Orkney trip report

In August 2019 I travelled to the island of Mainland in the Orkney Islands to be a research assistant on scientific fieldwork. I assisted with the data collection for a fellow student who is doing his undergraduate dissertation on the mixing of saline water and brackish water in Loch of Harray. At the same time, we were also assisting a QMUL School of Geography professor with the collection of water and ostracod samples for his research into past climates. Over the past ten thousand years, the Orkney Islands have experienced sea-level rise, resulting in what would previously been freshwater lochs becoming more saline from the ocean as well as the flooding of ancient human settlement sites. The purpose of the research carried out there was to help better understand what the conditions there (and elsewhere) may have been like in past years and also what further changes may be brought about by the currently changing climate.

I applied for and had been awarded £250 from the QMUL expeditions fund to assist me in undertaking this work. In itself, applying for this funding was educational – we had to budget out costs for transportation, accommodation and sustenance within an expected allowance and motivate why this trip was deserving of being funded. Learning how to do this suitably would be use in future projects of larger scales.

Having travelled from London by train and ferry via Aberdeen, we stayed in self-catering accommodation in the small town of Kirkwall.

Over the course of three days, we would go out to various points around Loch of Harray wading into the loch while wearing waterproof wader trousers to gather salinity and pH measurements for the undergraduate research project and also collect water samples and filtered soil samples from the loch bed for our professor’s research. The soil samples would then be analysed under a microscope at our accommodation on the evening of the day that they were collected to pick out the desired ostracod specimens by hand, each of which are smaller than the full stop at the end of this sentence.

Whilst I was not doing data gathering for my own project, it was still a valuable learning experience in independent field work. We found that flexibility is required in such work as methodology may have to be adjusted on the fly in response to anomalous and unexpected results.

Figure 1 John collecting a water sample
We also learnt that planning can only go so far in being able to deal with circumstances in the field and that some improvisation may be required such as our having to find routes through farmland to get to the intended sampling locations.

We also took the opportunity of this trip to visit places of cultural and historical significance.

- The active Neolithic archaeological excavation site Ness of Brodgar
- The partially restored Neolithic village of Skara Brae and the nearby museum manor Skaill House
- The Neolithic stone circle Ring of Brodgar
- A local folk music performance in Kirkwall
- The 12th century St Magnus Cathedral

This trip was most certainly educational and enriching in a variety of ways and I am grateful to Professor Dave Horne for organising it and to QMUL for awarding the funds to assist me in attending it.