

Summary of the project activities : Ecosystem monitoring on Igloolik Island

We will monitor the abundance and distribution of shorebirds, arthropods, small herbivores, avian and terrestrial predators, as well as plants functional groups in the Igloolik area. As shorebirds are an important component of the tundra ecosystem (prey to most predators using the tundra) and that they are currently declining due in part to habitat loss in temperate habitats, we need reliable estimate of their population size on arctic breeding grounds and monitoring of their migratory paths. That will involve marking approximately 60 shorebirds with standard bands (metal ring from the Canadian Wildlife service together with very small, plastic rings), and approximately 45 of those will have geolocators in addition (tiny devices weighting less than 2% of shorebirds mass). The methods have been tested for a long time to refine them and have no detrimental effects on the studied birds. The birds will be handled with great care by trained people. The protocols were reviewed by animal care committees. The project will be conducted on Igloolik Island. The field crew will be led by Nicolas Lecomte (biologist and professor at Université de Moncton) and Marie-Andrée Giroux (biologist at Université de Moncton) that will work closely with Mike Qrunnut (community member from Igloolik) and another community member from Igloolik. The project will run from May 20th to August 20th in 2017, 2018, and 2019. Before sea ice melting, the crew will travel with snowmobiles from Igloolik to the camp site close by Qikiqtarjuq (on Igloolik Island; look at the map). During the whole field season, the use of an ATV is anticipated to travel within a given sector.

