Each summer, high school students gear up to get hands-on experience in the field of fisheries science through the Hutton Junior Fisheries Biology Program. This paid summer internship and mentoring program, sponsored by AFS, seeks to engage, inspire, and diversify the next generation of fisheries professionals. For more than 20 years, the Hutton Program has worked to stimulate interest in careers in fisheries science and management among groups underrepresented in the fisheries professions today. We were able to meet two alumni of the Hutton Program via video conferencing and learn about how their experiences as Hutton Scholars influenced their lives.

Sean Landsman is one of the early Hutton Scholars in the program’s history, going through his internship in 2004. Jordyn Jones completed her internship more recently in 2016. Both say they had an overwhelmingly positive experience with the Hutton Program via video conferencing and learn about how their experiences as Hutton Scholars influenced their lives.

How did you find out about the Hutton Program?

SL: My father knew John Epifanio, a scientist with the Illinois Natural History Survey, via their involvement in a local bass fishing club, and got me connected with John. It was through talking to John that I discovered the Hutton Scholar Program and I put in an application to work with him.

JJ: It was the summer of 2016, so a little more recent, but it feels kind of long now; it's been a crazy time. I was going to Blake High School in Tampa, Florida and my mother is an environmental science teacher, so I've always been the teacher's daughter. One of her co-workers was the biology teacher and she told me “Hey, there's this program and I think that you would love it. I want you to check it out.” I went ahead and did my research on the program. I love everything to do with science, fisheries, marine biology. I’m my mother’s child when it comes to that, so I was super excited to apply. I didn't expect to get it, and I didn't want to get my hopes up, but I was super stoked as soon as I saw the details of it.

Why were you drawn to the Hutton Program? Were you interested in fisheries science before the program?

JJ: My whole life has been an awareness of the earth and the environment and its animals. I actually went to a marine science middle school in Virginia and we were right on the Chesapeake Bay. I went to Booker T. Washington Middle
Tell me about your mentor and where you worked.
JS: My mentor was John Epifanio. I worked with John as well as Dave Philipp, at the University of Illinois/Illinois Natural History Survey; also, Trent Thomas at Illinois Department of Natural Resources (IDNR). I think the draw of what John had proposed for me to do was that I would get a lot of exposure to a whole host of different fisheries related things; some of it was lab work, some of it was field work. I had my own little research project where I looked at using a paper-based fishing tournament, where anglers would apply a length-weight relationship—a length converter to come up with a weight for the fish they were catching in their tournaments.

I can clearly remember going out on the Illinois River and electrofishing for Asian carp shortly after they had gotten in and the population exploded. I can very clearly remember this day. I can remember being on the boat, the electrofisher being turned on, and the water just exploding with fish—with these Silver Carp Hypophthalmichthys molitrix that were jumping everywhere. I also did some electrofishing with IDNR staff. I worked at the research ponds at the university and helped maintain them. I helped collect fish at the end of the summer for research projects. I can very clearly remember getting super dirty collecting Common Carp Cyprinus carpio from the research ponds. I had some exposure in the lab to things like scale aging; so a number of different things both lab and field related, primarily in and around Champaign–Urbana, Illinois, and some of the surrounding communities.
JJ: I didn't do anything like that, so that's very cool to hear. I wish I could do electrofishing, so I'll have to join a trip one day.

I worked with Kathryn Guindon—Dr. Kathy—she was my mentor and she still is. This was 2016, we worked over at the Suncoast Youth Conservation Center in Apollo Beach, Florida. It is right next to the manatee viewing center. It was a cool area to work in. I had my own project that I worked on. I did a study between invasive and native species and seeing which ones were more abundant in the area with their size and growth, etc. I worked with Dr. Kathy, I worked with Rebecca, and I worked with Samantha—I'm not sure of their last names. My project involved seine nets, and I am going to say I was “in-seine” for choosing that project. I was the most fit person I have ever been in my life! We pulled 10 or 15-foot seine nets through brackish, muddy water and boy was it interesting; people were losing shoes, and the water was up to our necks. It was super great. We collected all of the fish and all of the species in there. We would document them and see what was going on the area. A few other things we did, we had children’s programs, and we would teach them how to kayak. We would have them fish from their kayaks and help them identify different fish species. It was just a really good time and it was great to have kids around, because they were always super excited about learning about the animals. I really enjoyed it, but each day I left covered chin to toe in mud. I had to buy clothes for the whole summer that I could throw away, because I couldn't wear them afterward.
SL: Is getting really muddy a required component for the program? Because I remember getting completely covered in mud working in research ponds.

