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:

1) Copy of either an NWT or Nunavut Wildlife Research Permit; or an Aurora Research Licence/Nunavut Research Licence. Include a copy of either the permit or the licence with this application or forward a copy to CWS upon receipt of it. Otherwise, your permit will not be issued.
2) Appendix 1 of this permit application must be completed by two ornithologists who have reviewed the application and are willing to attest to the ability and professionalism of the applicant.

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: 01 JUNE

Anticipated project end date: 15 JULY

Type of permit applied for:

- ☐ Bird Sanctuary permit
- ☒ National Wildlife Area entry permit
- ☐ Scientific permit to take, salvage, disturb or display migratory birds

Period of permit requested:

- ☐ 1 year
- ☐ 2 year
- ☒ 3 year

Please indicate by checkbox if your project is receiving federal government funding:

- ☐ No
- ☒ Polar Continental Shelf Program
- ☒ Yes/Other (please list)
  INTERNAL FUNDS

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 JENNIE RAUSCH P.O. BOX 2310, 5019 - 52ND STREET YELLOWKNIFE, NT X1A 2P7		**Fax** 867-873-6776 **Phone** 867-669-4709
Field supervisor Jennie Rausch	**E-mail address** jennie.rausch@ec.gc.ca	**Phone** 867-669-4709

Total number of personnel covered by application: 6

2. SUMMARY PROJECT INFORMATION

Project title:

Arctic Shorebird Monitoring Program
Permit Application for Polar Bear Pass NWA.

Project objective: (concise statement of purpose and goals)

The arctic shorebird monitoring program was initiated in response to widespread shorebird population declines noted on migration routes through southern Canada and the United States. Accurately estimating shorebird numbers during migration is difficult. The objective of the program is to produce population estimates for arctic-breeding shorebirds and then to monitor trends in their populations over time. We have completed 3 of 13 Canadian Arctic PRISM (Program for Regional and International Shorebird Monitoring) regions to date. In 2011 we will conduct surveys on Prince of Wales Island, Polar Bear Pass NWA on Bathurst Island, Cornwallis Island and the islands in between.

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

See attached project description.

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.

I already have a multi-year Sci Permit (NUN-SCI-10-01).

Do you plan to carry firearms?

☒ Yes ☐ No

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

Up to 4 pump action shotguns (Remington Marine Magnum 270). The purpose is for bear deterrent and protection.

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
Prince of Wales Island (camp)	99° 9′ 00″W 73° 5′ 00″N
Surveys throughout Prince of Wales Island north to Polar Bear Pass NWA on Bathurst Island and the southern area around Resolute Bay on Cornwallis Island, including Russell Island, Hamilton Island, Young Island, Lowther Island, Griffith Island, Somerville Island, Browne Island, Prescott Island and Baker Island.	Max Lat 75° 43′ N Max Long 103° 00′ W Min Lat 71° 15′ N Min Long 93° 25′ W

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)

The tent camp is not located within the NWA.

The only impact will be temporary disturbance of birds and mammals from the helicopters passing by and from human presence. Most plots will only be visited for 2 hours on the ground. Each plot will only have 2 observers who will be silently observing the birds and recording their movements. Care will be taken to avoid repeatedly disturbing nests as much as possible.

Disturbance to Red Knots during the tagging process will be minimal. Those handling birds will be experienced and trained to ensure minimal stress to the bird.

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
Helicopter	206L (1)	slinging gear to/from camp(s), travel to/from plots

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

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 the booklet "Species at risk in the NWT" at* http://www.nwtwildlife.com/ *for information on particular species.*

Identify Species at Risk found within your proposed project area.

Red Knot
Wolverine
Polar Bear
Grizzly Bear
Dolphin-Union Caribou
Peary Caribou
Peregrine Falcon anatum subspecies

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.

The potential adverse effect will be very temporary (short-term) disturbance. For Red Knot, we have already received animal care approval and permission from the Banding Office to handle knots.

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

When surveying rapid plots, we don't stay in any one location for more than 2 hours and will avoid repeatedly disturbing nests of the bird species. If there are large mammals in the areas we will not land at that plot or we will depart from the area.

