Environment Canada Environnement Canada

National Wildlife Research Centre
Carleton University
1125 Colonel By Drive
Ottawa, ON K1S 5B6

January 7, 2026

NWB Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

Dear Manager:

Please find attached an application for water use without a license, as well as project descriptions in both English and Inuktitut for research conducted on Coats Island, Nunavut. This work was previously covered under Nunavut Water Board License 8WLC-AIF2526.

Please note the previous license was held by Dr. Grant Gilchrist. I have been recently hired at Environment and Climate Change Canada to lead the Coats Island field site. All other permits are still valid including the NPC and NIRB permits for the site. Although I am taking over the management of the site from Dr. Gilchrist, the field activities and logistics will remain the same.

Thank you very much for your consideration of this application, and please do not hesitate to contact us with any questions or concerns you may have.

Sincerely,

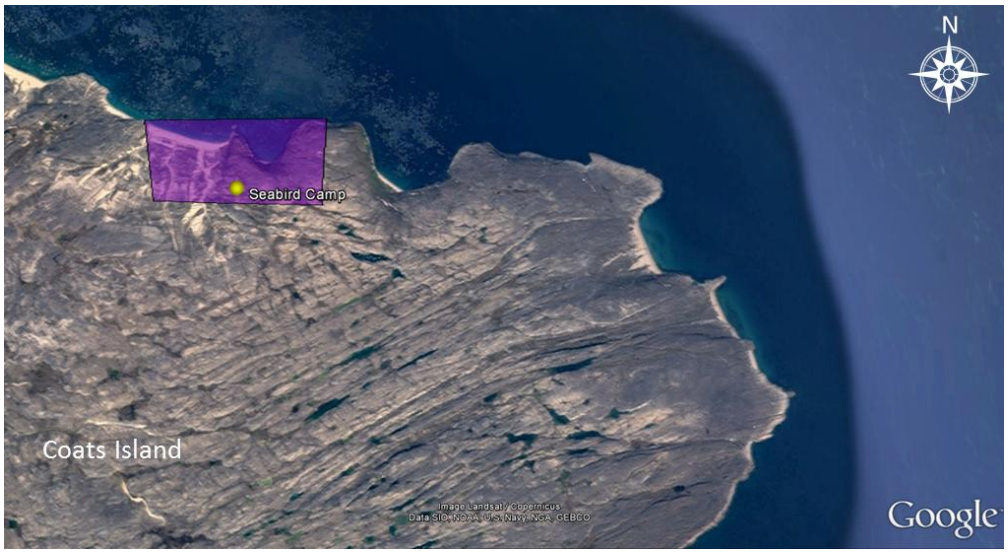
Don-Jean Leandri B.

Don-Jean Leandri
Research Scientist
Environment and Climate Change Canada

Canada

DESCRIPTION OF UNDERTAKING AND EQUIPMENT USED
Adaptation to an ice-free summer by Arctic seabirds

Future Arctic seas will have longer ice-free periods, opening new maritime corridors for shipping. We will ~~establish novel genomic and physiological techniques~~monitor seabird movement, behaviour and physiology to examine their resilience ~~of Arctic seabirds~~ to a less-icy future and their potential exposure to increased shipping traffic. ~~Specifically, we will examine whether particular genes or blood chemistries are associated with the ability of thick-billed murres to cope with environmental change.~~ We will use GPS-camera-accelerometers to track murres at sea in response to changing ice cover and identify key foraging areas. We will also determine whether unmanned aerial vehicles can be used to census murres in the Canadian Arctic. As a major cause of biologist mortality in Canada is air/boat accidents, we propose that unmanned aerial vehicles can be used to safely record murre numbers. We will fly vehicles past at varying distances and heights to determine what height and distance can be used to accurately census murre numbers without disturbing the birds. We anticipate on having a Twin Otter fly us in and out at the start/end of the season and to use an ATV at the start/end to haul gear from the plane to the cabin. Inuit assistants may also use the ATV for hunting. Twin Otter, helicopter and ATV will also be used to ferry gear for cabin construction in August. Finally, chemical pollution is an important component of environmental change in the Arctic. We will measure pollution levels in various tissues from glaucous gulls and murres. A small gas generator or solar panels will power the laptops and VHF radio in the camps and recharge batteries as required. Water use is restricted to personal/camping use – cooking, drinking and washing - and will be hauled from nearby meltwater ponds and streams to the camps using buckets. Grey water will be poured into sumps, and human waste composted in the composting toilets at both camps. Garbage is burned in a high temperature incinerator. Non-combustible garbage (e.g. glass) is backhauled to Iqaluit.



Map showing the maximum extent of the project area (within the purple polygon), including the twin otter landing area, seabird research camp, and seabird colony, on Coats Island, Nunavut.