

To: Nunavut Wildlife Management Board

February 24 2021

From: Enookie Inuarak  
Pond Inlet, Nunavut

Dear Board Members and staff of NWMB,

First off I hope everyone is doing well in this difficult time of Pandemic crises. And I want to take this opportunity to appreciate NWMB for funding that was granted to me and my team to do Killer Whale research in Pond Inlet Nunavut with associating with DFO.

Attached are summary of report what we did and accomplished. We had 5 local researchers 4 full time and 1 standby if one could not join the trip. They were myself Enookie Inuarak (lead) Michael Inuarak captain assistant, Owen Jawrenko, Jamie Erkloo, and back up David Suqslak.

With your approval of funding I hired one full time Captain (myself) and captain assistant and paid for all the equipment required for camping and boat rental. DFO paid for two full time 2 biopsy shooters for a one month work.

Once again we thank you for your funding and made it possible to do this work, it is first time for all local to do this work in Pond Inlet without anyone coming up from south.

Financial report to be send soon.

If you have any questions please feel free to contact me or Cory Matthews with DFO.

Regards,

Enookie Inuarak  
P.O Box 292 Pond Inlet, Nu  
X0A-0S0  
Ph# (867)899-6442  
email: [inuarak@gmail.com](mailto:inuarak@gmail.com)

Cory Matthews  
501 University Crescent  
Winnipeg Manitoba R3T 2N6  
[cory.matthews@dfo-mpo.gc.ca](mailto:cory.matthews@dfo-mpo.gc.ca)  
(204)915-5680

Killer whale research summer 2020 in Pond Inlet Nunavut.

The research for killer whales. Genetic identifying through biopsy, abundance counting in the region, and photography.

Research started August 14 2020 when the Killer whales were first spotted in Eclipse Sound till September 9 2020.

The team consisted of 4 local Inuit from Pond Inlet, one captain (lead), one captain assistant/photographer, and 2 biopsy shooters. The biopsy equipments were air gun with darts that take small sample of skin and fatty tissue. This was done by boat.

On each sighting of killer whales we filled out field forms reporting how many are in groups, number of calves, number of big dorsal fins, and if the killer whales were associating with other animals, and recording date of sighting and GPS locations.

We also filled out forms every time biopsy was done on a killer whale, GPS coordinates, date of biopsy, who shot the biopsy.

From August 14 –September 9 2020 we were able to biopsy 15 killer whales in the area of Eclipse sound, Milne Inlet, and Pond Inlet area. Counting of the killer whales were between 91-116 all together. We counted 8 groups within one month.

It is not clear how many times we saw same group in different days. But there was one day we saw 3 different groups in the same area, total count was between 40's and 50's killer whales. One group usually counted between 10-25.

Some days we would be on standby in Pond Inlet waiting for hunters to report sightings of killer whales through VHF radios. Other days we camp near where we have followed group of killer whales or be on standby out on the land camping. Several times there was spotting of killer whales by local hunters but we wouldn't be able to travel because of the weather and rough seas.

On few occasions following some groups we witness killer whales hunting Narwhals and feasting. Some Narwhals were killed and just left behind not eaten.

All skin and blubber biopsies have been received by DFO in Winnipeg and have been archived in their tissue database. Skin has been sub-sampled for whole-genome analysis to learn more about population structure. Blubber has also been sub-sampled for stable carbon isotope analysis of fatty acids, a relatively new stable isotope method that will inform killer whale diet and distribution. Results from all analyses are expected late 2021, but could be delayed due to restricted lab access during the pandemic. Photos and field notes are also being added to updated photos and sightings database at DFO for ongoing assessments of abundance and distribution in the eastern Canadian Arctic and north Atlantic (Through planned comparisons with photo ID catalogues from other regions).

