

JAMES RENNIE BEQUEST

REPORT ON EXPEDITION / PROJECT / CONFERENCE

Expedition/Project/

Conference Title: Studying Marine Mammals in the Wild

Travel Dates: 25.5-10.6.24

Location: Húsavík, Iceland

Group member(s): Finn McElrue-Inch

Aims: To study the cetacean life of Skjálfandi bay through the use of numerous ecological surveying techniques, as well as build a background context of the ecology of the bay, cetacean biology and the history of whaling through lecture material.

Photography consent form attached: Yes
(please refer to your award letter) No

OUTCOME (a minimum of 500 words):-

The 'Studying Marine Mammals in the Wild' course was provided by the University of Iceland and was run in the small town of Húsavík. The location of the University's research institute in Húsavík is no accident, with numerous environmentally-friendly whale watching tours running daily, and with geological activity resulting in a highly productive marine environment that attracts a number of cetacean species during their feeding season. Travel to this location was not particularly easy, so the funding provided by the James Rennie Bequest was vital in ensuring this opportunity was accessible.

The course itself ran between the 28th May and the 6th of June, and consisted of both lectures and field work opportunities. The first day involved an introduction to the ecology of Skjálfandi bay, the coast of which Húsavík can be found on. A number of cetacean species can be found in the surrounding waters, most commonly humpback whales (*Megaptera novaeangilae*), blue whales (*Balaenoptera musculus*), white-beaked dolphins (*Lagenorhynchus albirostris*), harbour porpoises (*Phocoena phocoena*) and minke whales (*Balaenoptera acutorostrata*). I learnt about the observed lengths and weights of these species, as well as information about their communication and diet. Following this, the course provided a lecture on the history of whaling techniques, whale-lore and the changing social and political aspects of the whaling industry. This context provided me with the necessary information to formulate my own opinions on the whaling industry, which is particularly important given the Icelandic government's decision to renew the hunting licence for their one and only whaling company still in operation. We were also able to tour the research centre's facilities, and access the renowned 'Húsavík Whale Museum'.

On the second day of the course, we began learning about different techniques used to study the marine mammals in their environment. This element of the course was taught almost entirely through field work, which allowed other students and I to gain valuable experience as well as witness the whales themselves firsthand. We began by assessing the behavioural traits of the whales, observing individuals and noting whether they were feeding,

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diving, milling etc. Here we observed both humpback whales and a blue whale, allowing us to identify the differences in their behaviour.

The next day, we used acoustic devices on a research vessel to attempt to produce sound recordings of the various noises cetaceans produce when feeding and communicating. While unsuccessful, we were able to observe a pod of white-beaked dolphins socialising nearby. Later that day, we were taught how using drone imagery can be a valuable tool in estimating whale mass and blubber thickness whilst minimising the stress on the animal. This element of the course was presented through both a lecture on the uses of drone imagery and its applications in allometry, and a practical demonstration with the drone in an attempt to photograph some cetaceans.

On the third day, we were taught how to use characteristics of different whales, captured through photographs, to identify them individually. We were able to match up mottling patterns, fluke patterns and scarring to already identified whales in the research institute's catalogue. I was also able to have a go at taking the photos myself, using a high resolution camera onboard the ship.

Now that we had finished learning about and practicing the different surveying techniques, it was time to choose one and use it to create a research project for the next few days. The aim was to utilise the taught skills to collect data in the field which could be presented at the end of the course. However, while whale sightings are an almost guarantee in Skjálfandi bay, the Icelandic weather is not. We were grounded as blizzard conditions descended onto Húsavík, preventing any further boat trips, thereby stopping our fieldwork in its tracks. To tackle this, we were provided with previously collected data, which we analysed as though we had collected it in the field.

Over the second half of the course, I produced a group project on the associations of seabirds and cetaceans in the bay. Seabirds can often be found with whales or dolphins in an effort to take advantage of prey resources driven to the surface by their behaviour. We investigated how often seabirds had been found to be present in relation to cetacean sightings and presented our results to the rest of the course, the institute's researchers and the whale watching guides and staff.

Without the James Rennie Bequest fund, this fantastic opportunity would not have been available due to high travel costs. I am extremely grateful to have been awarded this funding, as it has allowed me to view and study some of the most enigmatic creatures in the world, as well as make great friends and connections in a field I'm passionate about.

