Ruesink Lab Field Work

Student Name

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Experiential Learning Category

Research

Summarize your proposed experiential learning activity, including the primary focus of your activity, your intended actions, and the expectations of your supervisor and/or organization/partners.

I am currently working in the Ruesink lab out at Willapa Bay, WA, doing data collection for several projects related to oyster aquaculture. It involves grunt work, slogging through the tide flats, some brainstorming of possible experiments and ways to measure things, and a fair bit of prep. Currently, we're doing transects out from borders between eelgrass beds and stretches of mud inhabited by burrowing shrimp, with the goal of figuring out the relationship between the two. The main expectation is that I do my work well, be willing to help out when asked, and contribute what I can. My intention is to listen and learn as much as possible.

Explain how your activity demonstrates the values of the Honors Program Experiential Learning area you selected. Rather than reiterating our definition, outline how your activity embodies this definition.

Data collection and planning is a vital part of research. It's all very well and good to come up with a research topic and decide to investigate, but the real questions come after. What, specifically, do you need to know? How can you answer your question? How can you do it most efficiently? It's something, too, that doesn't seem to appear in my classes as much as the other parts of research. We're not often asked to collect data and figure out what to do with it, and many professors are willing to skip over the methods sections of papers. It seems to me that field work is an immensely valuable experience for a young scientist, so there you go.

How and why did you select this engagement? What skills or experiences do you hope to gain from it?

I was offered this job without applying, so I had not initially considered how it fit into my grand schemes of grad school and a life of research. I accepted because it sounded fun, and to be fair, that is the same reason I want to be a marine botanist. I think a summer of field work and being surrounded by experts in my field will do me good, give me the sort of knowledge I will need post-undergrad to go on to grad school or work as a lab tech.

How does this activity connect to your concurrent or past coursework? How does it speak to your broader education goals and experiences?

Dr. Ruesink taught my marine ecology class last spring, which segued into this job. Many of the concepts and genera in that class are ones I'm now seeing in the field. A field job in ecology is pretty similar to a good lab in one of my classes, spent outside talking about nature and trying to get what data we need. It's a hands-on application of what I've spent the past three years slowly learning.

How will your activity contribute to the larger goals of the organization/your partners?

Aside from the wholesome and fulfilling feeling of helping a hapless undergrad get valuable work experience in a very strange summer, they are also getting usable data for their projects.

Estimated hours per week: 35

Estimated project start: 06/20/2020

Estimated project end: 09/10/2020

Reflection

How has your completion of the project changed how you would answer those questions? How has this project furthered your educational or personal goals and experiences? How does it connect to your future or current coursework? How did your project contribute to the work of the organization or your partners? Do you see yourself continuing to work with the organization or partners, or on issues related to this project? What did you learn about yourself and the importance of this project over the course of the last quarter?

It has been a long, odd summer. It will continue to be a long, odd, anxious year. I must, therefore, first thank Dr. Ruesink and the rest of her lab for giving me a normal enough summer in a time when most of my cousins and friends have been kicking around their homes trying to orchestrate choir by video call or trick their cats into liking them. It's true that it, too, has been altered by the weird year of 2020: I am getting tested for the coronavirus twice in the next few days before returning to fieldwork; I don't believe I have any possessions which have not been doused in 70% alcohol at least once; and I've become obsessed with a specific brand of overpriced artisan ice cream from the corner store next to my house, which probably would've happened anyway, I admit, but I prefer to blame all new defects in my character or budget on the state of the world. In hindsight, I was exceedingly lucky to be given a way to fund my sugar habit.

More seriously, I could not tell you what my summer would have looked like without working with the lab. With our collective human talent of getting used to catastrophe, we have by now found our way to a new normal and regained some of our capacity for prediction, which is to say, it's easier to plan for the next few months now than it was back in the spring. As a species, we have a boring type of clairvoyance that allows us to say with absent-minded certainty that we will be doing X next month, or going to Y. That

ability to assume the future was knocked out of us in early March like a blinding blow to the head, and while for a while there was a certain wild rush in living through such unprecedented times, the view from June was distinctly bleak and cloudy. I did not realize in the winter how grateful I would be for this summer. I did not realize what a gift this opportunity was until I was out there, gluing baby oysters to things and measuring stalks of eelgrass, waking up early and watching the gray skies glow gold over the tideflats. The work was ideal for me, often requiring concentration, discussion, and good old fashioned digging in the mud. Above all else, I love intellectual conversation and brute physical labour, and it is a delight and a relief to discover that the course I have set myself on will afford me plenty of both. I can confirm now that marine biology not only sounds fun, it *is* fun.

The conversation, though, more than the pretty bay or the rollercoaster boat rides, is what I most cherish. I have not often gotten to listen to professional biologists discuss logistics or experimental design, in rather the same way that no one has talked to me about personal banking since I was in sixth grade. Inevitably, something gets left out of class when it comes to learning the skills of any career, so actually working with the lab gave me the chance to figure out how to be a scientist without any major consequences if I made a mistake. I think (hope) the most damage I did was when I broke a shovel, and in my defense it was a fairly interesting way to break a shovel. Well, mildly interesting at least. In return, I know a lot more about mudflat ecology than I did going in, have a better grasp of what working in research looks like, and have a mess of good advice about graduate school and job-hunting to help plot my trajectory from here through to graduate school and beyond, which is good because I'm frankly miserable at short-term planning. (It's terrifying that this has become short-term planning.) Dr. Ruesink encouraged me to try and think of a project I could run that would end with a publishable paper, an idea which I have been mulling over in the form of readings and scribbles for a while. I will talk with the lab about it next week, since I judge that to be the point at which it goes from rational planning to someone sitting alone in a room muttering to herself about things living on other things. Hopefully, this means that (a) I will continue to work with the lab through to 2021, and (b) I will get the chance to wear down my need to for ideas to be well-thought-out before presentation. One realizes after listening to reasonable adults workshop the possibility of bomb-building to kill shrimp that it should not be so stressful to talk about half-baked plans, so I suppose there's a good habit to break this fall.

Looking forward, the fall and winter of this year are still foggy to me, but at least now I have a better notion of where I ought to be going, even if circumstances could leap out of the bushes along the metaphorical path and spook my plans out of whack. This is a time, both in my life and worldwide, of intense uncertainty, and I am simply happy that most of my uncertainty is of the good, hopeful kind. I have had a good, useful summer, and I think I will end up having a good, useful fall. It's hard nowadays to ask for anything more.