Thank you

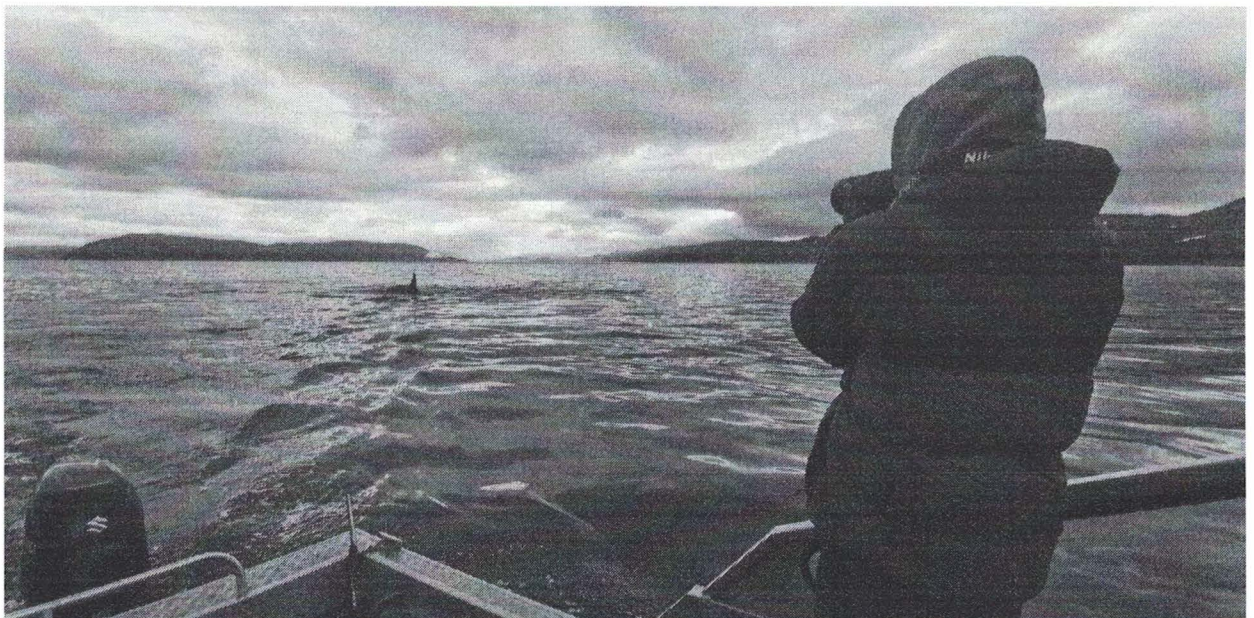
Enookie Inuarak



David Suqslak about to Biopsy Killer Whale

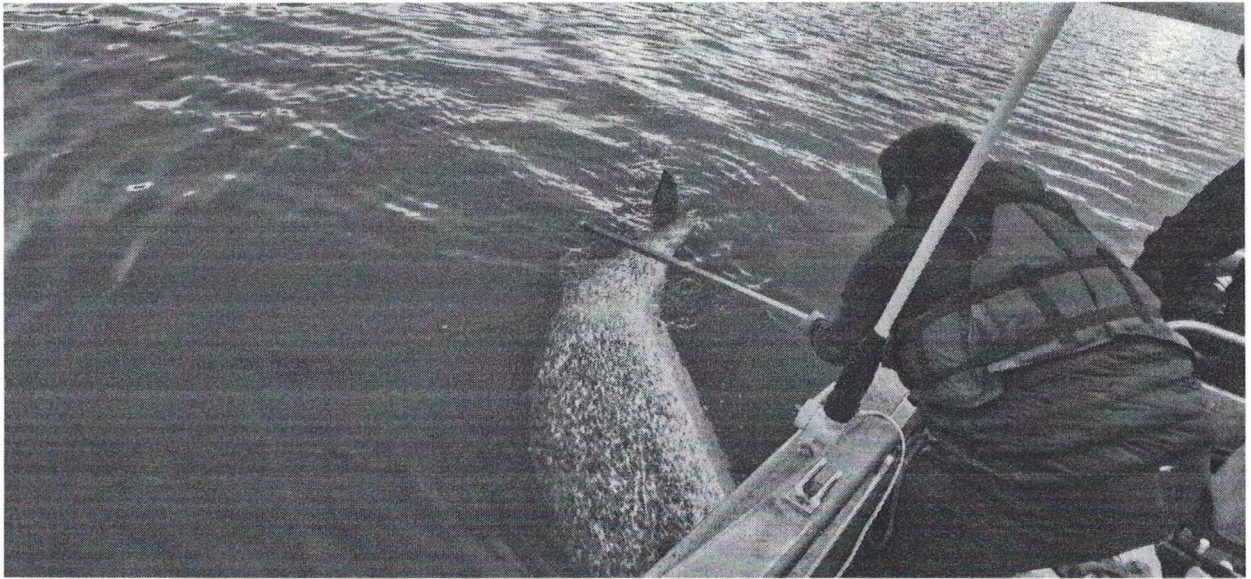


Jamie Erkloo taking photos





Narwhal killed by Killer Whales and just left behind.



Owen Jawrenko prepared to biopsy Killer Whale







ΔΙΓΓΟC αλφάβητο  
αβγ

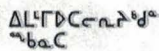
Fisheries and Oceans  
Canada



## Killer Whale Biopsy Datasheet

Biopsy # (1, 2, 3, 4, etc.)	GPS coordinates	Date of biopsy	Time of biopsy	Name of person who biopsied whale	Mark biopsy location on whale	Additional comments / observations
Example X	72.49750N -91.30194W	Aug 19	5:19 pm	Ennie		-large male -group 15-20
11	72°40.158N 79°27.881W	Aug 18	10:17 pm	Owen		Large Male
13	72°37.631N 79°42.303W	Aug 18	11:23	Owen		Female with calve
38	72°11.007N 80°46.423W	Aug 27	7:07 pm	Owen		Big Male
27	72°11.517N 80°46.370W	Aug 27	7:13 pm	Michael		Medium whale

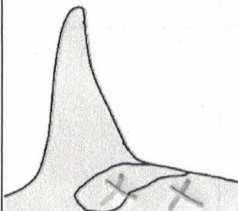
