

REEF RELIEF

Marine Science Careers

A collection of interviews with students,
interns, and professionals in the marine
science field

Education and Community Outreach - Haley Burleson

RR: What is your name and where are you from?

HB: Hi there! My name is Haley Burleson and I'm from Haymarket, Virginia.

RR: What is your current job and who do you work for?

HB: I am the Community Events Coordinator for Mote Marine Laboratory's International Center for Coral Reef Research and Restoration located in the Florida Keys. While I work full time, I am also taking online classes through the University of Florida to earn a graduate certificate in nonprofit management.



My hope is that the knowledge I gain in and out of the classroom will continue to help me promote the importance of marine science and build relationships within the community to spread the awareness of local environmental issues and the actions marine science nonprofits are taking to combat those issues.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

HB: Mote Marine Laboratory & Aquarium is a 501c3 marine science nonprofit organization. Mote was founded in 1955 by Dr. Eugenie Clark, the Shark Lady in Placida, Florida. Currently, Mote has six locations throughout Florida with over 20 research program and more than 200 staff members, including more than 30 Ph.D. scientists. Mote scientist conduct research on all seven continents.

RR: What does a "typical day" at your job or internship look like?

If you want to connect with a marine science professional, please reach out to Reef Relief for more information!

Education and Community Outreach - Haley Burleson

HB: A typical day for me at Mote in the Florida Keys varies depending on what is happening at our lab and locally in our community. When there are events coming up such as Ocean Fest, I'm traveling all over the Keys getting documents signed and having meeting with partners. Planning for an event will start about three months before the event and it starts with emailing a variety of vendors inquiring about their participation for our event. Part of event planning is also creating promotion materials for each event and marketing the event. If I'm not planning for a major event like Ocean Fest, I'm crafting ideas for smaller events to be held throughout the keys that will align with the message Mote wants to communicate to the public or, I am involved in other events to support our partners.

RR: How did you choose your career path?

HB: I grew up around the Chesapeake Bay and I was always on the coast at the beaches, frequenting aquariums, and fishing the estuaries with my dad. I took a liking to marine life at a young age and as I grew older, I realized that I could make a living being around marine life / marine science. I took an oceanography class in high school which solidified my interest in marine science, and I went on to receive a Bachelor of Science in Marine Biology from Old Dominion University in Norfolk, Virginia. Throughout my undergraduate years I received a variety of experience from volunteering with the Virginia Aquarium & Marine Science Center's Stranding Response Team, interning with a nonprofit organization tagging sharks and stingrays in Clearwater, Florida, and working summer jobs as a Fisheries Research Technician at the Virginia Institute of Marine Science.

After college I worked a seasonal fisheries job in Utah with the Utah Division of Wildlife Resources conducting Colorado River cutthroat trout enhancement projects. Shortly after this I was conducting creel surveys on Lake Kissimmee and Lake Tohopekaliga with Florida Fish and Wildlife Conservation Commission (FWC) for a season. Conveniently, as my seasonal job with FWC was coming to an end I was accepted into a full-time job at Mote Marine Laboratory & Aquarium as a fisheries research technician.

I worked as a research technician for Mote's fisheries research program from May 2018 to August 2019. Although I enjoyed my time as a research technician, I also came to the realization that there was a gap in

Education and Community Outreach - Haley Burleson

communicating science to the public and I wanted to make an effort in bridging that gap. I believe that knowledge is power and if the public doesn't understand local environmental issues and appreciate the efforts marine scientist are doing to combat those issues then scientists won't have as big of an impact as they could if the public did understand the reasoning behind the research. So, I started looking into making a slight change in my career path.

Coincidentally, an opening at Mote Marine Laboratory's International Center for Coral Reef Research and Restoration as Community Event Coordinator was posted on Mote's website. I applied and next thing I know, I'm packing my apartment up in Sarasota and moving down to Big Pine Key. I wanted to be in the marine science field because I wanted to make a difference in the world and I truly feel that I am doing that in my current role with Mote Marine Laboratory & Aquarium.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

HB: When I think of the most important issue our ocean faces in today's world, two things come to mind. The first thing is communicating environmental issues to the public. I think that there aren't enough people out there who truly understand what is happening to our environment and the impacts it will have if we don't take action. The second is the severe decline of coral tissue on coral reefs. There's approximately 2% coral tissue cover on Florida's coral reef and that is due to a variety of reasons including human interaction, pollution, climate change, and diseases. This is not a widespread known fact outside of the Florida Keys which reiterates the need to communicate environmental issues to the public. We need coral reefs for multiple reasons, one of which is that they provide thousands of jobs. It also doesn't hurt that coral reefs provide world class fishing 🐟

RR: When you were a child, what did you want to be when you grew up?

HB: I always knew I wanted to work with animals, but as I grew up, I gained clarity on what species of animals I enjoyed working with.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

Education and Community Outreach - Haley Burleson

HB: Gain experience, even if it's just volunteering. Volunteering in different roles of various organizations can really help someone understand what they like and don't like. Build relationships and keep them positive, the marine science community is a small community. A lot of my experience came from previous employers putting in a good word for me. Take risks, you will never know if you don't try.

RR: What is the most challenging part of your job?

I think currently the most challenging part of my job is making a name for myself in the local community and getting people to trust me. Getting people to trust someone new is always difficult and being in a small town.



Education and Community Outreach- Jessyca Garlock

RR: What is your name and where are you from?

JG: Jessyca Garlock; Orlando, FL

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

JG: Education Specialist at Mote Marine Laboratory

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?



JG: Mote Marine Laboratory was founded in 1955 as an independent marine research institution. Through the years, Mote has distinguished itself through the seamless integration of its research enterprise with education, public outreach and public policy programs. Our team believes conservation begins with education, and the sooner we can educate each other the better off our oceans and our lives will be.

"For generations, we have been taking from the sea. Now, it's time to start giving back." —William R. Mote

RR: What does a "typical day" at your job or internship look like?

JG: A typical day begins at 8 AM, arriving at the lab on Summerland Key and preparing for the day's lessons. Lessons could take place in the classroom learning about various research programs, in the lab learning about coral restoration methods, or underwater with our SCUBA gear exploring Mote's coral nurseries!

RR: How did you choose your career path?

JG: Growing up in Florida, I was surrounded by water and I knew early on I wanted a career that would allow me to work with the ocean. I visited a lot of

Education and Community Outreach- Jessyca Garlock

aquariums and was always amazed by the animals and inspired by the people who took care of them. When I was in college, and for a while after, I did many different internships and work experiences within the marine science field until I found my passion: teaching people about the environment and inspiring them to protect it!

RR: In your opinion, what is the most important issue our ocean faces in today's world?

JG: Coral reefs are disappearing at an alarming rate. They make up less than 1% of the ocean floor but support 25% of all marine life. Without coral reefs we would lose a source of food, medicine, economy, and shoreline protection! There are many issues that are super important to ocean conservation– but this one is especially important to us locally in the Keys.

RR: When you were a child, what did you want to be when you grew up?

JG: A marine scientist or a detective (& research is kind of like being a detective!)

RR: What is one piece of advice you would give a student who has interest in a marine science career?

JG: Try out a lot of different volunteer and internship positions until you find the field that is right for you. In marine science, you can be many different things and it can be overwhelming trying to figure out what exactly you want to do or study. My advice is to try a lot of different things when you're in high school and in college (even after college). Not only will you figure out what you like and don't like - this will also help you to network and meet lots of different people who might be giving you a job one day!

RR: What is the most challenging part of your job?

JG: Scientific research can seem complicated or overwhelming to someone outside of that field, and even to people in science! That's why science education is one of the most important parts of conservation. The most challenging part of my job is trying to communicate complex topics and ideas in a way that anyone, no matter their age or education background, can understand. Effective communication and education in science is a critical tool to creating change!