JJ: I will say, it was hot outside, so it always felt good.

Any favorite memories?
JJ: We were able to do Shark Week! We were able to take a lot of the sharks out from the Florida Fish and Wildlife Conservation Center. They let us borrow their sharks and we brought them out to Shark Week and everyone was able to take pictures with them.

SL: That's such a funny thing to hear! Borrowing sharks!
PT: It's the Florida version of a cup of sugar.
JJ: That or an alligator.

What did you enjoy about the program?
JJ: I enjoyed everything about the program. I am a person who enjoys learning, especially when it is something that I'm passionate about, so it was an opportunity to have hands on experience and actually learn how to be in the field coming fresh out of high school, but also it was an experience to learn fish identification and more about marine science and ecosystems. It really aided in my decision to go straight into biology in college. My kayaking skills are amazing now. I can get all around Tampa Bay. It was the experience of a lifetime. I told Dr. Kathy if she needs anything I am running out there!
SL: I learn best by doing, so getting that really practical experience was a ton of fun and taught me skills I had maybe only heard or read about. I think the other thing, too, is meeting all these people. I didn't know many folks that were into fisheries. That summer, aside from my mentors, I met
their grad students, all the staff at IDNR—at least a dozen different people throughout the summer—and everyone had the same passion as I did. I was fairly young at the time and I was impressed by everyone who was passionate about the same things I was passionate about and I never experienced that before.

Was there anything about your experience that was challenging (besides being in mud all the time)?

JJ: I really wrote down, “mud” in my notes! I like to work hard. The beach was 30–45 minutes away and I had to be there around 8 in the morning, so getting up and going while being physically tired took a toll. Plus I was learning how to drive. No complaints; just maybe being tired.

SL: If there was anything challenging, it has been wiped out of my memory from all the good stuff.

Please talk about your work or schooling. Are you involved directly in fisheries and aquatic sciences?

JJ: I went to Florida International University. I just graduated in December 2020 with my BS in biology. I was looking to get into the fisheries/marine science field, but it was so difficult with being in the middle of a pandemic. Right now I work with a law firm. It was not something I was expecting to do, but I am having a great time doing it. I still keep in contact with Dr. Kathy and do whatever I can do, but I’m super happy with my career right now.

SL: I hear you. Things are super challenging with the job market right now and I’m happy to hear, Jordyn, that you’re happily employed.

It’s been a very winding path for me. I am still in fisheries. I’m an instructor at Carleton University in Ottawa, Ontario, Canada. I’m on the teaching stream as opposed to the research stream. I fell in love with teaching when I taught my first course, which was fish biology. I taught fish biology in 2015, after that I taught some other biology courses, including introductory biology as well as animal behavior, watershed ecology, a couple of other courses—that was when I was at the University of Prince Edward Island. Going backwards in time, I did my PhD at the University of Prince Edward Island, I did my Master’s here at Carleton, and my BS at the University of Illinois. Now I’m in an interdisciplinary science program [at Carleton University] and teach science communication, among other things, but will be teaching fish biology in the fall. I still do research, though it is not a huge component of my job, but maybe that will change in the near future.

What was it about the Hutton Program that helped you going into school and the professional world?

JJ: Going into the program I always loved fisheries and marine science, but I didn’t have an abundant knowledge of fish species, their anatomy, etc. When I got to school, I took ecology and biology, and all the necessary courses, and whenever we studied anything regarding fish or marine science, there would be a little bell in my head that would ding and I would think “I already know this!” I had a lot of knowledge that I gained from the program that I didn’t even realize I kept and it was extremely helpful. This is nerdy, but I had notes from the Hutton Program and I would use them for school. It was super helpful.

