

James Bay Shorebird Survey

Jean Iron

In early August 2005 I volunteered to survey shorebirds for a crew of eight Ontario government biologists and technicians studying climate change along the coast of southern James Bay. Under the direction of research scientist Ken Abraham and research biologist Carrie Sadowski of the Ontario Ministry of Natural Resources (MNR), I counted, aged (adult or juvenile) and monitored the movements and habitat use of migrating shorebirds. Our headquarters was the MNR staff house in Moosonee about 20 km from James Bay. Each day we flew by helicopter to the study area along the coast. Figure 1.

James Bay is the southern extension of Hudson Bay. It cuts deeply into central Canada providing a route for tundra and boreal breeding shorebirds. The west coast of James Bay is in Ontario and the east coast is in Quebec, but the islands of James Bay are in Nunavut. Ontario's coast of James Bay is very flat. Its 400 km of north-south tidal flats make James Bay one of the most important staging areas for shorebirds in North America.

The most common shorebird of the nine day survey was the White-rumped Sandpiper with a high count of 7162 molting adults on 9 August. The second commonest shorebird was the Semipalmated Sandpiper with a high count of 4374 (60% juveniles) on 9 August.

The Hudson Bay and James Bay coasts of Ontario are of "hemispheric significance to staging flocks" of southbound Red Knots (Ross et al. 2003), being the fall equivalent to Delaware Bay in spring. My total survey count of Red Knots was only 252 adults. This low number of knots may reflect the big decline reported from Delaware Bay. The Canadian Wildlife Service is preparing a status report on the Red Knot, which will guide the Committee on the Status of Endangered Wildlife in Canada in designating the Red Knot as Endangered, Threatened, Special Concern, or Not At Risk. In addition, an international group of ornithologists from Canada, United States, Brazil, Argentina and Chile is studying the Red Knot.

I saw Marbled Godwits on several days including five fresh juveniles on 9 August. An isolated breeding population of perhaps a few thousand Marbled Godwits breeds in the coastal prairie-like wet grasslands of James Bay (Ross et al. 2003). Very little is known about this remote breeding population, which is mainly in Ontario and on Nunavut's Akimiski Island (largest James Bay island, see Figure 1) with a few in Quebec. I also saw Hudsonian Godwits on most days with a high count of 158 molting adults on 5 August. Thousands stage and fatten along the west coast of James Bay before most fly non-stop to South America. Other shorebirds seen during the survey were Black-bellied Plover, American Golden-Plover,

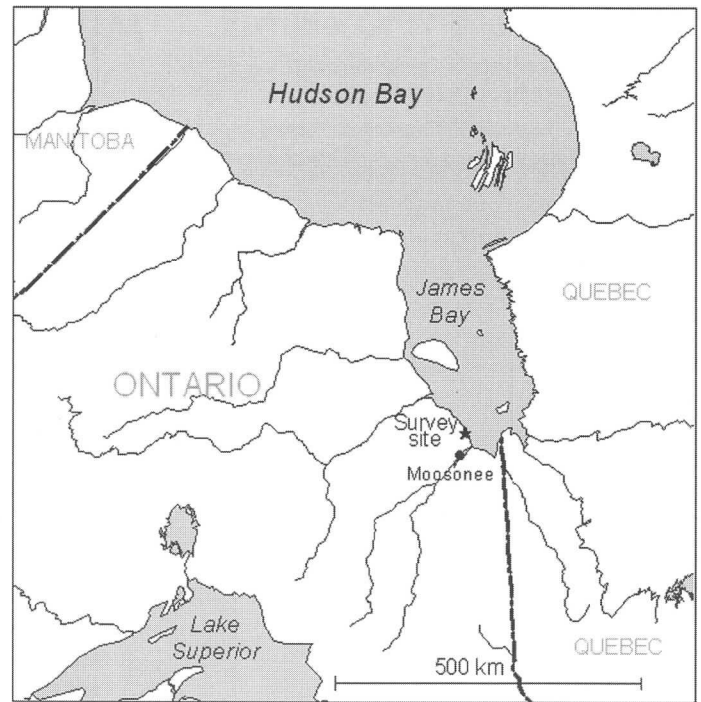


Figure 1. Shorebird survey site and Moosonee located at southwest end of James Bay. Akimiski Island is the largest island in James Bay. Map by Andrew Jano.

Semipalmated Plover, Greater Yellowlegs, Lesser Yellowlegs, Spotted Sandpiper, Whimbrel, Ruddy Turnstone, Sanderling, Least Sandpiper, Pectoral Sandpiper, Dunlin, and Wilson's Snipe.

Apart from the survey crew, I saw no humans, no pollution and no flotsam typical of coastal areas, while breathing the fresh salt air of Canada's huge inland sea. One day I saw footprints of a bear in the tidal mud, which turned out to be made by a Black Bear. It was comforting to know that the nearest Polar Bears (about 50) were summering about 200 km farther north on Akimiski Island.

Noteworthy birds and other animals seen during surveys were Sandhill Cranes, one Rough-legged Hawk, Arctic Terns, many Yellow Rails (still actively singing) including two dark young, many singing Nelson's Sharp-tailed Sparrows of the James Bay subspecies, *Ammodramus nelsoni alterus*, singing Le Conte's Sparrows, a juvenile Northern Shrike, and Rusty Blackbirds. We also saw three Belugas (white whales) at the mouth of the Moose River, many American Toads of the colourful Hudson Bay subspecies, *Bufo americanus copei*, and butterflies such as a Painted Lady that had wandered north.

You can see my shorebird and shorebird habitat photos of James Bay at <http://jeaniron.ca>

Literature Cited: Ross, K., K. Abraham, B. Clay, B. Collins, J. Iron, R. James, D. McLachlin, and R. Weeber. 2003. *Ontario Shorebird Conservation Plan*. Canadian Wildlife Service, Environment Canada. Cat No. 0-662-33933-9. Hard copies of this plan are free by emailing <wildlife.ontario@eg.gc.ca>. Please include your name and postal address.