Marine Mammal Stranding - Lindsey Reisz

RR: What is your name and where are you from?

LR: Lindsey Reisz. I'm originally from Nashville, TN.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

LR: I am a marine scientist and program coordinator for the Marine Science Eco Experience (MSEE). Also, I am a full-time graduate student in the Master of Professional Science (MPS) program at the University of Miami, Rosenstiel School of Marine and Atmospheric Science (RSMAS). I am on the Marine Mammal Science track and will be interning and completing my research project with the Stranding Investigations Program Team at Mote Marine Laboratory in Sarasota, FL during the summer and fall.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

LR: MSEE is an organization that brings the ocean to hotel and resort guests throughout the Florida Keys and Miami area. We host marine science presentations at hotels and bring small invertebrates that people are able to hold and learn about during the session. It is a great way to engage with the visitors of the Florida Keys and Miami and teach them about our local ecosystem and how they can make a difference in marine conservation. The Marine Mammal Science track at RSMAS is extremely hands-on and challenging. A few of my courses over the past year included the Department of Interior's Motorboat Operator Certification Course, biology of marine mammals, marine mammal disease and medicine, and marine mammal applied behavior analysis and managed care. The program is designed to



Marine Mammal Stranding - Lindsey Reisz

give us real world, hands-on experience that prepares us for a career post-graduation.

RR: What does a "typical day" at your job or internship look like?

LR: I will begin my internship in two weeks, but I've been told that no two days are the same when you are working in marine mammal and sea turtle stranding response. The key is to be flexible and working as a team with the other interns and biologists. If we receive a call of an injured sea turtle or marine mammal, then we will respond and hopefully be able to rescue or release that animal. If the animal is dead, we will perform a necropsy and try to determine why it died. Most days I will be collecting data to use for my research project and working on my project report.

RR: How did you choose your career path?

LR: I was determined to make it in the marine science field, and I took every opportunity I was offered. Through my experiences, I figured out that I really wanted to make a difference in the world through marine conservation. Ultimately, I knew that marine mammals were my passion and that is what lead me to pursue my MPS degree.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

LR: In my opinion, one of the most important issues our oceans are facing is pollution. This includes plastics, derelict lobster traps, fishing line, rope, etc. If you have ever participated in a beach cleanup, you have seen firsthand the variety of trash in our oceans and waterways. This debris is having a severe impact on all marine organisms and ecosystems, whether they are absorbing the chemicals released from the plastics or they have a rope wrapped around their pectoral flipper. As humans and consumers, we have an opportunity to make a difference and find a solution for this issue.

RR: When you were a child, what did you want to be when you grew up?

LR: It sounds cliché, but I always knew I wanted to have a job that kept me engaged with the ocean. So, a marine biologist seemed like my ideal and natural career path.

Marine Mammal Stranding - Lindsey Reisz

RR: What is one piece of advice you would give a student who has interest in a marine science career?

LR: My best advice is try to gain as much experience as possible in all niches of the marine science field. I believe it is best to try not to limit yourself to just one ecosystem, such as coral reefs. Everything in the ocean is connected so you want to be able to understand at least the basics of every ecosystem and organism.

RR: What is the most challenging part of your job?

LR: In stranding's, it is difficult knowing that you can't save a lot of the animals you are responding to, but you hope that, as scientists, we can learn something from their death, and it will lead to changes in management.



Manatee Research- Katy Frey

RR: What is your name and where are you from?

KF: Katy Frey, New Jersey

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?



KF: I am a Staff Biologist in the Manatee Research Program at Mote Marine Laboratory.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

KF: Mote is a non-profit that is both an aquarium, as well as a marine research facility.

RR: What does a "typical day" at your job or internship look like?

KF: I have two typical days: 1 is out in the field, photographing manatees and the scars/mutilations they get from boats; and 2 is matching images of animals over time to track individual animals and study life history patterns of the overall population.

RR: How did you choose your career path?

KF: I started as an intern with the program, having always been interested in marine mammals, and fell in love with manatees (how could you not?!) and photo-ID research.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

Manatee Research- Katy Frey

KF: I think the loss of coastal habitats (mangroves, corals, estuaries, etc.) is the most important issue; the ecosystem services they provide are unparalleled and as we continue to destroy these habitats, we're destroying our own future.

RR: When you were a child, what did you want to be when you grew up?

KF: I wanted to work with dolphins. I was that kid - posters, towels, you name it I had one with a dolphin on it!

RR: What is one piece of advice you would give a student who has interest in a marine science career?

KF: Take every opportunity available! This applies to more than just marine science too, but there's so many different avenues of marine science, and you never know where an experience or connection is going to take you! The ocean is full of endless possibilities (wow, that sounds really cheesy, lol)

RR: What is the most challenging part of your job?

KF: The uncertainty of our financial future; so much of our industry is based on grants and state funding and with our current political climate and leaders, the environment is clearly not a priority, which unfortunately translates to a lack of stability in funding.



Recreation and Ecotourism - Brady Stonesifer

RR: What is your name and where are you from?

BS: Brady Stonesifer. I'm from Fenwick Island, Delaware

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?



BS: I am currently captain of SQUID for Honest Eco, an eco-tour company in Key West that focuses on spreading a message of conservation through remarkable nature experiences.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

BS: Honest Eco strives to "make conservation contagious." We believe by showing guests a variety of marine species in a beautiful environment, they will fall in love with the ecosystem and be more willing to help protect it.

RR: What does a "typical day" at your job or internship look like?

BS: A typical day for me involves two trips out on the water. In each trip, we find wild dolphins about 3-7 miles offshore of from Key West. After observing their behavior for about an hour, we then go snorkeling at either a patch reef or a sponge garden in the Key West National Wildlife Refuge.

RR: How did you choose your career path?

BS: I chose this career path after falling in love with the ocean at a very young age, knowing it was something I wanted to continue learning about and studying for years to come.

Recreation and Ecotourism - Brady Stonesifer

RR: In your opinion, what is the most important issue our ocean faces in today's world?

BS: Ocean acidification is the biggest issue facing today's oceans. As we continue releasing CO2 into the atmosphere, our oceans continually absorb more CO2 than they are able to fix back into organic compounds, and the acidity of our waters slowly rises. This leads to the decline of a variety of marine species, specifically coral reef ecosystems, which contain a quarter of all marine species in the world!

RR: When you were a child, what did you want to be when you grew up?

BS: As a kid, I wanted to be a professional surfer!

RR: What is one piece of advice you would give a student who has interest in a marine science career?

BS: Create a project of your own. So many success stories from around the world weren't born from a miracle. Things like the Key West sunscreen ban, or plastic straw ban started from small organizations doing lots of good, hard work. It's the hard work of passionate individuals that will make a long-term difference!

RR: What is the most challenging part of your job?

BS: Docking the boat!



Wildlife Biology - Katie Flowers

RR: What is your name and where are you from?

KF: My name is Katie Flowers and I am from New Brunswick, Canada.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?



KF: I am a graduate research assistant in the Predator Ecology and Conservation Laboratory at Florida International University. I am studying to get my doctorate degree in biological science. When I graduate, I will be looking for funding to do a postdoctoral degree in conservation genetics or ray movements to inform management strategies for threatened species. After this, I hope to run my own non-governmental organization with my partner who is a shark scientist.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

KF: My dissertation research focuses on stingray behavior and habitat use in response to sharks in Caribbean coral reef ecosystems.

RR: What does a "typical day" at your job or internship look like?

