

## PROJECT SUMMARY:

### **Arctic Shorebird Monitoring Program - 2011**

We are concerned about the populations of shorebirds that breed in the Arctic. 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 hard 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 and we have requested appropriate permissions from the Kitikmeot and Qikiqtani Inuit Association’s for Inuit Owned Land exemption permits in addition to our wildlife-related permits.

We plan to hire a student through the Inuit Field Research Assistant program to assist with our surveys and will be purchasing our groceries and supplies from Resolute Bay.



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