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

We will record the location and endeavour to leave the area as soon as possible when a SAR or COSEWIC listed species is encountered (with the exception of Red Knot, which will be disturb as infrequently and for as short a time as possible).

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:	Phillip Manik Senior
Name of group represented:	Resolute Bay Hunters and Trappers Organization
Address / phone / fax:	General Delivery, Resolute Bay, NU X0A 0V0 867-252-3170
How contacted and date:	Letter in April 2011.
Participating?	☐ Yes ☒ No
If yes, how?	
Not participating other than offering potential field workers and recommending the project for a Nunavut Wildlife Permit.	

2. Representative name:	Simon Qingnaqtuq
Name of group represented:	Taloyoak Hunters and Trappers Organization
Address / phone / fax:	General Delivery, Taloyoak, NU, X0E 0B0
How contacted and date:	Letter in April 2011
Participating?	☐ Yes ☒ No
If yes, how?	
Not participating other than offering potential field workers and recommending the project for a Nunavut Wildlife Permit.	

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

Applicant Jennie Rausch
(Print Full Name)
Signature Jausch **Date** 2 May 2011

PROJECT SUMMARY:

Arctic Shorebird Monitoring Program

We are concerned about the populations of shorebirds that breed in the Arctic. Recently, studies that count these birds on their migration routes have found that numbers of most species are declining. No one is sure why this is happening, though some possible causes are: loss of habitat in countries where the birds spend the winter, human developments at their migration stopping points, climate change, and toxic substances on their wintering grounds.

Our knowledge of the size of shorebird populations is not very good, and some of the species that breed in the Arctic are difficult to monitor on their migration routes. We want to monitor the birds on their breeding grounds because we will get better estimates of their true population sizes. Canadian and American biologists have developed a method to monitor the population size of shorebird species that breed in the Arctic. We want to use this method to keep track of shorebird populations over the years, so we will know if they are increasing or decreasing. We can use this information to detect problems with the shorebird populations and then try to figure out what is causing the problem.

In June, there will be one field crew traveling to Prince of Wales Island to survey for shorebirds. They will set up camp on an abandoned airstrip approximately 9.5 km northeast of Forsyth Lake. The camp will be there from 15 June to 30 June. Our camp will be a temporary tent camp and everything will be removed when we leave.

The crew will have a helicopter and will do aerial surveys and ground surveys of plots in various locations on Prince of Wales Island. We may do additional surveys on the islands between Prince of Wales, Cornwallis and Bathurst Islands as well as surveys in the Polar Bear Pass National Wildlife Area. Surveyors will only be in the same area for 2-3 hours at a time and will not harass wildlife or leave garbage. To do ground surveys, 2 people walk 25 m apart back and forth over a 12 hectare area. They record the type and number of all birds seen. Aerial surveys for shorebirds will be done while flying from one plot to the next. Surveys will be flown at a speed of 80 - 90 kph at a height of about 30 m. If large mammals are spotted, we will fly higher to avoid disturbing them.

Red Knots, are a species of shorebirds that we are particularly concerned about in the Arctic. If we find a Red Knot nest we will attempt to trap both adults and place plastic bands on their legs to identify them. These bands allow us to identify the bird using binoculars so that we do not have to recapture it to know which individual bird it is. One feather may be collected from each bird to find more information about the bird such as whether it is male or female and it is related to. Taking one feather will not affect how the bird flies, and the bird will

grow a new one in the fall. This is very important information that will help to determine the status of Red Knots in the Arctic and help us to monitor their populations. None of this work harms the bird and the people handling the birds have a lot of experience and have been trained to do this work.

We may also “float” eggs. When we find a shorebird nest we will place each egg in a jar of water. It tells us how when the nest was laid and when the eggs will hatch. Floating the eggs only takes a few seconds and it does not hurt them.

Our camp is not located on any Inuit Owned Land Parcels. Some of our survey plots may be on Inuit Owned Lands (parcels RB-9 to 15, 22, 25 to 30, 32 and SB-55 to 58). We have requested appropriate permissions from the Kitikmeot and Qikiqtaaluk Inuit Association’s for access to these lands. We plan to hire an Inuit Field Research Assistant to assist with our surveys and will be purchasing our groceries and supplies from Resolute Bay.

Map showing approximate boundaries of the 2011 study area and camp location.