KF: There is no such thing as a typical day in my job. Despite what some may think, being a marine scientist actually doesn't involve that much field work. I spend the majority of my time at my computer reading published literature, analyzing data, writing papers, or watching baited remote underwater videos (BRUVS) for the Global FinPrint project. About once or twice a year I go to Belize to set various kinds of tags on sharks and stingrays that measure their activity and movements, set BRUVS to monitor shark and ray populations inside a marine protected area, conduct outreach

Wildlife Biology - Katie Flowers

with local communities, and train citizen scientists that get to join me on the adventure (check out our "Shark and Ray Conservation in Belize" Earthwatch program here).

RR: How did you choose your career path?

KF: I have always loved the ocean. However, in college I decided I wanted to be a teacher and was studying anthropology. Halfway through my degree, I volunteered on a dolphin research project in Greece monitoring individual movements using photographic identification. Once I got a taste of marine science in action, I was hooked. I graduated with a Bachelor of Arts thinking I would never get a marine related job. I decided to take an extra semester abroad in the Turks and Caicos studying marine resource management, where I fell in love with rays – the flat cousins of sharks. I was fascinated by their beauty but shocked to learn they are one of the least understood vertebrate groups on the planet, yet they are also facing many threats from overfishing to habitat loss. One of the most threatened marine fishes is right here in Florida's backyard - the small tooth sawfish. It may look shark-like with its dorsal fins and quirky tooth-lined snout, but it's actually a ray. After returning from the sunny Caribbean, I moved to the chilly shores of Canada where I was lucky enough to spend time working as an at-sea fisheries observer in the Gulf of St. Lawrence before moving to New York where I got my master's in marine Conservation and Policy.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

KF: Us – from destructive fishing practices, pollution, to our obsession with fossil fuels, our combined actions are threatening the health of ocean ecosystems. But it's not all doom and gloom, our actions can also be part of

the solution by working together across borders and fields of study.

RR: When you were a child, what did you want to be when you grew up?

KF: It varied from dolphin trainer, police officer, emergency medical technician, hairdresser, to teacher. I was never really aware a career in science would be possible for someone like me coming from such a small

Wildlife Biology - Katie Flowers

town with a population of about 800 people. I was never exposed to science in a classical sense but loved hiking in the forest behind my house and exploring tide pools on the beach in the summers. What I didn't realize is that I was training to be a scientist whenever I was experiencing nature because of my curiosity.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

KF: Dare to be different – marine scientists need to have a large skill set so you never know when anthropology, engineering, economics, or carpentry will come in handy. It will make you stand out in the crowd.

RR: What is the most challenging part of your job?

KF: Time management. I love what I do so it's hard to shut it off at the end of the day, while at the same time it is a lot of work balancing teaching, research, collaborations, and international field projects.



Wildlife Biology - Natalie Montero

RR: What is your name and where are you from?

NM: My name is Natalie Montero. I am originally from South Florida, but I live in the Florida Panhandle now.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?



NM: My current job is Fish and Wildlife Biologist at the Florida Fish and Wildlife Conservation Commission.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

NM: The FWC is Florida's fish and wildlife agency. It is in charge of managing Florida's fish and wildlife for their benefit and those of the people. We do research, create laws and policies, monitor animals and habitat, and more!

RR: What does a "typical day" at your job or internship look like?

NM: A "typical day" in my job is often spent at my desk. I work with people in Florida and across the Southeast US to learn more about animals, work towards conserving animals and habitats, and reach out and educate the public.

RR: How did you choose this career path?

NM: I chose this career path by taking a lot of different opportunities to figure out what aspect of conservation I wanted to be involved in. I had internships with different organizations and also conducted my own research to discover where I could make the biggest difference in conservation.

Wildlife Biology - Natalie Montero

RR: In your opinion, what is the most important issue our ocean faces in today's world?

NM: In my personal opinion, the most important issue our oceans face today is lack of knowledge. It can be difficult to understand how threats impact species and habitat when you don't know what a healthy version looks like. It can also be difficult to know if our actions are making a difference when we don't monitor in similar ways over a long time.

RR: When you were a child, what did you want to be when you grew up?

NM: When I was young, I wanted to be a veterinarian. I even worked at different clinics and hospitals as a vet tech (nurse) before I realized I liked conservation more.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

NM: My advice is to read and learn A LOT and also get involved! If you want to work in marine science, try different things to see what part of marine science you like most and learn how things are connected.

RR: What is the most challenging part of your job?

NM: The most challenging part of my job is figuring out how to use resources in the best way. We don't have enough money, time, or people to solve all of the problems we have when we need or want to. So we have to decide which are most important and able to be done multiple times each year. Sometimes things change without warning, like this pandemic, and we have to figure out how things may or will change when trying to use our resources in the best way.



Fisheries Biology - Dr. Will Heyman

RR: What is your name and where are you from?

WH: Dr. William D. Heyman (Will)
LGL Ecological Research Associates, Inc.
College Station, TX



RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

WH: I'm titled, Senior Marine Scientist with LGL Ecological Research.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

WH: LGL is an ecological research company (private sector). We are funded to do science through grants and contracts with and rec.

RR: What does a "typical day" at your job or internship look like?

WH: Fortunately - there is no typical day. On Friday, I was 60 miles offshore in the Gulf of Mexico on a commercial fishing boat doing fisheries research. Today, I'm working from home, analyzing underwater video data and working on a grant proposal to study Nassau grouper in the US Virgin Islands.

RR: How did you choose your career path?

WH: My dad told me, "Son, you are going to work for about 40 years. It would be wise to choose something that you like!" And I like the ocean. I like fishing. I also like diving, underwater photography, coral reefs. I also enjoy writing about my work. Finally, I like to try to influence marine conservation to

Fisheries Biology - Dr. Will Heyman

protect and manage the resources that I love. In doing so, I recognize that resources users need to make a living, so I like to work collaboratively with fishermen to design solutions that work for both the environment and sustainable livelihoods.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

WH: Population growth and associated, global changes in climate and increased direct (e.g. fishing) and indirect (e.g. upland pollution) impacts.

RR: When you were a child, what did you want to be when you grew up?

WH: Anything job that had me in the ocean.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

WH: Same advice as my dad gave me, above.

RR: What is the most challenging part of your job?

WH: Working with diverse groups of people that often have different objectives. The most painful part is working with people that really don't care about the outcomes - as long as they check the boxes that "get their job done" with the least amount of effort on their part. That attitude, unfortunately, often drives policy.



Coastal Management - Carly Shabo

RR: What is your name and where are you from?

CS: My name is Carly Shabo and I am from Hingham, Massachusetts. I am currently living and working in Oakland, California.



RR: What is your current job and who do you work for?

CS: I am the Coastal Community Resilience Specialist for the National Oceanic and Atmospheric Administration's (NOAA) Office for Coastal Management- West Coast Region.

RR: Can you tell us about the organization or business you work for?

CS: NOAA's overall mission is science, service and stewardship. "Coastal management" is a term that covers the decisions and actions taken to keep the natural environment, built environment, quality of life, and economic prosperity of our coastal areas in balance. As a scientific organization, NOAA provides access to the science and environmental intelligence communities need to ensure a resilient future for our coastlines.

RR: What does a "typical day" at your job or internship look like?

CS: Each day looks different than the last, and that is what makes it so fun. My days are filled with meetings with partners in other federal agencies, state organizations, and regional and local planners and managers. We work together to identify problems and find long-term solutions.

RR: How did you choose your career path?

Coastal Management - Carly Shabo

CS: I knew I wanted to be a marine biologist, but I didn't know exactly what that could mean. I took on a few different roles to see what I liked and didn't like and found again and again that advocating for better environmental decisions was not enough for me. I wanted to work to become one of the people making decisions at the highest level so that our communities and natural environment could be best prepared to weather the changing climate.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

CS: Destruction of our oceans' habitats encompasses so many important issues our oceans face. Pollution, overexploitation of marine resources, warming seas, and more are destroying so many of the habitats found beneath the waves. Damage of these habitats can kill the plants and animals responsible for that habitat's ecological functions and, sometimes, its survival and regeneration. Loss and destruction of habitat can mean loss of species harvested for food or natural products and can reduce food and livelihood security. Habitat loss can also decrease shoreline protection, negatively affecting coastal communities and industries by increasing exposure to climactic events such as storms and floods.

