CAREER PROFILES Options and Insights

STEPHANIE WEAR | Senior Scientist and Strategy Advisor, Global Science, The Nature Conservancy

swear@tnc.org

Degree: When, where, what, and what in?

I earned my BA in environmental science from the University of Virginia in 1996, my master's in marine sciences from the University of North Carolina (UNC), Chapel Hill, in 2000, and my PhD in marine Sciences from UNC Chapel Hill in 2015.

Did you stay in academia at all, and if so, for how long?

No. I had originally intended to get a PhD and go the academic route when I started graduate school, but after taking my comps and completing course work, my advisor moved to a new university. I had the choice of following my advisor and starting over or finishing up and seeing what I could do with a master's degree. I opted for the latter. I didn't return to school to complete my PhD for another 13 years, but fortunately when I did, my credits and requirements were satisfied so I was able to finish very quickly. I hadn't really planned to return for a PhD because my career was very satisfying, and I had been able to get the positions I sought—but then things evolved, and getting my PhD made sense.

How did you go about searching for a job outside of the university setting?

After earning my master's, I wasn't really sure if I wanted to go into conservation, education, or government work. There were not many job options when I was looking in 2000, so I had to get strategic. I took a job doing GIS work for a health research project that I saw as a placeholder, something I wasn't really interested in so that I didn't get stuck in it (inertia tends to get the best of us). So, during about eight months in that job, I explored all sorts of possibilities, applied for many of them, and saved money. I found that without any experience, it was difficult to land a job, and I wasn't sure what would be interesting and fun. I was offered some positions in outreach and education, but they were not "career" jobs, and I turned them down. I kept looking and finally found a couple of unpaid internships and volunteer opportunities in the US Virgin Islands. I had enough savings to scrape by and keep my student loans from defaulting, so I headed to the Virgin Islands for what was supposed to be three or four months. I didn't know anything about conservation and was hoping to learn. It was baptism by fire—and I was hooked. I loved the work. I loved the people. I loved the place and the challenge, so I stayed. After about five months, I took a full-time position with The Nature Conservancy (TNC) in 2001 and have been working there ever since.

Is this the only job (post-academia) that you've had? If not, what else did you do?

Besides my eight-month stint working on that GIS project, I have been a lifer at The Nature Conservancy.

What is your current job? What path did you take to get there?

I am a senior scientist and strategy advisor on our Global Science Team. The path I took to my current job was always guided by one question: "Will it be fun?" I chose an internship in the Caribbean over a paid position in Rhode Island. I chose a global job that would teach me about the world. I chose working with engaging people in interesting places with a little bit of adventure sprinkled in here and there. I often get asked how I got to my position, and to be sure, there is no tried and true way of getting to any job in the environmental space. It was a serendipitous adventure! I started as an intern, then took a position as a protected area specialist that evolved into running the conservation programs for the Virgin Islands and Eastern Caribbean Program. Next, I ran a global coral reef and climate change project, and that evolved into becoming Director of Coral Reef Conservation. At some point in the middle there, I started doing spokesperson work on all topics ocean and nature for TNC. Then I burned out because, well, I go overboard sometimes. So, I stepped back, got my PhD, and now I work on ocean pollution and continue to do spokesperson work for TNC.

What did your oceanographic education (or academic career) give you that is useful in your current job?

My training in oceanography has been the foundation for all of my work. I often say my work is about people, and that is very true. But the ocean science background I have is so important as we work to determine the best strategies, how we measure success, and what sort of questions to ask. It generally helps to have a good understanding of how the system you are working to protect works.

Is there any course or other training you would have liked to have had as part of your graduate education to meet the demands of the job market?
I would encourage students to find ways to get real-world experience outside graduate school and textbook learning. For example, supporting ongoing conservation work, either directly through your studies or in addition to them, will help you better understand the realities of the work as well as begin to build your network before graduation.

Is the job satisfying? What aspects of the job do you like best/least?
I have been at TNC for 19 years, so I would say, my job is satisfying, to be sure. I knew from the beginning that I would stick around for a long time. There are so many things I love about my job that it is hard to list them, but I would start with the awesome people of TNC. It is very cool to work in a mission-driven environment with people who share your values. I also have loved the diversity of the work—which is pretty much thanks to how messed up our planet is, so I guess that is a mixed bag. The challenge is intense, and there are a million opportunities to be creative and entrepreneurial. In terms of what I like the least, it is really hard to say no, and it feels impossible at times because everything feels important and urgent. Discipline is required to stay sane. I am not very disciplined and have had a few periods of burnout because of it. I always feel like I need a bigger team to get the job done. But I have learned to be efficient and to maximize the resources available—good life lessons.

Do you have any recommendations for new grads looking for jobs?
My advice is to seek jobs that you think you will enjoy, that will be fun, because you are going to spend a lot of time doing them. Be open to a range of possibilities because there really is no single path to the job of your dreams, and as long as you keep that intent front and center, you will find your way there. I very much believe in the power of setting intentions and then allowing nature to take its course.

KIM I. MARTINI | Senior Oceanographer, Sea-Bird Scientific

kmartini@seabird.com, https://twitter.com/rejectedbanana

Degree: When, where, what, and what in?
I completed my undergraduate degrees at the State University of New York at Albany, where I double majored in physics and fine art. After graduation, I stayed in the same department, planning to get a PhD in physics. About a year and a half into it, I realized I didn't want a career where I was trapped in a lab and decided to leave with just a master's degree. After working and figuring out what to do, I moved to Seattle in 2003 to start graduate school (again!) in physical oceanography at the University of Washington. I received my PhD in 2010.

