

ARCTIC SHOREBIRD MONITORING PROGRAM SUMMARY REPORT OF JUNE 2008 FIELD PROGRAM

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The Arctic Shorebird Monitoring Program hosted a Community Outreach Program for Qitkiliq Middle School and John Arnalukjuak High School students in Arviat from 27-30 May 2008 (Pictures 1-4). The objective of this program was to educate students about shorebirds, climate change and careers in biology. Jennie Rausch from the Canadian Wildlife Service in Yellowknife ran the program. She was helped by her co-worker, Donna Mulders and her daughters Tamika and Ashley, who used to live in Arviat. LeeAnn Fishback and Carley Basler from the Churchill Northern Studies Centre also helped with the science program. Students learned about the different types of shorebirds around the Kivalliq region and about climate change and how it will affect birds and their habitat. The hands-on portion of each day was done outside. Students learned how to use binoculars, take and filter water samples, do a vegetation survey, read a map and use a GPS (Global Positioning System). Anita Iblauk, Silas Illungiyok, Jimmy Muckpah, and Billy Ukutak each joined us for two of the afternoons and shared their knowledge about shorebirds and birds in general. Special thanks to Doreen Manik and Marvin McKay-Keenan for allowing us to do the program at their schools.

Arctic Shorebird Monitoring Program bird surveys were done around Arviat from 2-19 June 2008 and around Baker Lake 20-30 June 2008. Our survey crews rented housing in each community and went out each day in a helicopter or on an ATV to do our work. We did ground surveys and aerial surveys. For our aerial surveys, the helicopter flies low and slow over a specific area while we watch out our windows and record all the birds we see within a certain distance from the helicopter. Our aerial survey locations (survey lines) centred around each community (see Map 1). For our ground surveys, there were 2 different types around Arviat. One was called 'walk-about'. Walk-about took about 1 hour. Two people walked in opposite directions of where the helicopter landed, and recorded all the birds and nests they saw. We also recorded information about the habitat that was there. The other ground surveys were 'Intensive Surveys'. We used ATVs to travel to 4 plots set up along the Maguse Road and visited them every 2 days for about 2 weeks so we could see what species (types) of shorebirds were nesting there and how many were there. In Baker Lake, we did not do the Intensive Surveys because the birds had already been on their nests too long (too late in the breeding season) for this type of survey. Our crew was accompanied at various times by local teens, Greg Gibbons, Rochelle Illnik, and Madge Kingaq, and by community volunteers, Lisa-Jo and Jeff van den Scott.

We surveyed 41 ground plots near Arviat. During our surveys, we saw 61 species of birds, 19 of which were shorebirds. The shorebird species we saw the most of was the Semipalmated Sandpiper (Picture 5). When we surveyed areas that were close to the treeline we saw birds that normally nest in forests or in boreal forest-tundra transition zones (like Churchill, MB) such as Lesser Yellowlegs (a shorebird) and Black-poll Warbler (a songbird). We do not normally see these birds in tundra habitat and did not see these birds

on our surveys further north. Many of the shorebird species we saw south of Arviat, such as Red Knot and Sanderling, were migrating north. They were feeding on insects and other invertebrates in the rotting kelp along the coastline as they traveled to their breeding grounds in the High Arctic.

We counted over 2,500 birds during ground surveys and over 5,000 more birds during our aerial surveys. We found 60 bird nests when we did ground surveys. Almost half of these nests (29) were shorebird nests. Shorebird nests are very hard to find because they have small, brown, camouflaged eggs so that they blend in with the vegetation (Picture 6). We also visited the goose colonies north of Arviat and around and in the McConnell River Migratory Bird Sanctuary (Picture 7). Shorebirds and geese both like wetland habitat, but shorebirds do not like to nest in goose colonies because there is not enough food to eat. This is because the geese have eaten most of the vegetation so there are not enough insects for the shorebirds to eat and feed their young. We found no shorebirds or nests within the goose colonies.