RR: When you were a child, what did you want to be when you grew up?

CS: I knew I wanted to be a marine biologist since I was a kid- but when I was little, I thought marine biologists were just dolphin trainers! Through my career I have seen it can be so much more. I have worked in research, both in a lab and in the field, environmental education, policy development, and now policy implementation. It has been so interesting to see all of the different ways I can be a scientist!

RR: What is one piece of advice you would give a student who has interest in a marine science career?

CS: Say YES to exciting opportunities. Before I took on my current position, I worked in a research lab studying plants in Charleston SC, wrangled and tagged sharks and turtles in Turks and Caicos, taught in classrooms throughout the Florida Keys, and wrote policy recommendations for the island of Curacao. I learned something new from each and every position I

Coastal Management - Carly Shabo

held, and those experiences gave me the confidence and knowledge to get to where I am today.

RR: What is the most challenging part of your job?

CS: Balancing the needs of a healthy environment and a thriving community can be so tough. By basing our decisions on best-available science, we can be sure we are doing what's best for our coastlines and the people that live there.



Wildlife Biology - Valeria Paz

RR: What is your name and where are you from?

VP: My name is Valeria Paz and I was born in Peru and moved to the United States when I was 11 years old. I have lived in Miami, Florida ever since.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

VP: I am a Marine Biologist and I work at Florida International University. I am finishing my PhD in Biology.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

VP: Florida International University is a research university and has been recently ranked 9th best research university in the world for marine science. As a biology PhD student, I am studying what habitats are critical for bottlenose dolphins in the Everglades. I'm interested in learning what they eat, how they interact with each other and other species such as fish, sharks, and alligators. I hope that with learning what they need to survive, we can do a better job at protecting them.

RR: What does a "typical day" at your job or internship look like? My days can vary from working in a lab or spending the day in the water but

VP: A lot of my work requires observation of dolphins and data collection in the field. So, a typical day in the Everglades starts around 3:45 AM, I get to campus to gather all the gear and get the truck and boat ready. We are



Wildlife Biology - Valeria Paz

usually out on the road by 4:15, with a crew of 4 people. We arrive at the dock by 6:30-7am, depending on traffic, then we have a 45-minute boat ride to the coastal Everglades. We usually finish around 5-6pm or maybe later depending on when the sun sets. We get back to campus between 8-9pm. It consists of very long days, but these are particularly amazing days. Every time is a different experience, we get to see wildlife and sceneries most people don't get the chance to see. Not all field experiences are the same, since it depends how far you are from what you want to study.

A typical day in the lab or office can be the normal 9am-5pm schedule or flexible as you need it to be. I have had 12-hour days when I had to run a particular lab experiment and I have also had days when I can read and write from home.

RR: How did you choose your career path?

VP: I was undecided through my first year in college. I knew I loved science, but I was not quite sure what I wanted to do until I took a class in ecology. Ecology is the study of how organisms interact with each other and their environment. I have always had a fascination with the discovery of the natural world. I volunteered in different labs, applied to internships, talked to a lot of my professors and asked a lot of questions, before I decided this was the path I wanted to take. Marine Biology is not seen as a traditional career in Latin America, so getting my parents on board took multiple discussions but ultimately, they are very proud and supportive.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

VP: There are many threats to our oceans like overfishing, ocean acidification, and climate change just to name a few. But one particularly important issue is pollution of our oceans. Plastic/ microplastics, heavy metals, pharmaceuticals seep into waterways and end up in the oceans and are taken up by animals, which we also consume through seafood. We can already see the impact of these pollutants in animals, like dolphins, whales, sharks, turtles, and we know it can affect humans as well.

RR: When you were a child, what did you want to be when you grew up?

Wildlife Biology - Valeria Paz

VP: I wanted to be a paleontologist and study dinosaurs after watching Jurassic Park and I also wanted to be a meteorologist and chase tornadoes like in the movie Twister. I have always been very driven by adventure and discovery.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

VP: There are so many different career tracks within marine science, it's incredible. It is very multidisciplinary, from engineers, biologists, chemists, economists, to social scientists, I would advise you to read about it, maintain good grades, and once you are old enough, volunteer or intern in many different areas of marine science and see what you are most passionate about. If you are slightly curious about a certain area, read about it, talk to people in the field, don't be afraid to ask questions. I have taken many volunteers over the years, and they have been very helpful.

RR: What is the most challenging part of your job?

VP: We want to protect what we love, and sometimes the hardest part of the job is seeing all the negative effects we as humans have on our environment. But it is also our motivation to continue studying why these things are happening and what we can do to better conserve, restore and protect these important resources.



Marine Specimen Collection-Don DeMaria

RR: What is your name and where are you from?

DD: Don DeMaria from Jacksonville, Florida, but have been living in the Florida Keys for 40 years.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

DD: Self Employed--owner of a business (Sea Samples)

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

DD: Sea Samples is a small business that provides marine specimens for research facilities and the aquarium trade.

RR: What does a "typical day" at your job or internship look like?

DD: A typical day for us would involve diving on the sea grass beds for emerald crabs and turbo snails for the aquarium trade. Or, we could be diving under one of the bridges in the Keys for angelfish for the aquarium trade. On some days we dive for research specimens--mostly sponges and ascidians in the mangroves or out on the reef in deeper water.

RR: How did you choose your career path?

DD: After my second year of college I visited a friend of mine who was living on Big Pine Key and collecting tropical fish for the aquarium trade. He brought me out for the day, and I made up my mind then that is what I wanted



Marine Specimen Collection-Don DeMaria

to do- make living doing what others save up all year to do on their vacation- scuba diving on a coral reef.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

DD: Overfishing and degraded water quality

RR: When you were a child, what did you want to be when you grew up?

DD: I really had no idea-but I really enjoyed fishing.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

DD: Think outside the box -- there are many opportunities in the marine field other than just working for a state or federal government agency

RR: What is the most challenging part of your job?

DD: Probably dealing with the weather and a declining eco-system.



Fisheries Management- Jessica McCawley

RR: What is your name and where are you from?

JM: My name is Jessica McCawley. I am originally from coastal Alabama, but now I live in Tallahassee, FL.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

JM: I am the Director of the Florida Fish and Wildlife Conservation Commission's (FWC) Division of Marine Fisheries Management. This is a state agency of the State of Florida.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

JM: FWC is the largest state fish and wildlife agency in the nation. We also have the largest law enforcement (game warden) capacity of any state fish and wildlife agency in the nation. The mission of the agency is Managing Fish and Wildlife for their long-term well-being and the benefit of people. Florida is considered the Fishing Capital of the World. We lead the nation in the number of recreational anglers, boaters, recreational fishing trips, and IGFA fishing records. The FWC manages hundreds of marine species in the Gulf of Mexico and Atlantic Ocean. We manage fisheries in state waters (out to 3 miles on the Atlantic coast and out to 9 miles on the Gulf coast) and work with the federal fishery management Councils to manage fisheries in federal waters which extend to 200 nautical miles offshore of both coasts.

RR: What does a "typical day" at your job or internship look like?

JM: There is no typical day at my job as a fisheries manager. Almost every day is different, and it is never boring! I spend a lot of time talking to commercial and recreational fishermen about the resource and about the



Fisheries Management- Jessica McCawley

regulations. I also spend time talking to scientists to understand the research that is being conducted in the ocean on various fish species.

RR: How did you choose your career path?

