JAMES RENNIE BEQUEST

REPORT ON EXPEDITION / PROJECT / CONFERENCE

Expedition/Project/ Conference Title: Studying marine mammals in the wild

Travel Dates: 25/ 05/ 24 – 8/ 06/ 24

Location: Húsavík, Iceland

Group member(s): Emma House

Aims: To learn more about cetaceans in their natural habitat: specifically how to observe, track, listen and monitor them in the Skjalfandi Bay, Husavik.

Photography consent form attached: *(please refer to your award letter)*

☒ Yes
☐ No

OUTCOME (a minimum of 500 words):-

'Studying marine mammals in the wild' is a course taught at the whale research station of the University of Iceland, based in Húsavík. Marianne Rasmussen, the course director, as well as a series of PhD students and researchers helped run the jam-packed course from 28th May to 6th June. Mainly based in the Húsavík Whale Museum, the course began with a series of lectures introducing the Skjalfandi Bay, including the common cetaceans that occur, from porpoises to blue whales. Marianne Rasmussen talked us through the recent research held at the bay, referring to photo identification, hydrophone recordings and drone imagery. Finally, we received a lecture providing an overview of the history of whaling in Iceland and the misconceptions of whales from old literature and historical tales which was eye opening and harrowing.

After receiving the foundational knowledge for the course, we began to learn techniques in the field. In groups, we rotated different activities. Firstly, we observed cetacean behaviour from the tour boats – the main means of data collection for interns and researchers there. As a group, we identified cetaceans, how frequently they were breathing, fluking or feeding, which can be of particular interest when regarding proximity to tourism boats. This exercise strengthened my teamwork skills, as I took notes from the fellow students, such as timings, behaviours and the distance the cetacean was located from the boat. The next day we had the opportunity to collect sound recordings with a hydrophone on the research boat with Marianne Rasmussen, who specialises in this field. Although unsuccessful, this experience was insightful and fascinating, especially regarding the research they have already carried out. We were lucky enough to witness a pod of White-Beaked Dolphins, who perform clicks for echolocation and whistles for communication. Later in the day we learnt about the use of drones in cetacean research, specifically how imagery can be used to determine blubber thickness. Alongside this came the regulations and precautions of using drones, especially concerning disturbances to cetaceans, which was interesting.

The day after consisted of photo identification of cetaceans, using cameras provided by the university. Having never used equipment like this before I proceeded to precautiously spam the camera with images of the fluke for Humpback whales. This is a major identification point for them, as well as the pigmentation patterns on their back and the shape of their dorsal fin which can be scarred through combat or human disturbance. We were provided with identification catalogues of cetaceans found at the bay, thus could match up our own images with those from

the catalogue. Here, we truly got to know the specific whales that frequent the bay. We also got to grips with a website called Happy Whale, whereby members of the public and researchers can upload images they take of whales, to identify and track them. Luckily, as students and data collectors of cetaceans, we had the opportunity to hop on many tourism boats to gain a better understanding of these majestic creatures.

After learning these skills at sea, we chose projects to focus on. Ours specifically looked at how seabird presence is influenced by the species of cetacean in the Skjalfandi Bay. Usually, students would have the opportunity to collect data themselves, but unfortunately, due to stormy, snowy weather (in June!), it was unsafe to go out and all boat tours were paused. As a result, we were provided with data collected from interns in previous years. We discovered little association between the seabirds and cetaceans, with a limited range of data provided. Interestingly, through literature readings and further talks with Marianne Rasmussen, we do believe there are specific seabird cetacean associations – dependent upon feeding strategy and diets. This research project has significantly piqued my interest and inspired me to look at similar topics for my bachelor's dissertation. After the data analysis and in-depth literature readings, we put together a slide show to present to the audience of researchers and masters students. This strengthened my oral presentation skills and truly boosted my confidence in public speaking.

This trip would not have been possible without the James Rennie Bequest Fund. I am endlessly grateful for this opportunity – the people I met along the way and the research we carried out has deeply inspired me. Attending this course has opened up a new world of marine biology to me that I would not have encountered to the same extent otherwise. It has been a motivating trip that has sparked ideas for me to study cetaceans further in the future as well as allowing me to develop a range of new skills. It was a memorable trip and I am truly thankful for the funding that made it happen.