This summer, I worked for the Peary-MacMillan Arctic Museum as a Gibbons Fellow on a project involving the Crocker Land Expedition. Donald MacMillan led the expedition from 1913 to 1917 in order to prove or disprove the existence of a landmass that Robert E. Peary thought he saw northwest of the known Arctic Islands in 1906, which turned out to be a mirage.

My project involved mapping the locations of the expedition members and outlining what they were doing at these locations. I read the field journals of three of the expedition members, MacMillan, the geologist Elmer Ekblaw, and the zoologist Maurice Tanquary. From these accounts, I noted the names of places they explored and used Google Earth to determine points of latitude and longitude, which I compiled in an Excel spreadsheet. I kept track of the dates they were in each of these locations and took quotes from these dates in their journals, which reveal what they were doing or how they were feeling about their Arctic experiences. I also picked out photographs of these locations from MacMillan’s Crocker Land photographs. Ultimately, I hope to give viewers the opportunity to see what the expedition members were seeing and experiencing through an interactive map.

Initially, I mapped the locations in Google Earth, but I switched to ArcMap because I thought it would give me more options for creating pop-ups in the map that would contain the photos and journal quotes. In addition, I thought it would be useful to learn some basics about using ArcGIS because I am minoring in Earth and Oceanographic Science and have not yet used the program. I took a 3-day basic course in ArcGIS with Professor Johnson. ArcGIS has allowed me to configure all the pop-ups at once and to pull information directly from my Excel spreadsheet, instead of having to put the information for pop-ups individually into Google Earth.

I plotted the locations for the map in ArcMap and drew lines for the routes that the expedition members took. I saved these points and lines as shapefiles and imported them into ArcGIS Online. In ArcGIS Online, I added pop-ups to the map so that a viewer can click on each location and see the location name, the date, a photograph, and a quote from the journals or a short summary of what they were doing. By creating the map in ArcGIS Online, I can embed it into a website so that it can be accessed by the public on the Arctic Museum’s website. The map can also be displayed on an iPad or other touchscreen device that viewers can use in the museum exhibit.

As a side project this summer, I learned how to use iMovie from a short seminar given by the IT department and used the program to edit video footage of a speaker who gave a talk at Bowdoin in June. The speaker, Elizabeth Solis, grew up in Labrador and donated her photographs and traditional fur clothing to the museum. I replaced video footage of her photographs projected onto a screen with scans of her slides so that her commentary would match up with higher quality images of her photographs.

Working as a Gibbons Fellow this summer has given me a greater understanding of the ways in which museums attempt to grab the interest of museum-goers and convey information through technology. I also gained detailed knowledge of the Crocker Land Expedition as I carefully combed through the explorers’ journals in order to collect the information I needed to construct my map.

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