JM: I grew up on the water fishing, sailing, skiing, etc. I enjoyed being outdoors and love the natural environment. I was always fascinated by my science courses in school and could not get enough of them. I have a scientific mind and knew I wanted to do something in science. I was able to pair my love of fish with science to be a marine scientist.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

JM: There are many important issues facing our ocean today, such as ocean pollution, warming climate, ocean acidification, etc.

RR: When you were a child, what did you want to be when you grew up?

JM: I wanted to be a marine biologist when I was young. I also considered careers in environmental science and being an environmental attorney.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

JM: If you have an interest in marine science do internships during the school year or in the summer. Internships will help you figure out if this career is really something you want to do and if so, which particular aspect of it you like the most. You can also talk to people in the field and possibly even find a mentor in the field.

RR: What is the most challenging part of your job?

JM: My job is more about managing the people that interact with the ocean than about managing the resource itself. Trying to help people understand that additional regulations may be needed or changes in way people interact with the marine species might be needed is hard to do.

Coral Reef Conservation-Allyson DeMerlis

RR: What is your name and where are you from?

AD: My name is Allyson, and I'm from Fairfax, Virginia.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

AD: I am currently a graduate student at the University of Miami, and I am majoring in marine biology. I want to continue to do research on coral reefs after I graduate in order to help conserve coral reefs!

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

AD: My school is in Miami, Florida, and I research corals that are found here in Florida. I want to study how increasing ocean temperatures affect the corals' ability to survive and figure out ways that we can help restore our coral reefs.

RR: What does a "typical day" at your job or internship look like?

AD: Right now, a typical day for me involves attending classes online, reading research articles, and learning how to analyze data that I've collected from experiments. I am also planning future experiments for next year.

RR: How did you choose your career path?

AD: I really liked my science and math classes in school and knew I wanted to do something in those topics for college. I majored in biology for my bachelor's degree, but it wasn't until I lived in a tropical place for a marine



Coral Reef Conservation-Allyson DeMerlis

biology internship and saw coral reefs for the first time that I knew I wanted to study them.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

AD: Climate change affects our oceans in so many ways. Greenhouse gas emissions, such as carbon dioxide, harm coral reefs and will continue to do so until we move to more renewable energy sources.

RR: When you were a child, what did you want to be when you grew up?

AD: When I was young, I wanted to be a dolphin trainer. Then, I thought I wanted to be a veterinarian for a while.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

AD: Keep following what you are passionate about and learn as much as you can. The more inquisitive and curious you are, the more opportunities for learning and growth you will come across!

RR: What is the most challenging part of your job?

AD: I surprisingly spend a lot of time at a desk on my computer rather than swimming in the ocean, as you might think a marine biologist does. I try to get out in the ocean whenever the opportunity arises!



Evolutionary Biology- Samantha Levell

RR: What is your name and where are you from?

SL: My name is Samantha Levell and I am from Sarasota, Florida.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

SL: I am currently a PhD Candidate in the Evolution, Ecology, and Organismal Biology (EEOB) Program at the University of California, Riverside. I hope to use my PhD to become a Biology professor.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

SL: The EEOB major is an offshoot of biology, which allows me to focus on studying a specific biological field, evolution.

RR: What does a "typical day" at your job or internship look like?

SL: A typical day in a PhD program is very variable. It's a 5-year program, during which time I have taken classes, taught classes, and done research. Now that I am in my 4th year, I spend most of my time teaching and doing research. I teach biology classes ranging from introduction to evolution an ecology to advanced evolution courses. When I do research, it can range from spending a week in Mexico collecting fish to working in the lab caring for fish in our experiments or extracting DNA from preserved fish.

RR: How did you choose your career path?



Evolutionary Biology- Samantha Levell

SL: I have always loved animals, and always wanted to be a marine biologist. I originally wanted to work in an aquarium, but when I went to college, I was exposed to the research world. I feel in love with the idea of asking questions and performing experiments to answer those questions. I also loved teaching and mentorship, which made being a professor a very fitting career path.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

SL: Our oceans face many issues. I think the largest is global warming, as warm, rising seas will hurt not only coastal cities, but also the communities that reside nearshore.

RR: When you were a child, what did you want to be when you grew up?

SL: I wanted to be a marine biologist or animal trainer.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

SL: If you have passion, you can do it! People will tell you that you have to be good at math to do science, which is true to a certain extent, but I pushed through and made it despite my struggles with difficult school subjects.

RR: What is the most challenging part of your job?

SL: The most challenging part of my job is the balancing act. As a graduate student, I wear many hats. I am a student, a teacher, and a mentor at school. It definitely keeps things exciting, though!



Coral Reef Conservation- Zack Rago

RR: What is your name and where are you from?

ZR: My Name is Zack Rago and I grew up in Denver, Colorado.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?



ZR: I have a few "jobs". I work as an Aquarist for Elite Reef, as an Education and Science Coordinator for the The Ocean Blueprint and from time to time as a Field Technician for View Into The Blue. However, I am also about to start grad school to study Marine Biology at The Hawaii Institute of Marine Biology.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

ZR: Elite Reef is a retail company that grows and sells corals and other marine organisms to aquarium hobbyists for their personal aquariums. The Ocean Blueprint is an NGO that is creating a global coral monitoring network by using innovative technologies with the goal of exploring ecosystem conservation by leveraging youth and passionate individuals to assist in data gathering and project based learning.

View Into The Blue is a company that builds and implements technologies for marine ecosystems. Particularly, imagery and monitoring equipment for use in the ocean.

RR: What does a "typical day" at your job or internship look like?

ZR: Because I do many different things it can vary. Some days I am fragmenting (fragging) corals at my coral growing facility in Denver, and other

Coral Reef Conservation- Zack Rago

days I am working in classrooms to engage students with coral reef science. Every now and then I also get to travel to coral reefs and scuba dive while I install scientific equipment directly on the reef!

RR: How did you choose your career path?

ZR: As a kid I was also interested in biology. I was very lucky because I spent many of my childhood summers in Hawaii where I really fell in love with the ocean. I always knew I wanted to work with marine biology and my entire life I dedicated to taking opportunities that may set me up for that. I started as a tank cleaner at a local fish store when I was around 15 and eventually even got to be featured in the Netflix documentary Chasing Coral where I documented coral bleaching events around the world.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

ZR: The list of threats to our ocean is very large. There's overfishing, pollution, plastics, and climate change. Most of my personal work has been focused on something called coral bleaching which is a consequence of climate change making sea water much warmer than usual. The corals can't take much heat and they turn white and can even die. For me, this is the most important issue, but we must tackle all of the problems!

RR: When you were a child, what did you want to be when you grew up?

ZR: From a very early age I knew that I wanted to be a biologist! I probably knew as an elementary student that I wanted to focus on the ocean but by the time I was in high school there was no doubt that I wanted to work on coral reefs.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

ZR: The greatest advice I can give is to never lose your curiosity in whatever it is that fascinates you. Your passion will lead you to opportunities and if you commit and stick with it then everything will fall into place. I think about the

Coral Reef Conservation- Zack Rago

quote, "It is better to be prepared for an opportunity and not have one than have an opportunity and not be prepared." – Whitney Young

RR: What is the most challenging part of your job?

ZR: I love my work. However, the ocean is threatened by many factors at the moment and sometimes I have to witness those threats firsthand and that can be incredibly sad. On the other hand, though, it is those same challenges that motivate and inspire to continue that work!!



"Hold on to that curiosity and hold on to that passion because good passion means good work and good work is what's gonna change the world."

- Zack Rago

Fisheries Biology- Matt Woodstock

RR: What is your name and where are you from?

