For office use only	
Date Received	Permit No.

CANADIAN WILDLIFE SERVICE PERMIT APPLICATION

NOTE TO RESEARCHERS

Without exception, all research within the NWT and Nunavut must be licensed. This includes work in indigenous knowledge as well as in physical, social, and biological sciences. For information on licensing for your project within the NWT, please refer to the Aurora Research Institute's Web site at http://www.nwtresearch.com. For Nunavut, visit the Nunavut Research Institute Web site at http://www.nri.nu.ca.

For Scientific Permits: Prior to issuing a Scientific Permit to Take, Salvage or Disturb Migratory Birds, CWS requires a copy of either an NWT or Nunavut Wildlife Research Permit; or an Aurora Research Permit/Nunavut Research Permit. Include a copy of either permit with this application or forward a copy to CWS upon receipt of it, or your CWS permit will not be issued.

Nunavut: In Nunavut your project will have to undergo screening by the Nunavut Impact Review Board. One of their requirements is that you obtain a conformity report from the Nunavut Planning Commission. Please ensure that you have done so.

To be completed by all applicants:

☒ New application
☐ Amendment/extension of existing permit
Existing permit no.

Territory:
☐ NWT
☒ Nunavut

Anticipated project start date: 5 Jan. 2011
Anticipated project end date: 25 Mar. 2011

Please indicate by checkbox if your project is receiving federal government funding:
☐ No
☐ Polar Continental Shelf Project
☒ Yes/Other (please list)

Type of permit applied for:
☐ Bird Sanctuary permit
☐ National Wildlife Area entry permit
☒ Scientific permit to take salvage or disturb migratory birds

Period of permit requested:
☐ 1 year
☐ 2 year
☒ 3 year

Please indicate by checkbox if your project requires approvals/permits by any of the following regulators:
☐ DFO ☐ NRCAN
☐ INAC ☐ Parks Canada
☐ NWT or Nunavut Water Board
☐ NEB

1. CONTACT INFORMATION

Applicant name and mailing address Amie Black and Grant Gilchrist NWRC, Carleton University 1125 Colonel By Dr. Ottawa, ON, K1A 0H3		**Fax** 613-998-0458 **Phone** 613-998-7364 (Grant)
Field supervisor Grant Gilchrist	**E-mail address** amie.black@ec.gc.ca grant.gilchrist@ec.gc.ca	**Phone** 613-998-8523 (Amie)

Total number of personnel covered by application: 3

2. SUMMARY PROJECT INFORMATION

Project title:

Detecting Avian Cholera in the Hudson Bay Common Eider (Somateria mollissima sedentaria) in the Belcher Island Archipelago, Nunavut.

Project objective: (concise statement of purpose and goals)

We will be working with local Inuit hunters to collect cloacal and choanal swabs, tissue, feather, and blood samples from eiders over-wintering in the polynyas and leads near Sanikiluaq. These samples will be analysed for avian cholera, and will indicate whether the disease has reached the wintering grounds of Common Eiders in Nunavut and possibly where the disease originated from. They will also inform us about what other breeding areas the disease may be carried to by infected birds over-wintering in the polynya.

Project description: (non-technical summary; 300 words or less; describe purpose, nature and occasion of all activities; include the anticipated intensity of vehicle use)

Many hundreds of common eider ducks have recently died from avian cholera in the Canadian Arctic since it was first detected in 2004, particularly at colonies in northern Hudson Bay and in Hudson Strait. Cholera has killed thousands of eider ducks nesting at the East Bay Island colony on Southampton Island; the largest eider breeding colony in Arctic Canada. Inuit residents also report cholera mortality of eider ducks at other colonies near their communities. Some Northern common eider ducks over-winter in the Belcher Island Archipelago and therefore are possibly exposing other eiders over-wintering in the area to the disease. This issue should be investigated, as Hudson Bay eiders are an economically important species to the community of Sanikiluaq.

We will be accompanying Inuit to their hunting grounds using snowmobiles. We anticipate our use of snowmobiles will be moderately intense, as we will use them each day to travel to and from hunting grounds. However, the durations of the fieldwork will be short (1-2 weeks).

