

High Arctic Shorebird Ground Surveys & Rope Dragging

Vicky Johnston/Jennie Rausch, Canadian Wildlife Service, Yellowknife

jennie.rausch@ec.gc.ca

These surveys are conducted in wetlands and vegetated uplands, or fine patchworks of the two. Habitat type is recorded along with an assessment of wetland type, according to the Canada Wetlands Inventory classification system, and presence/absence of exposed peat. Each surveyor wanders around for 20-30 minutes radiating from a starting point. All birds seen or heard are recorded. Start and finish times are recorded as are estimates of amount of ground covered. Location of the starting point, each shorebird recorded, and furthest point reached during wanderings are GPS'd. Mark location of each shorebird in the GPS. Photographs are taken of habitat generally, and habitat that each shorebird is seen in.

If the area is adjacent to a wetland, use the centre of the wetland as the starting point and radiate out from it – ideally you should survey the entire wetland plus a 500m buffer around the wetland. At a subset of the wetlands, rope drag (see rope drag building instructions attached) a buffer around the wetland.

The aim of the area searches is to determine the maximum distances from a wetland that support nesting shorebirds. The aim of the rope drags is to provide a calibration of the area searches. Please estimate how wide the buffer surveyed was.

If any nests are found, please record:

- ❖ Species
- ❖ Number of eggs
- ❖ Distance you (or the rope) was from the nest when the bird flushed
- ❖ How many meters the nest is from the edge of the wetland (or record if it is within the wetland)

HIGH ARCTIC GROUND SURVEYS

Island:

Site:

Date:

Centre coordinate:

Survey type (area search, rope drag) _____

Habitat Type(s) _____

Is this a wetland? Yes/No If yes, wetland type:

Is this a peat-based wetland? Yes/No

Photo numbers and waypoints from this site:

Birds seen:

a) Shorebirds

Species	Location (UTM, incl. zone)	Status (nesting, pair, single)	Comments (incl. # of eggs, flush distance, distance nest is from wetland, etc.)

b) Other birds

Bird Survey Rope Drag Construction

Supplies:

Exact quantities are not given for some items because it depends on the length of rope, which determines how many danglers, etc. Colours in brackets behind item denotes colour of item on schematic drawing (Appendix B).

- 1 – 30 or 40m ½” nylon rope (red)
- 2 – weight lifting belts (see Appendix A for photo)
- 2 – medium to heavy duty carabineers (purple)
- long roll of plastic runner (like what people use in their entry ways) – without the little nipples on the underside (catches on ropes) (orange)
- grommets (black)
- lots of ¼” rope – that will hold knots (non-slip) (blue)
- 2 – curved pieces of hard plastic or flexible pipe approx 7” long, 1-2” diameter (green)

Instructions:

See Appendix B for schematic.

Cut the plastic runner into 3” wide and 2 feet long strips (cut with the grain of any ribbing to prevent curling).

Install a grommet approximately 2” down from the top of each runner strip.

Tie a piece of ¼” thick rope into each grommet – use a bowline or some other non-slip knot and melt ends of ropes if plastic to help hold. The length of the rope should be about 1 ft plus extra for tying knots on both ends – to the runner and to the large rope.

Thread the plastic pipes onto each end of the ½” rope and tie a knot so the pipe becomes a “handle”. Cover the area of the rope where the handle will sit with duct tape to prevent chafing. Leave about 1.5 ft of rope as the trailing end. Tie this end piece into a little loop (where the carabineer will attach to weight belt). Burn all ends and tie non-slip knots.

Lay the ½” rope out along the floor in a straight line. Trailers should start approx. 3-4 ft from the “handle” on each end and be spaced every 1.5 ft. Tie the ropes on using non-slip knots. It is very important the trailer do not slide along the ½” rope – if you can’t tie knots that won’t slide along the rope, then you must insert smaller rope through the ½” rope (with a needle) and tie the ¼” rope to the ½” rope so it stays in that position along the ½” rope permanently.

Field Use:

Users put on the weight belts, clip the carabineer to the belt and keep the rope taut as they walk in a systematic swath through the plots. One person needs to keep focused on where the pair is headed while the other person keeps the line taut. If it isn't kept taut, then it will catch on everything which becomes very frustrating.

Using bamboo/survey stakes with flagging tape placed ahead of the swath the pair is working on gives them something to focus on to keep on track which helps save going over the same area twice, or missing covering some ground.

Rope Drag - Appendix A

Example of style of weight belt to get (Grizzly Fitness) – available online at:
<http://www.supplementscanada.com/popeyes/grizzly.html>.

The most important features are:

1. it is wide enough that it won't cut into the person while they are pulling the rope taut and,
2. it has a metal 'loop' where the carabineer can clip on.



Rope Drag – Appendix B

This schematic drawing is not to scale and does not show weight belts.