MW: My name is Matt Woodstock and I am originally from Footville, Wisconsin.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

MW: Currently, I am a PhD student at Florida International University. My research is broadly focused on the health of marine ecosystems and the status of fisheries around the world.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

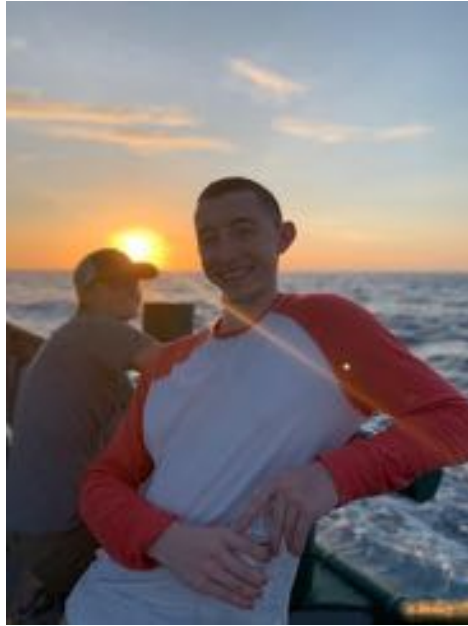
MW: My major is Ecology, the study of all living and non-living things in ecosystems and their interactions, with a specialization in marine science. In grad school, your research generally directs your major much more than in undergrad.

RR: What does a "typical day" at your job or internship look like?

MW: A typical day for me involves developing computer models in order to simulate ecosystem processes so that we can predict how ecosystems will react to changes in the world, such as climate change or fishing behavior.

RR: How did you choose your career path?

MW: I have always loved the outdoors and studying nature, so I went to college to study Biology. While there, I had the opportunity to spend one



Fisheries Biology- Matt Woodstock

summer researching shark and stingray populations off the coast of Tampa, FL. I loved it so I decided to get my master's degree in Marine Biology from Nova Southeastern University. While there I studied the ecology of deep-sea fishes and helped mark sea turtle nests in Broward County, FL. I then learned how important computer modeling is to understand our world's oceans, so I went with that.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

MW: As the global population continues to rise, we are going to have a real issue with producing enough food. Currently, many of the world's fisheries are overfished, meaning we have removed more fish from the population than can be replenished.

RR: When you were a child, what did you want to be when you grew up?

MW: When I was a child, I knew that I wanted to be a scientist, I just didn't know which kind.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

MW: It really helps to have a strong math background (particularly to do what I do) so you can understand what to do with the data after you collect it.

RR: What is the most challenging part of your job?

MW: The most challenging part of my job is trying to use what we do know to help us understand what we do not know. There are a lot of mysteries in the ocean and we are constantly still learning.

Wildlife Behavior- Sarah Luongo

RR: What is your name and where are you from?

SL: My name is Sarah Luongo and I am from Long Beach, California.

2.) What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post graduation?

I am currently a Ph.D. Candidate at Florida International University studying the movement and behavior of marine fishes and sharks. When I graduate, I hope to one day work as a Professor at a University and have my own research lab where I can inspire students to help conserve our oceans and the fish that live there.

3.) Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

I am a graduate student for Florida International University, I have several research projects that I am working on to earn my degree. One of my favorite projects focuses on the critically endangered Nassau grouper, a large bodied grouper species that can be found in tropical waters in the western Atlantic Ocean. Nassau grouper form large spawning aggregations, where many of them gather in the same place at the same time to reproduce. However, when fisherman learn where these aggregations are, they can easily catch most of the fish there. This is why Nassau grouper are currently listed as critically endangered, especially in The Bahamas where I study them. The goal of my research is to determine the best ways we can protect them from overfishing and hopefully we can help their populations grow and recover!



Wildlife Behavior- Sarah Luongo

4.) What does a "typical day" at your job or internship look like?

I have two types of typical days: office days and field days. A typical office day in my job involves reading books and research articles to expand my knowledge, analyzing data that I have collected and writing about my results. These days can be some of the best for me, especially when I find get a cool and interesting result from the data I have collected! Field days are full of adventure, I am usually either on a boat or in the ocean scuba diving. Field days involve capturing, tagging and then releasing fish or sharks with tags that will tell me where they are going, how deep they are, how fast they are moving and more! These days can be long, exhausting and challenging at times, but they are always worth it!

RR: How did you choose your career path?

SL: Overfishing is one of the biggest threats our oceans face, this is because overfishing has both direct effects such as the removal of fish from their ecosystem and indirect effects such as limiting the amount of prey for other species. There are also many consequences of fishing, such as bycatch, where fishermen accidentally catch other species while they are trying to catch their target species. One thing everyone can do to help is make sure the seafood we eat is coming from a sustainable source and cut back on the amount of seafood we are eating.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

SL: Overfishing is one of the biggest threats our oceans face, this is because overfishing has both direct effects such as the removal of fish from their ecosystem and indirect effects such as limiting the amount of prey for other species. There are also many consequences of fishing, such as bycatch, where fishermen accidentally catch other species while they are trying to catch their target species. One thing everyone can do to help is make sure the seafood we eat is coming from a sustainable source and cut back on the amount of seafood we are eating.

RR: When you were a child, what did you want to be when you grew up?

Wildlife Behavior- Sarah Luongo

SL: When I was a child, I wanted to be a Veterinarian more than anything. I loved animals and I knew I wanted to do something that would allow me to help them. When I was in high school, I took a marine biology class that included a lot of hands on activities. We went on a field trip to the tide pools and that was when I started to realize there are animals in the ocean that need help too. After that I became very passionate about marine biology and I wanted to help protect our oceans and all the animals that live there.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

SL: Follow your dreams! If you are interested in marine science do not give up that passion. Depending on your age visit your local aquarium, ask about volunteering, sign up for a marine science summer camps if you can, anything interactive! Read books about the ocean or watch a documentary, try and find out what interests you the most! There are many different paths in marine science, and there are many different ways to help our oceans!

RR: What is the most challenging part of your job?

SL: The most challenging part of my job is the field work. There can be a lot of things that go wrong when you are in the field, weather can be bad, experiments can go wrong, tags can fail and not provide any data, the list goes on and on. This can all be very frustrating and discouraging at times, but I try to stay positive, because every bad day provides a lesson to learn from it and that makes you a better, stronger researcher in the end!



Environmental Consulting- David Snyder

RR: What is your name and where are you from?

DS: David Snyder, Jupiter, Florida.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

DS: Senior Scientist, CSA Ocean Sciences Inc.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

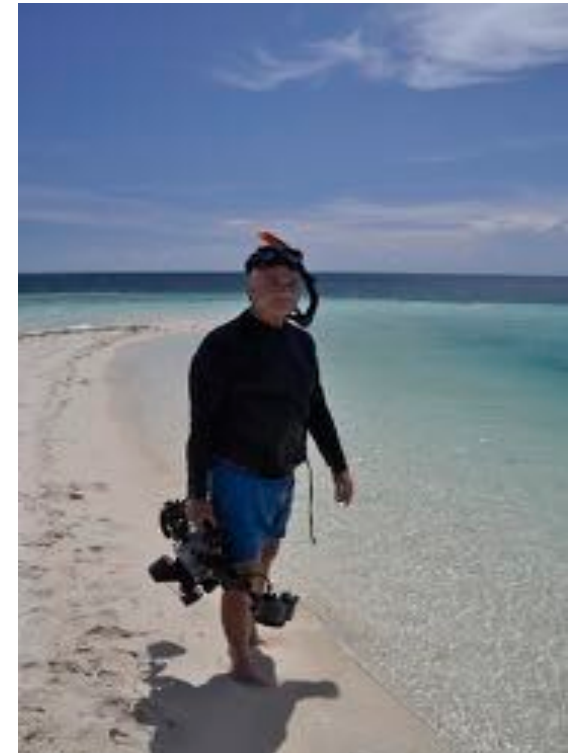
DS: CSA Ocean Sciences Inc is a marine environmental consulting firm. CSA provides environmental services for offshore industries, government agencies, and other entities. Essentially, we collect and interpret data that will identify environmental risks and minimize impacts of various projects (oil and gas activity, coastal construction, dredging, etc) occurring in marine waters.

