

## *Mitchell Meads*

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### **Education**

<i>Ph.D., Marine and Coastal Management Sciences</i>	May, 2021
<b>Texas A&amp;M University at Galveston</b>	Galveston, TX
<i>B.S., Biological Sciences</i>	2018
<b>University of Central Florida</b>	Orlando, FL
<i>Minor in Environmental Studies</i>	
<b>Dean's List</b>	Fall 2016, Fall 2019, Spring 2020, Fall 2020
<b>Protected Species Observer Certification</b>	2017
<b>UCF Short-Term Study Abroad Program</b>	2016

### **Research Experience**

#### **Protected and Preserved Lands Analysis, Houston Wilderness (2020)**

- Compiled and organized several geospatial datasets to determine amount of protected and preserved lands in Harris County and its adjacent 8 counties
- Created GIS maps to visually represent the percentage of protected and preserved lands, in addition to land use and land cover types in the study region
- Shared datasets and GIS map to Houston Wilderness partners for online publication

#### **Social Resiliency of New York City Case Study, Texas A&M University at Galveston (2019)**

- Evaluated the level of social resilience inclusion and implementation in current, government backed resiliency plans of New York City
- Compared 14 governmental, current resilience plans consisting of 1,214 pages
- Offered suggestions of improvements to social resilience in New York City and tools of implementation for those suggestions

#### **ArcGIS Technical Report, Texas A&M University at Galveston (2019)**

- Utilized National Flood Insurance Policy data to temporally and spatially analyze historical trends of flood policy claims across 5 different decades
- Created maps visually representing historical trends of flood damages across the continental United States since 1973

### **Poster Presentation, International Sea Turtle Symposium (2019)**

- Biological abstract accepted by program committee into Nesting Biology Session
- Designed relative human development index for the Archie Carr National Wildlife Refuge using geographic areas of condominiums, hotels, homes, community parks, and pristine landscapes
- Created logistic regression model to analyze relationship between sea turtle nest depredations and novel human development index

### **Undergraduate Research Assistant, UCF Marine Ecology Lab (2018)**

- Used lift nets, bottom trawl nets, and purse seine nets to collect samples of small nekton such as, juvenile sport fish, crustaceans, and other invertebrates in shallow, brackish environments of the Indian River Lagoon
- Responsible for species identification of collected samples
- Measured the standard length and counted total number of individuals for various species of collected samples
- Prepared and packaged grey snapper (*Lutjanus griseus*) tissue for radioisotope analysis

### **Undergraduate Research Assistant, UCF Marine Turtle Research Group (2017 – 2019)**

- Collected, sampled, and recorded biological data on federally endangered species of loggerhead (*Caretta caretta*), green (*Chelonia mydas*), and leatherback (*Dermochelys coriacea*) sea turtles on the Archie Carr National Wildlife Refuge
- Conducted sea turtle morning nest surveys, tangle netting trips, and clutch inventories
- Informed the local public on the importance of minimizing anthropogenic effects on nesting sea turtles through outreach events and individual encounters
- Worked in union with local and authorities such as police officers and Florida Fish and Wildlife Control
- Collaborated with graduate students to conduct research on foraging ecology, disease ecology, and predation
- Safely trained undergraduate interns on proper research techniques

### **UCF Belize Short-Term Study Abroad Research Project (2016)**

- Designed and executed a week long research project on the effectiveness of Marine Protected Areas using populations of queen conch (*Strombus gigas*) in the waters of Glover's Atoll Reef
- Logged over 20 hours of underwater research in many different reef types
- Collected samples for graduate research on microplastics

### **Undergraduate Research Assistant, UCF Coastal & Estuarine Ecology Lab (2016)**

- Used ecologically sustainable methods of restoring intercostal shorelines in the Mosquito Lagoon
- Planted and monitored mangroves (*Rhizophora mangle*) and cordgrasses (*Spartina alterniflora*) to be relocated to degraded intercostal shorelines
- Constructed and relocated oyster mats (*Crassostrea virginica*) to combat invasive species of mussel and barnacle