Did you stay in academia at all, and if so, for how long?
After graduating, I moved to the University of Alaska Fairbanks for my first postdoc, researching internal waves and turbulence in the Arctic. In 2013, I returned to Seattle for another postdoc at the University of Washington and NOAA/Pacific Marine Environmental Laboratory, working with the interdisciplinary EcoFOCI group. Its members are oceanographers and fisheries scientists who monitor the Bering Sea ecosystem. The plan when I took the position was to eventually transition to a permanent position within EcoFOCI.

How did you go about searching for a job outside of the university setting?
When I started hunting for jobs during my postdoc years, I knew that I was not going to go down the traditional academic route. Because I had been active on social media and in science communication, I had already seen many of the career opportunities for scientists that existed outside of academia. One of the first things that I did was to make two lists: things in science that I liked to do and things I did not. When I started searching, these lists not only helped me to narrow down which jobs I should apply for, but also to understand whether I was a good fit for positions outside of environmental science.

Another important step was talking to my network outside of oceanography and academia. I would ask my friends questions like: *How did you get your job? What was the application and hiring process like? What do you and don't you like about your job? What was your career trajectory to get to this point?* Because they had been through the process, they were a wonderful resource for understanding it.

I did my homework. I had a great CV, but that is a highly specialized document intended for other academics and not broadly understood outside of academic settings. Quite honestly, I spent a lot of time googling questions such as: *How do I write a resume? What does a good cover letter look like? How do I translate my skill set for this job? What to do during the interview process?* There are so many great examples out there that can be used as models when you start applying for jobs. Scientists are pretty good at doing research. In this case, I just pivoted

to address the current task of searching for a job.

Lastly, I phoned a friend. After preparing my application, I asked a colleague to review it. We all have strong points, but sometimes we aren't that good at highlighting them. An outside perspective can remind you of the strengths that make you a great fit for the job.

Is this the only job (post-academia) that you've had? If not, what else did you do?

It really depends on your definition of academic. Long-term monitoring with a group based at a government institution has a lot of similarities with a career at a university, but it's not strictly academic with regards to funding and possible career trajectories.

What is your current job? What path did you take to get there?

In simplest terms, my job is to make your data better. But a lot of what I do still mirrors the daily life of an academic. I work at Sea-Bird Scientific, a company that makes instrumentation to study the physical and biogeochemical properties of the ocean. If you have ever used a CTD on a ship, you've used one of our instruments. As Senior Oceanographer, my main responsibility is to be an expert on CTD design and function. I work with engineering to design sensors and with production to streamline manufacturing. I develop processing and analysis tools to improve sensors and data. I collaborate with scientists at various institutions and write peer-reviewed papers. I even design and teach courses.

At the time that I applied for my current job, I wasn't planning on leaving NOAA. But I had been gently exploring other options and applying to a handful of jobs that interested me. I was downloading a manual on the Sea-Bird website and thought, "Why don't I just look if they have any positions available?" And they did! Because I had already been applying, I had practice with the process, and it didn't take long to tailor my resume and cover letter for the application. I also applied even when I didn't have all the experience listed on the advertisement. I knew that I was bringing a lot of expertise in other areas and could learn the rest when I got the job.

What did your oceanographic education (or academic career) give you that is useful in your current job?

My most useful experience in academia comes from what I call "the year of odd jobs." Between my postdocs, I took on two projects very different from my previous trajectory as an oceanographer. One was designing a data acquisition system for a novel observation platform. The other was mining buoy data to understand sea ice deformation in the Arctic. Both really broadened my skill set and also gave me confidence that I could successfully take on and complete tasks outside my training.

Is there any course or other training you would have liked to have had as part of your graduate education to meet the demands of the job market?

I can only speak for my current position, but I would have liked to have more training in business and managing people. But don't worry if there are gaps in your education when moving outside of academia. When you work in industry, you will often be provided with the training you need to succeed. It's simply not cost-effective for you to spend the time to learn it on your own.

Is the job satisfying? What aspects of the job do you like best/least?

I love my job! I help people with their science, solve difficult problems, and get to work with a lot of very smart and nice people. The atmosphere at Sea-Bird is very social and collaborative. It's rare that I get to spend a day at my desk just quietly doing research. Because we make so many of the instruments that people use to study the ocean, it's really satisfying to know that as a scientist behind the science, even small changes will have a big impact on science globally.

It has not always been an easy transition moving from a research to a manufacturing and business environment. We use many of the same tools, but the methods and vocabulary are often different. Initially, I was reluctant to learn new processes because I felt it was slowing down my work. But after chatting with a friend who works at another company in the Seattle area, I gave incorporating new approaches into my work a chance. In the end, I found I came up with better solutions and was able to communicate them faster and more clearly among my colleagues. I still struggle sometimes, but it has become easier as I realize that being flexible and open to new ways of doing things can lead to better outcomes overall.

Do you have any recommendations for new grads looking for jobs?

As a person who has left academia, I get asked this question a lot. While I can't say that I am an expert, I have applied for and gotten a job outside academia, I've interviewed over a dozen people for multiple positions across my organization in the past three years, and I've asked people the same question. This is my short summary, written up as a useful to-don't list.

- Don't wait for the perfect job to start applying. In this case, practice does make perfect. If you have already gone through the process, you will be ready when the perfect job does come up.
- Don't ignore the Internet. Get a profile on LinkedIn. Fill out your profile completely. Make a website. Employers do their homework, too.
- Don't be afraid to take risks. Sometimes a different path ends up being the most fruitful.
- Don't do this alone. Lean on your network inside and outside academia. And once you succeed, make sure to pay it forward.
- Don't underestimate yourself. You are all highly capable people. It just doesn't always feel that way when you are in a room full of other highly capable people.
- Don't give up. It takes work to find the job that's right for you. You may not immediately find the right job. You may not. But keep trying—you can do it!