RR: What does a "typical day" at your job or internship look like?

DS: Writing reports, analyzing data, and preparing for field trips.

RR: How did you choose your career path?

DS: Consulting as opposed to academics or government agencies was purely by chance.



Environmental Consulting- David Snyder

RR: In your opinion, what is the most important issue our ocean faces in today's world?

DS: Too many people exploiting the finite resources.

RR: When you were a child, what did you want to be when you grew up?

DS: As young child, I wanted to drive bulldozers but a little later on I wanted to be a fishing guide or boat captain.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

DS: If you are passionate about some aspect of the marine science field (for me, fishes), your job will be easy and enjoyable (you will not be rich).

RR: What is the most challenging part of your job?

DS: Completing projects without going over the allotted budget. This involves the weather, equipment failure, and some luck.



Marine Biodiversity- Samuel Bedgood

RR: What is your name and where are you from?

SB: My name is Samuel Bedgood and I am from Riverside California.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

SB: I am a Ph.D. candidate in a marine biodiversity research lab at the University of California Irvine. Technically I am paid by the government through a fellowship to study sea anemones! I hope to eventually become a researcher and teaching faculty at a university.

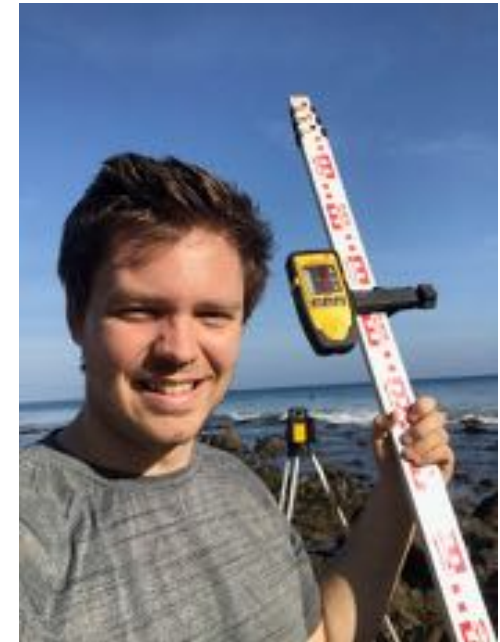
RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

SB: I am in the Ecology and Evolutionary Biology Department, but I specifically study marine biodiversity and ecology. My lab group (Bracken

Lab) is a great place to conduct research! We have access to all kinds of resources including a seawater system where we can run experiments and coastal reserves that only allow researchers access.

RR: What does a "typical day" at your job or internship look like?

SB: My typical day can include anything from visiting tide pools along the California Coast to running samples in the lab to writing papers about my research. You have to be pretty flexible to be a research scientist, but that



Marine Biodiversity- Samuel Bedgood

doesn't mean you have to be great at everything. I am good at math, but I am not so great at writing. Luckily, my university has classes that have helped me improve my writing. The most important trait that drives all of my work is a desire to learn!

RR: How did you choose your career path?

SB: I have always loved studying animals in the ocean, and when I couldn't be at the ocean, I kept marine aquariums at home. I was especially interested in coral, sea anemones, and their algal symbionts. It still amazes me that coral is both an animal and a plant. Once I got to college, I joined a marine biology lab. I liked it so much that I decided I wanted to study marine biology as a career.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

SB: Global warming is an enormous problem that is and will change our oceans permanently. A small mean temperature increase can change ocean chemistry, currents, and ecological communities. The problems caused by climate change are not always easy to predict, but we do know that many species will disappear or shift their geographic range as a result. We all play a part and can make a difference in combatting climate change.

RR: When you were a child, what did you want to be when you grew up?

SB: I wanted to be a marine biologist or a zookeeper!

RR: What is one piece of advice you would give a student who has interest in a marine science career?

SB: Contact a scientist and ask them about their research. Most of us really do love sharing our work with other people. Look for opportunities to volunteer or get a summer internship. These positions allow you to build a network of people who can help you find jobs.

RR: What is the most challenging part of your job?

Marine Biodiversity- Samuel Bedgood

SB: The most challenging part for me is writing! I really do dislike writing if you can't tell, but I am learning to enjoy it because its how scientists share their ideas with each other.



Marine Resource Issues- Michael Domeier

RR: What is your name and where are you from?

MD: Michael Domeier. I currently live in Hawaii but grew up in Connecticut and went to college in Florida.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

MD: I founded a nonprofit called the Marine Conservation Science Institute.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

MD: My nonprofit is very small, with just myself and one other employee. But I have founded 3 nonprofits in my career, all of which are still operating. I founded Science and Conservation of Reef Fish Aggregations and I also founded the Pflieger Institute of Environmental Research. All of them are focused on solving marine resource issues, particularly fisheries issues.

RR: What does a "typical day" at your job or internship look like?

MD: Most of my time is behind the desk, writing papers, analyzing data, searching for funding and preparing for the next field trip. The most enjoyable time is of course the field work. I'm winding down my career as a scientist, so I only work on one project now, studying Great White Sharks in the Eastern Pacific.

RR: How did you choose your career path?



Marine Resource Issues- Michael Domeier

MD: I didn't really have to choose. From before I even went to preschool I was in love with animals and gravitated towards fish as I got older. Birds have always fascinated me as well....and I kept a lot of reptiles and amphibians as a child.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

MD: Without a doubt: Acidification. Acidification is the gradual lowering of the ocean's pH due to the massive amount of carbon dioxide emissions dissolving into the world's oceans. As the ocean gets more acidic, certain marine life struggles to survive. For example, animals that make an exoskeleton out of calcium carbonate (coral, clams, etc.) will no longer be able to extract calcium from the sea. It is thought that the world's coral reefs could go extinct by the end of this century.

RR: When you were a child, what did you want to be when you grew up?

MD: Always wanted to be a biologist.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

MD: If you want to be a successful marine scientist you really need to go to graduate school and get a Ph.D.

RR: What is the most challenging part of your job?

MD: Raising funds to do the research. Field work can be very expensive, particularly if you use some of the latest technology...like satellite tags.

Photojournalism- Doug Perrine

RR: What is your name and where are you from?

DP: Doug Perrine. I live in Kona, Hawaii, but previously lived in Texas and South Florida.



RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

DP: I am self employed as a freelance photojournalist.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

DP: My business used to consist largely of pitching stories with photos to magazines and answering requests for photos from various sorts of publishers. Now most of my business has dried up to changes in the publishing industry, so I mostly supply photos to agents who market them for me.

RR: What does a "typical day" at your job or internship look like?

DP: A typical day is sitting at a computer editing photos. Less commonly I actually get to go out and take photos. My specialty is marine wildlife, so taking photos often involves going on or under the ocean.

RR: How did you choose your career path?

Photojournalism- Doug Perrine

DP: While I was studying fisheries science, I started selling stories about marine biology to magazines. At that time, I was doing well enough with it that I was able to consider it as a career that would enable me to travel and to spend more time outside than working in a fisheries office.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

DP: Climate change.

RR: When you were a child, what did you want to be when you grew up?

DP: Astronaut, professional football player, maybe a lawyer.

RR: What is one piece of advice you would give a student who has interest in a marine science career?

DP: Find a line of work that is really interesting and enjoyable to you and that you are passionate about, and you will do well at it.

RR: What is the most challenging part of your job?

DP: Getting paid.



Coral Reef Conservation- Isabelle Basden

RR: What is your name and where are you from?

IB: My name is Isabelle Basden and I am from Sarasota, FL.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?