*******We will collect samples from birds shot with a 12 GA shotgun****. Blood, feather, cloacal and choanal swabs, and tissue samples will be collected. Blood, swabs, and tissue will be frozen at -20°C, and feathers will remain at room temperature. All blood and swab samples will be shipped to the Veterinary College in ***Saskatoon*** to be analysed for Avian Cholera. Tissue samples will be analysed at the National Wildlife Research Centre for parasites and contaminants. We will collect up to 200 samples of each type for disease analysis.**

****In addition to sampling eiders, we will also be deploying remote time-lapse photography equipment at polynya and floe edge habitats to collect information on the dynamics of sea ice extent through the winter, and the associated distribution, abundance and behaviour of eider ducks and other wildlife using these habitats. This will allow us to quantify how sea duck populations respond to oceanographic changes in sea ice within years.

We will deploy oceanographic equipment (salinity meters) in winter sea ice habitats. This will provide important information crucial for evaluating sea ice dynamics in relation to eider foraging behaviour, and for placing local scale efforts in broader ecological and oceanographic context.*****

NOTE: *A full project description should accompany this application.*

Activities related to project proposal: (check as many as apply)

☒ Scientific research	☐ Ground surveys	☐ Storage of fuel
☐ Tourism, non-commercial	☐ Aerial surveys	☐ Camp construction
☐ Tourism, commercial	☐ Winter road	☐ Use of firearms
☐ Use of boats	☐ Commercial harvest	☐ Use of explosives
☐ Use of aircraft	☐ Cruise ship	☐ Seismic exploration
☐ Use of off-road vehicles	☐ Drilling activities	☐ Mining activities
☐ Other (please specify):		

Are you applying to kill, salvage or otherwise interfere with migratory birds (e.g. take blood, transmitter implant, etc.)?

☒ Yes ☐ No

If yes, provide details, including specie(s) of bird, number and method. Indicate whether the approval of an animal care committee has been received and include the name of the committee.

We will be accompanying Inuit to their hunting grounds and collecting samples from Common Eiders shot as a result of hunting. We will not be collecting birds solely for scientific purposes.

After a bird has been shot and retrieved by a hunter, blood, feather, cloacal and choanal swabs, and tissue samples will be collected. Blood, swabs, and tissue will be frozen at -20°C, and feathers will remain at room temperature. All samples will be shipped to the Veterinary College in St. Hyacinth, Quebec to be analysed for Avian Cholera. We will collect up to 200 samples of each type for disease analysis. We will also opportunistically collect any dead eiders found at the site to be sent to the lab for cholera analysis.

We have applied for Animal Care approval from The Environment Canada Animal Care Committee, Prairie and Northern Regions as well as a Scientific Permit from the Government of Nunavut.

Sample	Amount collected	Number of samples
Blood	3 ml	200
Feather	5 feathers	200
Cloacal swab	1 swab	200
Choanal swab	1 swab	200
Tissue	Kidneys, liver, lungs	200 each
Carcasses	Whole or partial carcasses	As found

Do you plan to carry firearms?

☒ Yes ☐ No

If yes, please describe number, type and purpose of firearms.

Bear protection - Remington Marine Magnum 12 gauge shotguns, 1 per person

3. PROJECT LOCATION

Geographic place names and coordinates: (be as specific as possible; enter multiple coordinates for activities occurring over large area(s))

Location	Geographic Coordinates
Environment Canada Cabin	55° 49.361N, 79° 53.925W

***NOTE:** A map document delineating activity centres and travel corridors, etc. is required and should accompany this application. Please submit shapefiles if available.*

Status of land upon which project will occur:

- ☐ Federal crown
- ☒ Inuit-owned or other private
- ☐ Territorial (commissioner's land)

4. OPERATIONAL AND ENVIRONMENTAL CONSIDERATIONS

Provide a summary of potential environmental impacts and proposed restoration plans and activities: (describe the effects of the proposed activities on land, water, flora, fauna; attach separate pages as necessary)

We will be conducting our research during the winter for a relatively short period of time (1-2 weeks). We will be using snowmobiles to travel to and from the hunting grounds, white gas for cooking, and kerosene to heat the cabin. All of these fuels will be stored in appropriate containers to avoid leaks. MSDS and spill contingency plans will be provided to the field crew. Because the work will take place during the winter, fuel spills will be cleaned up before they permeate the snow and ice and impact the land or water.