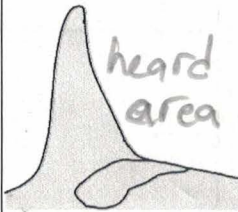
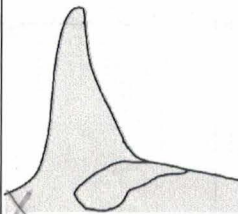
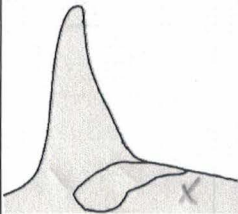
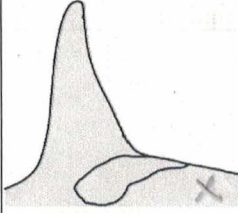
**Send to:** Steve Ferguson, DFO, 501 University Crescent, Winnipeg, MB, R3T 2N6  
Ph: 204-983-5057; Fax: 204-9834-2403; email: oca@dfo-mpo.gc.ca



Fisheries and Oceans  
Canada



# Killer Whale Biopsy Datasheet

Biopsy # (1, 2, 3, 4, etc.)	GPS coordinates	Date of biopsy	Time of biopsy	Name of person who biopsied whale	Mark biopsy location on whale	Additional comments / observations
17 29	72°14.143N 80°40.934W	27 Aug 27	8:01 pm	Owen Michael		smaller size 2 darts same whale
16	72°15.925N 80°34.983W	Aug 27	8:50 pm	Owen		dart on head area
26	72°15.926N 80°34.845W	Aug 27	8:50 pm	Michael		dart on front area too
05	Same <del>area</del> area	Aug 27	7:15 pm	Michael		forgot to write earlier about
10	72°49.090N 78°11.859W	Aug 28	5:44pm	David Suglark		medium Male or big female





