GOOSE BANDING PROJECT

Description of Standard Methods

A helicopter is used to transport the banding crew and carry equipment for banding activities. It also serves to help locate groups of geese to be banded. Once a group of geese is selected, the banding team is landed and sets up a semi-circular net frame with poles with a V-shaped pair of nets to serve as leads to the capture net. The crew members hide as the helicopter slowly "walks" the flightless (in moult) geese towards the entry of the V-shaped leads. The helicopter and the banding crew then slowly walk the geese into the holding pen and the geese are then contained in the holding pen. This is a modern version of the arctic INUIT walking flightless geese into pens made of piled rock. A photo of the net showing a small flock being herded inside is included at end.

The geese are then separated into adults and goslings if the group contains both. Individuals are then captured by hand, aged and sexed (latter by cloacal examination), and a leg band fitted to each. After processing, the geese are released as a group to a nearby adjacent water body.

The following now summarizes those procedures used to avoid any undue stress or injury to geese during the capture and handling process:

1. Geese are not captured during rainy conditions, thereby avoiding additional thermal stress upon individuals, particularly goslings.
2. When a group of geese is within the trap pen, another holding pen is erected and the smaller goslings are put in the pen to avoid any risk of trampling by adult geese.
3. We do not usually band large groups (greater than ~400) to avoid any trampling by large numbers of geese, and undue processing time. Our crews routinely band 250-300 geese per hour after they are in the net.
4. We use an efficient handling routine to minimize the direct holding and processing time of a given individual goose.
5. All geese are held and released at the same time, near a body of water, to ensure the group stays together and to allow maintenance of family groups. In the case of large flocks, goslings may be released in smaller numbers with a few adults as banding progresses, in order to reduce heat stress and the risk of trampling.
6. Groups with goslings are not captured unless goslings are large enough to not be at risk of trampling. This is efficiently accomplished by proper scheduling of banding since the hatch is highly synchronous.
7. We use recommended leg band sizes and specialized banding pliers to ensure proper fit and conformation of bands.

Please note that our intent during these programs is to address annual survival rates of various age/sex cohorts in addition to the distribution information. Consequently we must minimize to the greatest possible extent any mortality arising from our capture and marking of geese in our sample, in addition of course, to our personal concerns for the welfare of the individuals being handled.

Monitoring Procedures

During our banding operations on the breeding grounds we constantly monitor the conditions of the geese in the traps, and during their processing, to minimize any stress as noted above. After banding, we observe the released flock to detect any signs of weakness of individuals and can recapture individuals and locate them in areas more safe from predators, but this is rarely required. Weak goslings are those that lag far behind other released birds, and that can be recaptured easily when they lie down to rest, or those with obvious injuries. In a typical year, this might involve 1 in ~ 1000 birds banded. Often these birds are moved to a grassy shoreline of a nearby pond to allow for recovery.

Goose Project Description, Baffin Island

Goose surveys and banding will be conducted by helicopter for a 15-day period each summer while geese are flightless, between the dates of July 15 and August 15. The information collected will be used to monitor the health of Cackling goose, snow goose, Ross's goose, and brant populations, as well as swans and some sea ducks as part of an ongoing monitoring program for arctic waterfowl. There will be up to 7 personnel involved (pilot, engineer, and up to 5 goose surveyors/banders), and all will stay at an existing camp at Nikko Island. This project has operated annually since 1989.