NIRB: Online Public Registry for CWS' "Marine Habitat Use of Black Guillemots at Pitsiulaaqsi and Eastern Canada Seabirds at Sea Surveys" Project Proposal

Public Registry - Project Proposals
NPC 151115: Marine Habitat Use of Black Guillemots at Pitsiulaaqsi and Eastern Canada Seabirds at Sea (ECSAS) Surveys
Close
Proposal Status: Conformity Determination Issued
Overview Documents
Project Overview
Type of application: New
Proponent name:
Julia Baak
Proponent company:
Canadian Wildlife Service
Project Description:
Black guillemots (Cepphus grylle) are a widespread Arctic seabird, ranging from the Atlantic to the High Arctic in Canada. Importantly, Canada supports an estimated 440,000 individuals (approximately 58% of the global population), placing a high degree of responsibility on Canada to monitor and conserve this species. As pursuit-diving seabirds that forage in shallow, coastal waters or near ice edges and polynyas, these birds are particularly vulnerable to human activities such as shipping traffic, oil spills, and exposure to contaminants. Despite this, we know little about the movement ecology and threats of black guillemots in Canada, particularly in Nunavut, where there is no available tracking data for this species during the breeding and non-breeding season. As shipping and other human activities continue to increase in the Canadian Arctic, monitoring the movement ecology of black guillemots is important to better understand key habitats for these species, as well as potential threats that these species may be exposed to throughout the year. To address these critical knowledge gaps, we propose to deploy Global Positioning System (GPS) transmitters on 30 adult black guillemots to quantify fine-scale foraging movements during the breeding season. These data will provide the first detailed insights into the movement ecology of black guillemots in this region, which will support the identification of important marine areas and inform marine spatial planning. The resulting data will also establish a baseline for future monitoring and contribute to multi-regional seabird tracking efforts aimed at assessing cumulative impacts and conservation needs in a rapidly changing Arctic. Additionally, subarctic and arctic waters around Canada support millions of breeding birds. Although tied closer to land during the breeding season when they raise their young, seabirds exist mostly in the marine environment. Since many spend much of their lives out of sight of land, knowledge of their at-sea distribution has been difficult to obtain. Since 2006, the Eastern Canada Seabirds at Sea (ECSAS) program has monitored seabirds at sea using ships-of-opportunity, including Canadian Coast Guard vessels, cruise ships, and more recently, ships in local communities. The information from these surveys is used to identify important marine areas for protection, and understand the potential consequences of climate change and other threats on Arctic marine bird populations. Although the surveys were designed to count

birds, observers collect information on all wildlife sightings, including marine mammals and plastic pollution. All data are made publicly available through the Open Government Data Portal. Although several trained observers exist in the Atlantic provinces of Canada, we lack the expertise in Arctic Canada where survey effort is needed most. Thus, our second objective is to train northern community members, including Inuit staff within CWS, to enhance our capacity to monitor seabirds across Arctic Canada.

Project Schedule

Start Date:
2026-07-01
End Date:
2026-08-31

Project Map

List of project geometries:
Id
Geometry
Location Name
20660
point
Pitsiulaaqsi

NPC Planning regions:
No Approved Plan

Project Land Use and Authorizations

Project Land Use:
Scientific Research
Licensing Agencies:
Government of Canada - Canadian Wildlife Service
Government of Canada - Canadian Wildlife Service
Government of Nunavut - Department of Environment

Material Use

Equipment:
Type
Quantity
Type
Use
Boat
1
Unknown
To transport people to and from Pitsiulaaqsi (departing from Iqaluit). The boat size will depend on the number of personnel and availability of outfitters (to be determined). Boat will hold up to 8 personnel.

Fuel Use:
Type
Container
Capacity
Use

Gasoline
1
200
Fuel for the boat
Hazardous Material and Chemical Use:
Type
Container
Capacity
Use
No data found
Water Consumption:
Daily Amount (m^2)
Retrieval Method
Retrieval Location
0
Waste and Impacts
Environmental Impacts:
No predicted impacts. All waste (if any) will remain on the boat and be brought back to Iqaluit.
Waste Management:
Waste Type
Quantity Generated
Treatement Method
Disposal Method
Combustible wastes
1 bag
NA
Brought back to Iqaluit for disposal at the municipal waste facility.