# Killer Whale Sighting Form



Date whales were seen Sept 04, 2020 Time 4:24

Location Pond Inlet

GPS coordinates 72°43.184 N  
77°47.716 W

Number of whales in the group 11 Number of calves 4 Number of big dorsal fins 2

Were the killer whales associated with other animals? ☐ No

☐ beluga ☒ narwhal ☐ bowhead whale ☐ ringed seal ☐ bearded seal

☐ other seals (type) \_\_\_\_\_ ☐ fish (type) \_\_\_\_\_ ☐ Other \_\_\_\_\_

Activity ☒ feeding ☐ playing ☐ travelling ☐ Other (specify) \_\_\_\_\_

Circle what you saw



breach



spyhop



porpoising



calm group



tail slap



big dorsal fin  
(males)

Try to take picture of

Photographs will not be used for commercial purposes and copyright will remain with the photographer



dorsal fin and  
saddle patch



Eye patch



genital area

Additional Comments (including past sightings)

Name Enookie Inuarek

Address Pond Inlet  
NU

Phone # (867) 899-6442





Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

# Killer Whale Sighting Form



Date whales were seen Aug 28, 2020 Time 4:50pm

Location Eclipse sound across pond Inlet

GPS coordinates 72°52.662 N  
78°04.052 W

Number of whales in the group 20-25 Number of calves note Number of big dorsal fins 2 or 3

Were the killer whales associated with other animals? ☒ No

☐ beluga ☐ narwhal ☐ bowhead whale ☐ ringed seal ☐ bearded seal

☐ other seals (type) \_\_\_\_\_ ☐ fish (type) \_\_\_\_\_ ☐ Other \_\_\_\_\_

Activity ☐ feeding ☐ playing ☒ travelling ☐ Other (specify) \_\_\_\_\_

Circle what you saw



breach



spyhop



porpoising



calm group



tail slap



big dorsal fin  
(males)

Try to take picture of \_\_\_\_\_ Photographs will not be used for commercial purposes and copyright will remain with the photographer



dorsal fin and  
saddle patch



Eye patch



genital area

Additional Comments (including past sightings)

too spread out to count  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name _____
Address _____
Phone # _____

Send to: Steve Ferguson, DFO, 501 University Crescent, Winnipeg, MB, R3T 2N6  
ph: 204-983-5057; Fax: 204-984-2403; email: oca@dfo-mpo.gc.ca





Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

# Killer Whale Sighting Form



Date whales were seen \_\_\_\_\_

Time 5:39 pm

Location \_\_\_\_\_

GPS coordinates

72°11.464

N

80°51.634

W

Number of whales in the group 20-30 Number of calves maybe 3 Number of big dorsal fins 2

Were the killer whales associated with other animals? ☐ No

☐ beluga ☒ narwhal ☐ bowhead whale ☐ ringed seal ☐ bearded seal

☐ other seals (type) \_\_\_\_\_ ☐ fish (type) \_\_\_\_\_ ☐ Other \_\_\_\_\_

Activity ☒ feeding ☐ playing ☐ travelling ☐ Other (specify) \_\_\_\_\_

Circle what you saw



breach



spyhop



porpoising



calm group



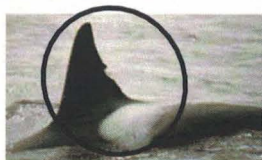
tail slap



big dorsal fin  
(males)

Try to take picture of

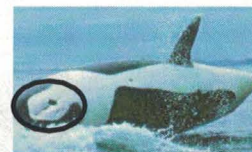
Photographs will not be used for commercial purposes and copyright will remain with the photographer



dorsal fin and  
saddle patch



Eye patch



genital area

Additional Comments (including past sightings)

1 darted but no skin on it

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone # \_\_\_\_\_

Send to: Steve Ferguson, DFO, 501 University Crescent, Winnipeg, MB, R3T 2N6  
ph: 204-983-5057; Fax: 204-984-2403; email: oca@dfo-mpo.gc.ca



Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

# Killer Whale Sighting Form



Date whales were seen Aug 26, 20 Time 9:10 pm

Location Milne Inlet before Bruce head

GPS coordinates 72°05.893 N  
80°28.064 W

Number of whales in the group 10 Number of calves 4 Number of big dorsal fins 2

Were the killer whales associated with other animals? ☐ No

☐ beluga ☐ narwhal ☐ bowhead whale ☐ ringed seal ☐ bearded seal

☐ other seals (type) \_\_\_\_\_ ☐ fish (type) \_\_\_\_\_ ☐ Other eating something

Activity ☒ feeding ☐ playing ☐ travelling ☐ Other (specify) \_\_\_\_\_

Circle what you saw



breach



spyhop



porpoising



calm group



tail slap



big dorsal fin  
(males)

Try to take picture of

Photographs will not be used for commercial purposes and copyright will remain with the photographer



dorsal fin and  
saddle patch



Eye patch



genital area

Additional Comments (including past sightings)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Name	_____
Address	_____ _____ _____
Phone #	_____ _____

Send to: Steve Ferguson, DFO, 501 University Crescent, Winnipeg, MB, R3T 2N6  
ph: 204-983-5057; Fax: 204-984-2403; email: oca@dfo-mpo.gc.ca





# Killer Whale Sighting Form



Date whales were seen Aug 26, 2020 Time 5:30 pm

Location Milne Tule, Bruce head area

GPS coordinates 72° 03.185 N  
80° 35.994 W

Number of whales in the group between 20-30 Number of calves not sure Number of big dorsal fins 4

Were the killer whales associated with other animals? ☒ No

☐ beluga ☐ narwhal ☐ bowhead whale ☐ ringed seal ☐ bearded seal

☐ other seals (type) \_\_\_\_\_ ☐ fish (type) \_\_\_\_\_ ☐ Other \_\_\_\_\_

Activity ☐ feeding ☐ playing ☒ travelling ☐ Other (specify) going further in

Circle what you saw



breach



spyhop



porpoising



calm group



tail slap



big dorsal fin  
(males)

Try to take picture of Photographs will not be used for commercial purposes and copyright will remain with the photographer



dorsal fin and  
saddle patch



Eye patch



genital area

Additional Comments (including past sightings)

2 groups split in distance  
unable to Biopsy  
too shy

Name Eneakie Inuvarek

Address \_\_\_\_\_

Phone # \_\_\_\_\_





Fisheries and Oceans  
Canada

Pêches et Océans  
Canada

# Killer Whale Sighting Form



Date whales were seen Aug 18 2020 Time 9:12 pm

Location Eclipse sound

GPS coordinates 72° 41.178 N  
79° 11.498 W

Number of whales in the group about 10 Number of calves 4 Number of big dorsal fins 2

Were the killer whales associated with other animals? ☒ No

☐ beluga ☐ narwhal ☐ bowhead whale ☐ ringed seal ☐ bearded seal

☐ other seals (type) \_\_\_\_\_ ☐ fish (type) \_\_\_\_\_ ☐ Other \_\_\_\_\_

Activity ☐ feeding ☐ playing ☒ travelling ☐ Other (specify) going west towards

Circle what you saw

trembley sound



breach



spyhop



porpoising



calm group



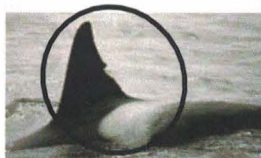
tail slap



big dorsal fin  
(males)

Try to take picture of

Photographs will not be used for commercial purposes and copyright will remain with the photographer



dorsal fin and  
saddle patch



Eye patch



genital area

Additional Comments (including past sightings)

2 more different groups far off

This group are shy, hard to follow

Name Enoskie Inuvarek

Address P.O. Box 292  
Pond Inlet Nu.  
X0A-0S0

Phone # 867 899-6442