We surveyed 35 ground plots near Baker Lake. We saw 30 different species of birds, which included seven species of shorebird. The most common shorebirds we saw were Semipalmated Sandpiper (Picture 5) and American Golden-Plover (Picture 8). We counted over 500 birds during these surveys. We found 23 nests in total and 6 of these were shorebird nests. We saw fewer birds in the Baker Lake area than the Arviat area. This is because Baker Lake is inland and Arviat is near the coast. Once birds move inland to nest, they spread out a lot so the density (concentration) is not as high. Arviat is also closer to the treeline and the transition zone between boreal forest and tundra. Some shorebirds like Hudsonian Godwit and Whimbrel prefer tundra areas close to the treeline and the coast so they are usually only found nesting near places like Arviat and north of Inuvik, NWT.

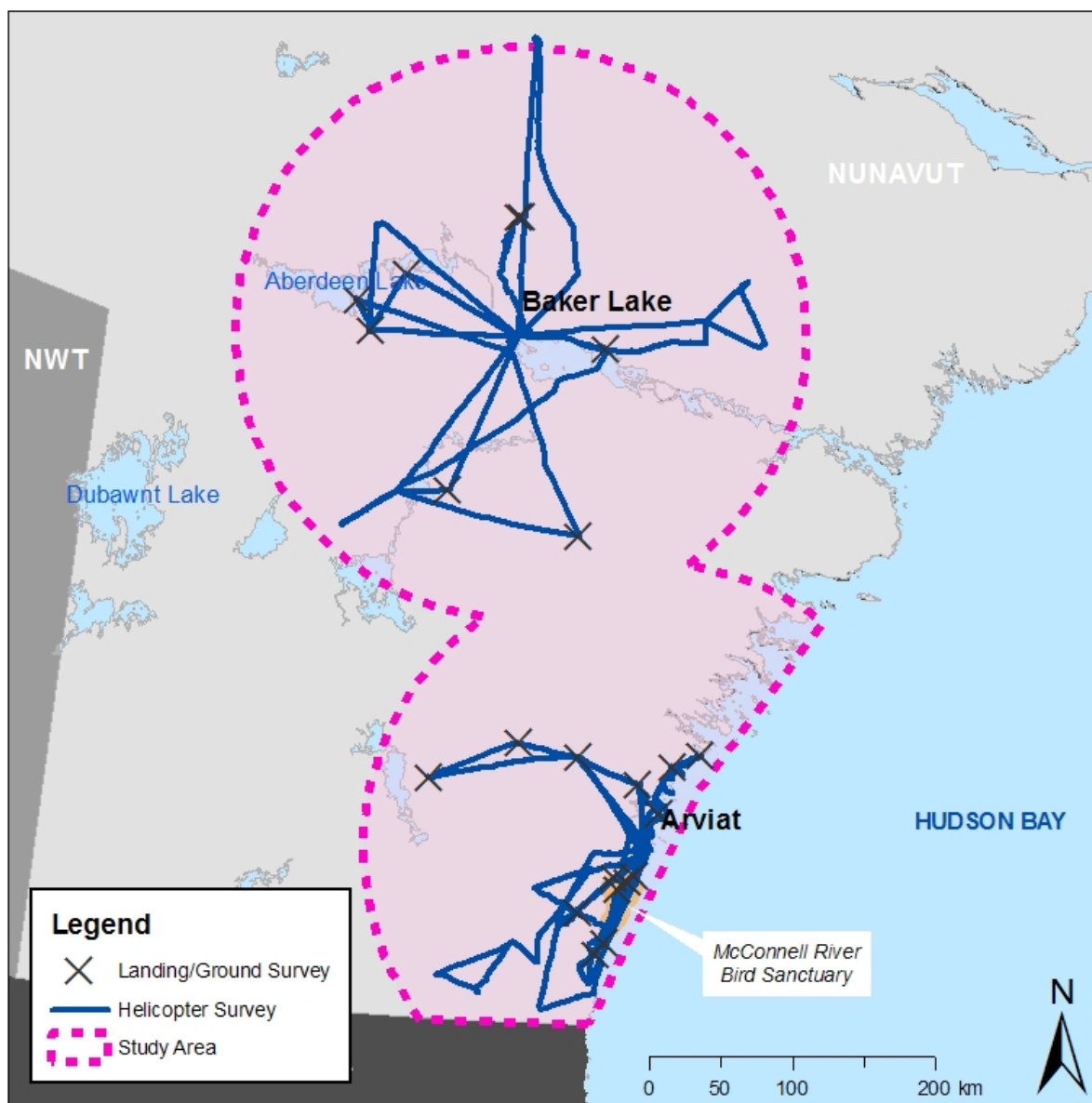
A list of all the bird and wildlife species we saw this summer is attached.

