

Canada

Project Description

This project will address key environmental information gaps identified during recent Environmental Impact Review Hearings conducted in late 2011 concerning the proposed Baffinland Iron Mines Corporation Mary River project. Specifically, the study will estimate the distribution and abundance patterns of Thick Billed Murres and identify their use of key marine habitat areas.

We will also use small GPS devices (18 grams; less than 2% of body weight) and temperature depth recorders (TDR; 3 grams; less than 1% of body weight) to track movements and diving behaviour of individuals during the breeding season. GPS units will be affixed to the back of the bird using TESA tape and deployed for 2-7 days. TDR's will be affixed to a plastic leg band and deployed for 2-7 days. Individuals will be re-captured after this period to retrieve the units.

At Cape Graham Moore the field camp will consist of a few temporary canvas wall tents. Our field activities there will last from July 20 - Aug 15. We will use a helicopter to shuttle food and equipment to the field camp location. We will not use any vehicles on the island, and will leave the island via chartered boat from Pond Inlet. There will be four researchers in camp during this period.

Our research methodology emphasizes close collaboration with local communities. We hire boat captains for work with Thick billed murres and rely extensively on local ecological knowledge for guidance on research protocols – such as where to sample and when. Ultimately, we hope to be able to work together with northern residents to quantify the effects that disease, shipping, and increased predation are having on seabirds, assess the potential for these pressures to intensify with further climatic warming, and identify management options.