A Qikiqtani Inuit Association Land Use Exemption (Q09XN06) has been obtained (expires 28 February 2011) and we have applied for a renewal.

List of equipment and fuel to be used: (include aircraft, vehicles, boats, generators, large tent structures, various types of fuel, etc; indicate proposed containment strategies for all fuels; attach separate pages as necessary)

Equipment / Fuel	Size / Amount	Proposed use / Containment
Snowmobiles/gasoline		travel to/from hunting grounds
Cook stove/white gas		cooking/
Heater/kerosene		heat cabin

NOTE: Please submit a copy of a spill contingency plan, if available, with this application.

Waste disposal: (describe any wastes that may be produced, e.g. garbage, grey water, sewage, hazardous waste, and proposed disposal methods; attach separate pages as necessary)

Type of waste	Approx. amount produced	Proposed disposal method
Garbage	20lbs	Return to Sanikiluaq by snowmobile
Greywater	10L/day	sump >150 m from any water
Sewage	2L/day	sump >150 m from any water

5. POTENTIAL ADVERSE EFFECTS TO SPECIES AT RISK

PLEASE NOTE:

- *You should consider species at risk legally listed on the Species at Risk Act (i.e. on Schedule 1) and those under consideration for legal listing, such as those designated by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).*
- *Refer to species status reports and other information on the Species at Risk Registry at www.sararegistry.gc.ca for information on specific species.*

Identify Species at Risk found within your proposed project area.

Beluga whales, listed as endangered in the Eastern Hudson Bay by COSEWIC, but not listed under SARA, occur in the area during the winter.

List any potential adverse effects that your project may have on the species, its habitat and/or its residence. All direct, indirect and cumulative effects should be considered.

We do not anticipate any effects on Beluga Whales or their habitat, as our research will be carried out over a short period of time and have a very small impact on the land. There is the most chance of a small fuel spill near our cabin, which is located far from the marine habitat used by Belugas.

If potential adverse effects are identified, list mitigation to avoid or lessen those effects.

When possible, refueling of snowmobiles will be done away from sea ice and open water to avoid a fuel spill.

List monitoring measures to determine the effectiveness of mitigation and/or identify where further mitigation is required.

6. CONSULTATION

List local community representatives who have been contacted about your proposed activities: (include community groups, local businesses, schools, etc.; state how they are participating in your activity, if at all (e.g. providing advice, supplying goods, hired to assist you, etc.))

1. Representative name:	Lucassie Arragutainaq
Name of group represented:	Sanikiluaq Hunters and Trappers Association
Address / phone / fax:	General Delivery, Sanililuaq, NU, X0A 0W0/ (867) 266-8709
How contacted and date:	Contacted by email November 23, 2010, ***February 23, 2012***
Participating?	☒ Yes ☐ No
If yes, how?	

The community of Sanikiluaq has been involved with the project since its inception in 1998. All work is conducted in direct collaboration with experienced Inuit hunters and in close consultation with the local Hunters and Trappers Organization, whom have identified this research as an important priority for local co-management efforts.
****We will be hiring local hunters through the HTA to collect the birds. This hiring will be done through a collaborative research grant managed by the HTA.****

2. Representative name:	
Name of group represented:	
Address / phone / fax:	
How contacted and date:	
Participating?	☐ Yes ☐ No
If yes, how?	

3. Representative name:	
Name of group represented:	
Address / phone / fax:	
How contacted and date:	
Participating?	☐ Yes ☐ No
If yes, how?	

Applicant Grant Gilchrist - Amie Black
(Print Full Name)

Signature Amie Black - for Grant Gilchrist **Date** 23 Feb. 2012