This past field season was a good start to finding out where shorebirds nest in the Kivalliq region. The habitat data we collected during the Walk-about Surveys is being used to finish a landcover (habitat) classification that was started in the early 1990s by the Canadian Wildlife Service and complements the classifications being done by the Government of Nunavut (Mitch Campbell). The data that we collected this summer will assist us in making shorebird population estimates and monitoring changes in populations over time. It will also help us plan future shorebird surveys in the Kivalliq region.

If you would like to know more about what we saw this summer or about the Arctic Shorebird Monitoring Program in general, please contact:

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MAP



Map 1 – Map showing where we went for our helicopter and ground surveys near Arviat and Baker Lake. We recorded all birds seen during our surveys.

PHOTOGRAPHS



Picture 1 – Shorebird school program at Qitiqliq Middle School. Practising using binoculars and bird field guides



Picture 2 – Shorebird school program at Qitiqliq Middle School. Looking at photos of shorebirds with Anita and Silas.



Picture 3 – Shorebird school program at John Arnalukjuak High School. Reading maps and learning to record location coordinates.



Picture 4 – Shorebird school program at John Arnalukjuak High School. Filtering a water sample.



Picture 5 – Semipalmated Sandpiper with a chick hiding underneath. The most common shorebird we saw during our surveys (Arviat and Baker Lake).



Picture 6 – A Semipalmated Sandpiper nest. Shorebird nests have 4 eggs and are speckled and brown so that they are camouflaged from predators like foxes, gulls, jaegers.



Picture 7 – McConnell River Bird Sanctuary, in one of the Snow Goose/ Ross's Goose colonies. No shorebirds were found in the goose colonies.



Picture 8 – American Golden-Plover. The second most common shorebird seen around Baker Lake.

WILDLIFE SPECIES SEEN

Shorebirds

American Golden-Plover
Baird's Sandpiper
Black-bellied Plover
Dunlin
Hudsonian Godwit
Least Sandpiper
Lesser Yellowlegs
Pectoral Sandpiper
Red Phalarope

Red-necked Phalarope
Ruddy Turnstone
Sanderling
Semipalmated Plover
Semipalmated Sandpiper
Stilt Sandpiper
Whimbrel
White-rumped Sandpiper
Wilson's Snipe

Songbirds

American Pipit
American Tree Sparrow
Blackpoll Warbler
Common Raven
Common Redpoll
Gray-cheeked Thrush
Harris's Sparrow

Hoary Redpoll
Horned Lark
Lapland Longspur
Savannah Sparrow
Snow Bunting
White-crowned Sparrow
Yellow Warbler

Waterfowl

Canada Goose
Common Eider
Greater Scaup
Greater White-fronted Goose
Green-winged Teal
Long-tailed Duck

Northern Pintail
Pacific Loon
Red-breasted Merganser
Ross's Goose
Lesser Snow Goose
Tundra Swan

Other Birds

Arctic Tern
Bald Eagle
Glaucous Gull
Herring Gull
Long-tailed Jaeger

Merlin
Parasitic Jaeger
Rock Ptarmigan
Sandhill Crane
Willow Ptarmigan

Mammals

Arctic Fox
Arctic Hare

Caribou