

Library Research Award Reflective Essay – Finn Mander

When I was assigned the final paper in FISH 464, I was terrified. Until this point, the longest paper I had written was a quarter the length being asked for. As a response to this fear, I did the wrong thing by hiding away from the assignment. In doing so, the final two weeks of the quarter proved to be a rollercoaster. This journey led to my learning many lessons both academic and personal, and I am happy to share that they resulted in my writing something that I am deeply proud of and excited to share with the review committee.

I began my process for writing the paper by brainstorming. Our prompt required writing about an Arctic marine vertebrate and discussing how it would fare as a result of climate change. I couldn't help but remember a tiny bird that was briefly mentioned in class--the Arctic tern (*Sterna paradisaea*). The Arctic tern is famous for its ~50,000 km round-trip migration between the North and the South poles every year. This trophy-winning bird presented a unique opportunity for studying climate change because the bird travels between the two most vulnerable (and polar opposite...) environments on the planet. Excited about my topic, I met with my professor and TA to discuss my idea, because I had not developed a sense for how successful such a broad subject could be. After receiving the greenlight for my topic, I began writing a brief outline. I chose to narrow down my research by focusing on specific areas of the life history of the Arctic tern that I could research more compartmentally (habitat, migration, diet, reproduction, and predation). I made my goal for research that of understanding three things: What the baseline for the Arctic tern is in each of these areas, how climate change may affect these areas, and how the former two relate to other migratory/sea birds in order to give a broader perspective.

I began my formal research by utilizing the library guides from the University of Washington Libraries. 'Academic Search Complete' proved to be fruitful for my research because it provided advanced search features. The searches that I used contained keywords relevant to each area of concentration within my paper (e.g. "arctic tern" "reproduction" "climate"), in addition to limiting results to only peer-reviewed literature published within the past ten years in order to keep the results current. Using a software called 'Mendeley,' I organized my articles and produced citations in the style required for my assignment. When I

found an article title that seemed promising, I read the abstract to further evaluate it. If the abstract was relevant to my subject, I read the rest of the article while taking notes in a word document. For large claims in each article, I would go to the references section or the methods depending on the source and evaluate the accuracy of what was being conveyed. To do this, I would use the 5 W questions method. Before long, I was accumulating many interesting articles and notes that would connect well with my subject, being careful to write notes that did not stretch the conclusions being made to outside of the scope of the fact. After reading enough articles, I began to recognize the same studies being referenced. I sought these out, finding that for every article, I would also find multiple others within the references section. A roadblock appeared in seeking these out, though, as many of them were not available on ‘academic search complete,’ especially older articles. In my despair, I navigated back to the UW website, finding the electronic journals page. This gave me access to nearly all of the articles that I needed. The few articles that neither of these solutions gave access to were somehow also what seemed like the best articles—a frustrating barrier! In order to access them, I found a website called ‘Research Gate,’ where I was able to request access to the articles from the authors themselves. Additionally, I found a number of books that were referenced by many articles. These were available for me to access through Google Books. My final method was searching for the names of authors that I had found success finding relevant, current, and accurate research from.

After completing my research and note taking, I took each bullet point from each article and organized it into one of my five categories. This resulted in my having one document that had a multitude of information organized by topic—an outline! From here, I wrote my paper by simply working down the list. I used the ‘pomodoro technique for the first time while writing, which helped me to stay alert. After finishing a draft, several friends graciously edited it for me. All that remained after my draft was my references section. To create this, I simply generated a citation within ‘Mendeley,’ and copied it into a document where I then organized each citation alphabetically and corrected any errors from the automatic citation. One more final edit and I was finished!

Reflecting on this paper, I am so grateful for the resources that we have available to us as students. First and foremost, I had an incredible instructor and TA guiding me along, giving me advice on ways to evaluate the credibility of a source, teaching me how to read scientific

literature, and manually writing citations, among other valuable lessons. Secondly, I regretfully have to admit that it led to my using the UW Libraries website for the first time... Having said this, I am so thankful to have been exposed to this resource and those that it provides access to. I simply could not have written this paper without it. Walking away from this experience, I am excited for the challenge of writing my next paper, which I am sure will be a far less taxing process. I am reminded that embracing the unfamiliar and scary can lead to valuable experiences and lessons learned.