## **Work Experience**

### **Graduate Research Assistant, The Institute for a Disaster Resilient Texas (2020 – Present)**

- Assisting in a project for land cover and land use change forecasting in the greater Houston region
- Mastering statistical modeling programs like FUTURES and R
- Providing GIS maps and other datasets for predicting land cover and land use change

### **Environmental Policy and Programs Fellow, Houston Wilderness (2020 – Present)**

- Organized multiple tree plantings to achieve Houston Wilderness' goal of 4.6 million trees planted by 2030
- Collaborated with the Port of Houston, Trees for Houston, Houston-Galveston Area Council, the Health Department of the City of Houston, Natural Resource Conservation Service, and other Houston Wilderness partners to achieve an annual increase of .4% carbon sequestration
- Created GIS maps for publication on Houston Wilderness website and other GIS maps for Houston Wilderness partners
- Lead and initiated an avian analysis on relationship between bird species and tree plantings

### **Graduate Teaching Assistant, Physics 1 (2019)**

- Safely lead classrooms of up to 18 students through experiments based on applied physics concepts
- Effectively lectured according to the lesson plan and assisted students with conceptual problems during office hours
- Proctored classroom quizzes and exams following student honor code
- Graded weekly lab reports following lecture professor's criteria

### **Graduate Teaching Assistant, Wetlands Management (2019)**

- Assisted adjunct professor in conducting safe field trips to wetlands in the Houston/Galveston area
- Identified megafauna and biota in wetland ecosystems for students
- Collected samples of plants for students to view later in the classroom
- Worked in unison with a wetlands delineator during final field exam to evaluate students' ability to delineate wetland boundaries

### **Accounting Specialist, CCI Systems (2012 – 2015)**

- Collaborated with other businesses, such as Verizon and Disney, to execute purchase orders in a timely fashion
- Worked with fellow employees to dispute a property tax audit
- Transitioned to a paperless office
- Responsible for disposing of important documents such as contracts and check stubs

## **Certifications & Licenses**

### **Protected Species Observer (2017)**

- Obtained a certification to earn a profession as a Marine Mammal Observer & Protected Species Observer in the Gulf of Mexico
- Capable of being able to distinguish and identify species of marine mammal or reptile
- Educated on legal protocols that must be followed for any protected species of marine life in the Gulf of Mexico
- Able to utilize proper communication skills to enforce legal protocols

### **ATV Safety Certification (2017)**

- Passed a course highlighting safe driving techniques on an ATV
- Demonstrated safe driving techniques during morning sea turtle nesting surveys
- Instructed summer interns on safe driving techniques including loading ATV's onto trucks

### **Boating License (2015)**

- Acquired boating license by completing a two-day boater's safety course
- Experienced in safe boat loading and trailer maintenance

## **Awards/Honors**

### **National Science Foundation International Research and Education Program on Coastal Flood Risk Reduction (2020)**

- Accepted research proposal on natural and nature-based flood mitigation systems along the North Sea coast of the Netherlands
- Fully funded round-trip to the Netherlands with 15 other students from Texas A&M University, Jackson State University, and Rice University

### **International Sea Turtle Symposium Travel Grant (2019)**

- Awarded 6 nights lodging by the Travel Grant Committee for the 2019 International Sea Turtle Symposium in Charleston, South Carolina

### **Evolution Film Festival/Video Contest Submission Finalist (2017)**

- As a part of an evolution class at the University of Central Florida taught by Dr. Anna Savage, a classmate and I submitted an original homemade video to a contest hosted by Duke University. The video was chosen out of hundreds of other submissions to be sent to the Evolution Film Festival in Portland, Oregon. There, it was selected out of 45 very competitive submissions as one of 13 finalists to be screened at the festival.

## **Technological Experience**

- Highly trained and experienced using ArcGIS, R, and Stata to analyze complex data sets
- Certified in Microsoft Excel, Word, PowerPoint, and Adobe Photoshop CS5
- Proficient in laboratory technologies such as mass spectroscopy, stable isotope analysis, and chromatography