IB: I am currently a research technician for the Acidification, Climate, and Coral Reef Ecosystems Team (ACCRETE) at the National Oceanic and Atmospheric Administration (NOAA) in Miami, FL.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

IB: The ACCRETE lab researches the impacts of climate change and ocean acidification on coral reefs. We conduct a variety of studies to research how climate change and ocean acidification are affecting the construction and breakdown of coral reef ecosystems, as well as how this will affect ecosystem function (e.g., biodiversity).

RR: What does a "typical day" at your job or internship look like?

IB: My job is constantly changing and is often different from day to day. As a research technician I am involved in a variety of projects and therefore have a variety of responsibilities. Some typical tasks of mine include scuba diving to collect environmental data, aquarium maintenance, taking care of corals, analyzing water samples, and analyzing data.

RR: How did you choose your career path?

IB: I have always been interested in studying a life science. As I have gained different experiences throughout my life, from volunteering at an aquarium to

Coral Reef Conservation- Isabelle Basden

participating in undergraduate research, I've been able to narrow my interests and eventually decided to study coral reef ecology.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

IB: Unfortunately, there are a lot of issues our oceans are facing right now. Plastic pollution is a very large threat that still needs to be addressed but I believe climate change is the biggest threat at this time. Slowing climate change will require extreme global efforts and we are still largely unaware of the effects it will have, not only on the oceans but the planet as a whole.

RR: When you were a child, what did you want to be when you grew up?

IB: When I was a child, I wanted to study big cats, specifically cheetahs. I would tell people I wanted to be "the Jane Goodall of cheetahs."

RR: What is one piece of advice you would give a student who has interest in a marine science career?

IB: One piece of advice I would give a student interested in pursuing a career in marine science would be to try and get experience in the field in some way if possible. This could be volunteering as a guide at a local aquarium, participating in an online citizen science project, or finding out if there are public science talks in your area. This will help you learn more about the field and will help you narrow your interests.

RR: What is the most challenging part of your job?

IB: There are a lot of challenging aspects of my job, but I would say the most challenging part is learning how to move forward when things aren't going as planned. Issues and roadblocks often come up when studying marine ecology and you must persevere and figure out how to move on.

Wildlife Behavior- Maurits van Zinnicq Bergmann

RR: What is your name and where are you from?

MZB: Maurits (Mo) van Zinnicq Bergmann, born and raised in the Netherlands.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?



MZB: Currently I am a PhD candidate in Biology at Florida International University (FIU) in Miami, Florida USA. My research focuses on understanding coexistence among large and free-swimming sharks and rays, by studying how these animals interact with each other and their habitats. I do all this work in Bimini, The Bahamas. I also teach undergraduate students about general biology and ecology, sometimes going on trips to the Florida Everglades and dissecting cool animals to learn more about them. After graduation, I hope to secure a postdoctoral position to continue pursuing my research interests in this field. I am also working toward setting up a scientific consultancy company for after my graduation. Scientists would hire me to conduct scientific research for them.

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

MZB: FIU is Florida's largest underrepresented minority serving institution that also has the highest enrollment of international students state-wide. Very recently, FIU was ranked by the *Times Higher Education* Rankings as a world leader when it comes to studying freshwater and marine ecosystems.

RR: What does a "typical day" at your job or internship look like?

Wildlife Behavior- Maurits van Zinnicq Bergmann

MZB: Now that I am done with field work, typically I spend my days teaching and analyzing the data I collected over the years. At the beginning of my PhD, my typical days were spent in Bimini, the Bahamas catching and tagging large sharks and rays with electronic transmitters. This, in combination with a network of underwater bottom listening stations, allowed me to monitor their movements around the island. I also deployed underwater baited video cameras to estimate shark and ray densities in different habitats.

RR: How did you choose your career path?

MZB: This question somewhat relates to question 7, in that I was always fascinated to learn more about animals in the world's oceans. What started out as a vague interest in fish, developed into a detailed interest in understanding animal behavior and movements in relation to its physical environment and interactions with other organisms, with special reference to large marine predators including sharks. Every big decision that I made career-wise up to this point, has been to get where I am today, and to stay in this field.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

MZB: Factors ranging from climate change and related changes in water temperature and chemistry, to overfishing, pollution and habitat destruction, world oceans face some of the biggest challenges of our time. Although solutions to these problems are not straightforward, it is important that we are aware of the consequences of our own actions and choices, and the value of healthy natural ecosystems for our society.

RR: When you were a child, what did you want to be when you grew up?

MZB: As long as I can remember, I felt drawn and connected to the oceans. Although I never lived on the coast, every year during the summer holidays, my family and I would travel to different coasts across western Europe to enjoy their beaches and play in the water. It was when I first saw fish swimming that I decided I wanted to become a marine biologist. A little later when I first discovered sharks, I was fascinated by them and knew I wanted to study and better understand them through observation. I never really thought of a plan B if this wouldn't work out.

Wildlife Behavior- Maurits van Zinnicq Bergmann

RR: What is one piece of advice you would give a student who has interest in a marine science career?

MZB: Pursue your dreams and never give up. Work hard and try to be the best person you can be. Often students that enter the biology program get overwhelmed by the slim odds of securing a career in biology following graduation. While this may be true, if you do not try, you will never know. For example, many of my peers during school had similar dreams of becoming a marine biologist, but never followed through because they didn't think they would be successful. So they settled with less, never knowing how their future could have looked like if they tried.

RR: What is the most challenging part of your job?

MZB: The most challenging part of my job as a researcher is trading off time to complete different tasks that come at you simultaneously. Often times, you are not working on just one thing at a time, and so allocating or partitioning time to different tasks while still maintaining productivity is hard. Especially if you have to teach labs simultaneously with doing research.



Environmental Consulting- Karen Kennedy DeMaria

RR: What is your name and where are you from?

KKD: Karen Kennedy DeMaria, grew up in Toms River, New Jersey.

RR: What is your current job and who do you work for? If you are in school, what is your major and what do you hope to do post-graduation?

KKD: I am the Urban Forester for the City of Key West

RR: Can you tell us about the organization or business you work for? If you are in school, can you tell us about your major?

KKD: I work for a local City government. Not only do I manage the Tree Commission, but I am also the acting City Biologist and review building permits and work the engineering and utilities department. The City of Key West is an island, so it is important to have a biological review on projects.

RR: What does a "typical day" at your job or internship look like?

KKD: I do site visits to look at the health and conditions of trees (I actually hug trees!--so I can measure their circumference), review building permits for potential tree impacts, meet with property owners, review landscape plans, write reports.

RR: How did you choose your career path?

KKD: It chose me. Living in a small community you take the jobs you can get. Out of college in Jacksonville, Florida I started out working for the State health department working outside doing the field work to locate and permit



Environmental Consulting- Karen Kennedy DeMaria

septic tanks then I worked as an enforcement biologist with the Army Corps of Engineers (Federal Government). When I moved to the Florida Keys I worked as an environmental consultant and worked with several different engineering firms primarily doing site visits and documenting the environmental conditions of the upland, wetland, and benthic areas for regulatory permits (local, State, and Federal).

I also worked as a fishery biologist for the State doing life history studies (dissecting fish to collect their gonads, stomach contents and otoliths to understand the reproductive lifecycle and age of the fishes to help determine proper size limits for fishery laws.) and managed a research grant that collected invertebrates for cancer research. At the end of the research grant the job as the urban forester opened and I was asked to help out. It then became a permanent job.

RR: In your opinion, what is the most important issue our ocean faces in today's world?

KKD: Water Quality and habitat loss

RR: When you were a child, what did you want to be when you grew up?

KKD: a marine biologist

RR: What is one piece of advice you would give a student who has interest in a marine science career?

KKD: Realize you will never be rich, but your life will always be interesting! Be realistic and open to possible job opportunities.

RR: What is the most challenging part of your job?

KKD: The politics.



If you want to connect with a marine science professional, please reach out to Reef Relief for more information!