

**1. NWRT Project number: 3-13-30**

**2. Title:** Jones Sound Narwhal Study

**3. Project Leader:** Steve Ferguson, Research Scientist, Marine Mammal Research Program, Arctic Research Division Central & Arctic Region Fisheries and Oceans Canada, 501 University Crescent, Winnipeg, Manitoba, R3T 2N6, phone 204 983 5057 | facsimile 204 984-2403 [steve.ferguson@dfo-mpo.gc.ca](mailto:steve.ferguson@dfo-mpo.gc.ca)

**4. Summary:** During the month of August narwhals were to be caught in mesh nets (approx. 40 cm stretched mesh x 50 m long) set perpendicular to shore near the community of Grise Fiord. They were to be restrained for a short period and have a satellite transmitter attached on their dorsal ridge, blood and measurements were to be taken.

**5. Project Objectives:** Study the seasonal distribution and diving behaviour of Jones Sound narwhals in relation to management issues related to stock identity, climate change, autumn ice entrapments, and wintering area of the stock. This project would also provide valuable information towards the proposed Lancaster Sound Protected Area. We would also gather information on the overall health of captured animals and the level of stress during restraint. By looking at the fatty acids from small samples of blubber we will also be able to determine what the narwhals are eating. The main objectives for this study were not achieved due to lack of narwhals in the area and poor capture site.

**6. Material and Methods:** A research camp was established in a narrow area of Grise Fiord between August 21<sup>st</sup> and August 27<sup>th</sup>. The area was chosen by the Grise Fiord HTO. A net was set on the 22<sup>nd</sup>. There was a shallow area and the a sand/gravel bar located approximately 100m from the high water line of the shore which restricted the window of potential whale capture to a few hours before and after high tide. Setting the net beyond the sand bar was not possible as it would have situated captured whales too far from camp for a safe and quick response by the team members, and thus, posed too great a risk to the health of the animals. This sand/gravel bar was not seen on reconnaissance flights nor on satellite imagery of the area, and was only recognised as a serious impediment to tagging efforts after fully experiencing all aspects of the environment (including tide fluctuations of 4m, whale movements, wind and weather patterns, etc.). Additional efforts were made to set nets across the main channel of the fiord at low tide when whales were observed in the area; however, due to strong currents through this channel and an overall reduced capacity to control this setup (due to camp location, etc.) this effort was called off

for safety of the tagging team and whales (should they have been caught in this scenario). Efforts to capture whales at high tide continued until camp was struck on the 27<sup>th</sup>. In the meantime, during low tides, tagging staff including local Grise Fiord team members, scouted better locations for camp and whale net deployment. A suitable location was found on August 26<sup>th</sup>. The decision was made to cease efforts for 2013 and break camp as scheduled on August 27<sup>th</sup>.

**7. Project Schedule:** Field work was postponed by one week due to bad weather. Camp was established on August 20th in Grise Fiord. Because very few animals were seen in the area and difficulties in changing tickets, etc., the camp was pulled on its scheduled date of August 27<sup>th</sup> and all staff returned to the Hamlet of Grise Fiord.

**8. Preliminary results/discussion:** No animals were tagged so there are no scientific results. During our stay at camp a new area further north was chosen to establish the research camp and set nets if the project is funded in 2014

**9. Reporting to communities/resource users:** The Grise Fiord HTO was notified on the status of the field work when we returned to the Hamlet. A letter was sent the Grise Fiord HTO in early January, requesting a meeting to discuss last year's results and support for next year's project. Both parties decided that the meeting scheduled for March in Grise Fiord should be cancelled due to the fact that no whales were tagged and no whale behaviour information was available. Details regarding future plans and possible improvements were conversed through a series of emails and telephone conversations between Ivig HTO representatives and Jack Orr.

**NWMB Financial Report 2012-2013**  
**File 3-13-30**  
**Jones Sound Narwhal Study Movements and Ecology**

1. **Original Project Budget and Contributions:**
- i. Original Budget, from project proposal accepted by NWMB: **\$150K**
  - ii. Contributions of NWMB, proponent and others, from project proposal accepted by NWMB: **\$65K**, Other: **\$85K (DFO, WWF)**

**Financial Report:**

<b>Budget Item</b>	<b>Budget ed (\$K)</b>	<b>Disburse d (\$K)</b>	<b>Variance (\$K)</b>	<b>Explanation of variance and additional remarks</b>
Freight	\$13.0K	\$13.0K	\$0K	increased freight costs
Travel	\$34.0K	\$42.0k	+\$8K	More than originally estimated due to poor weather
Contracts for field support including charters	\$16K	\$26.3K	+\$10K	higher charter charges from PCSP because of under estimated weight of people and supplies/food
Field Staff	\$25K	\$32K	+\$7K	More students than originally expected
Food	\$7.0K	\$8.6K	+\$1.6K	More expensive food bought in Pond Inlet
Fuel	\$5.0K	\$3.5	-\$1.5K	Use of HTO boats less than anticipated
Equipment/tags/ phone	\$30.5K	\$19.0K	-\$11.5K	Less purchased (tags from last year)
Community Reporting	\$5.5K	\$0K	\$0.0K	Meeting to be held in Grise Fjord in March 2014 up to \$6K
Analysis+ reporting	\$14.0K	\$0.5K	-\$13.5K	minimal ARGOS charges with no tags deployed
<b>TOTAL</b>	<b>\$150K</b>	<b>\$144.9K</b>	<b>+6.1\$</b>	

**Balance, if any, to be returned to NWMB: 0.**

**Balance, if any, to be carried over: 0**

I certify that this is an accurate statement of the Board project funds received and disbursed in accordance with the joint contribution agreement.

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 Financial Signing Officer

