquarium
- Interpreted exhibits and answered questions for visitors
- Finished 25 training hours during the spring semester involving lectures and classes
- Completed 100 volunteer hours including the training hours

# Teaching Experience

#### **Coastal Communities Environmental Educator**

Don Lee Center Arapahoe, NC

February – June 2015

- Taught coastal science classes in an outdoor experiential education program
- Instructed primarily fourth through eighth grade students
- Facilitated Challenge Course elements, large group activities, and evening programs
- Maintained Nature Center aquaria and cared for amphibians and reptiles
- Upheld the cleanliness and appearance of the facility

## Camp Counselor Howard County Conservancy Nature Day Camp Woodstock, MD Summer 2011

- Created daily lesson plans for eight 5-day sessions around various themes including aquatic life, plant life, reptiles, insects, and animals
- Taught and supervised 10-15 children daily, ages 5-12

#### Workshop Attendance

Introduction to Quantum GIS Workshop NOAA Disaster Response Center Mobile, AL August 2, 2017

GSMFC GulfFIN Otolith Processors Workshop Panama City, FL May 9-10, 2017 & May 4-5, 2016

Research Integrity Workshop University of South Alabama Department of Marine Sciences Dauphin Island, AL April 7, 2017 Instructor: Dr. Ronald Kiene

Statistics/R Workshop Grand Bay NERR Moss Point, MS July 25-27, 2016

**Instructor: Dr. Robert Leaf** 

#### **Certifications**

Diver's Alert Network Diving First Aid for Professional Divers March 2017

**Motorboat Operator Certification Course March 2016** 

PADI Open Water Diver January 2015

**Organizations** American Fisheries Society

July 2016 - Present

Computer Skills Microsoft Office (Word, Excel, & Powerpoint)

**R Programming Language** 

**Quantum GIS** 

**Image-Pro Plus** 

Honors & Awards Chancellor's Achievement Award

**Spring 2013, Spring 2012, Spring 2011** 

- At least 15 credit hours with no grade lower than A-

Dean's List

Fall 2012, Fall 2011, Fall 2010

Pat Corcoran Smith Scholarship Fall 2010

- High school GPA of 3.5 or higher

Required to take at least 12 credit hours during fall 2010 semester

#### **References** Dr. J. Marcus Drymon (Advisor)

Assistant Extension Professor, Mississippi State University Coastal Research and Extension Center 1815 Popps Ferry Road, Biloxi, MS 39532 (228) 546-1028 marcus.drymon@msstate.edu

#### Dr. Sean P. Powers (Advisor)

Professor and Chair of Marine Sciences, University of South Alabama Senior Marine Scientist, Dauphin Island Sea Lab Department of Marine Sciences, Life Sciences Building Room 25 University of South Alabama, Mobile, AL 36688 (251) 460-7136 spowers@disl.org

#### **Crystal LouAllen Hightower**

Lab Manager, Fisheries Ecology Lab, Dauphin Island Sea Lab 101 Bienville Boulevard Dauphin Island, AL 36528 (251) 861-2141 x2384 chightower@disl.org