SL: My love of field work. I had so much of it; my program was very heavily weighted toward field work as opposed to the lab work. I realized that you can do science outside and that was so cool. That was one of the best things I took from the program; that I discovered that you can do field science. As a boy that loved to be outside and in nature in any capacity, it was so cool to know that I could enter a profession where I could spend a lot of time outdoors. Much of my research is field based, so that was an important element of the program that I embrace wholeheartedly. When I was going through the program I was exposed to a lot of different things, and that same exposure to a variety of experiences is something that I try to give my students now. Whether I am teaching a course on science communication or fish biology, I want students to walk away with practical experience.

Do you think the Hutton Program is successful in recruiting a more diverse workforce of fisheries professionals? Do you feel personally affected by this?

JJ: I do think that increasing diversity in any program is important. I think the key is really just to widen your audience and make sure you are reaching as many people as possible. A lot of the time it is not a lack of wanting to join the program, but a lack of knowing that it exists, or what it consists of, or even sometimes students being fearful of not getting into the program and not being successful in it. Cultivating a society of being welcoming and being as broad as possible, as far as reaching students.

As a minority, it is always somewhat personal for me, just because I feel it is so important. As an African-American
student growing up in Virginia, I wasn’t around a whole bunch of people that looked like me all the time, but I was super into science. So, just like you, Sean, didn’t know a lot of people who were in fisheries, I was one of a kind for a while as well. I was always the person who had to convince my friends and say “Hey, come try this” as far as going fishing, which they had never done. Sometimes it is the lack of experience or of knowledge sometimes, so I think it is important to make sure you are reaching out to as many people as possible, because you never know—people find new passions.

SL: This year was my first time sitting on the Hutton application selection committee and I thought that was so much fun reading all of those student applications. I was super impressed by how up front and center diversity was in the minds of all the committee members; it was something we all took very seriously. I’d say it is one of the major initiatives that AFS has that helps promote diversity within the fisheries community. Science is for everybody and fisheries science is part of that. I think, as Jordyn said, part of the issue is that a lot of students don’t know that you can have a career in this.

JJ: Or they’re scared to try it.

SL: Definitely. They don’t know anybody, and this is the perfect way to get their foot in the door, even if you don’t have a ton of experience. If you come to the table with an interest in the environment and science and an interest in being a leader, this is a great program to provide a jumping-off platform.

I don’t know if this is because I moved to Canada, but I haven’t had many opportunities to interact with other Hutton Scholars, but I look around today and I see an increasingly diverse community of fisheries professionals. Not long ago on Twitter, Solomon David started the “Faces of Fisheries Science.” It spanned every gender and ethnicity and race, and it was amazing to see that diversity. Certainly, the Hutton Program is contributing to that by reaching out to different schools around the USA. People are working hard to actively promote fisheries science and promote the opportunity to get involved. I see it as special in that regard, and I remember when I was applying, it was one of my first experiences of seeing that women and minorities were front and center. It was a program that said “We want more representation in our community” and as a privileged white male, I had never come across that before.

I see this as a major initiative of AFS that has been going on for a long time. I hope people remember that AFS has been working toward increasing diversity in the fisheries profession.

What advice would you give to the current and upcoming classes of Hutton Scholars?

SL: Don’t be afraid to get muddy!

Embrace every opportunity that comes your way through the program. I didn’t do this, but however many years later, I never took notes on my experience; I just have what’s stored in my mind. It is a good idea to take notes on your experiences and what you’re learning. If you’re presented with an opportunity to go do something you have never done before, go do it.

JJ: I agree. I wrote in all caps “HAVE A BLAST!” It’s an amazing summer being outside with like-minded people like you. Enjoy your experience. I also wrote “Take your internship seriously.” It’s a good opportunity to have field experience and personal knowledge from that experience. If that is something you’re looking to do as a career, you’re going to want to take as much knowledge as you can along the way. Try to make lasting connections. If you meet people that have the same mindset as you or people that are in the place that you want to be, make sure you stay in contact with them and see if there are any other programs that you can assist with or join. There are always people looking for enthusiastic people to join their team. What is better than doing something you love and getting a scholarship for it?

Have fun and get muddy. If you didn’t get muddy, you did not do it correctly!