DE BEERS GROUP

March 24, 2023

James Hodson
Manager, Habitat and Environmental Assessment
Department Environment and Natural Resources
Government of Northwest Territories
P.O. Box 1320
Yellowknife, NT X1A 2L9

Via Email: WMMP@gov.nt.ca

Dear Mr. Hodson:

RE: Gahcho Kué 2022 Wildlife Report

De Beers Canada is pleased to provide Gahcho Kué Mine's 2022 Annual Wildlife Report, in accordance with the Wildlife Management and Monitoring Plan (WMMP), Ver.1.2, which was approved by the Government of Northwest Territories on March 31, 2022.

This report is also submitted to fulfill the reporting requirement in the Wildlife Research Permit (Permit #: WL501014).

If you have any questions regarding this submission, I can be contacted at william.liu@debeersgroup.com or (867) 445-1485.

Sincerely,

William Liu
Environment and Permitting Superintendent
De Beers Canada Inc.

cc:
Wildlife Management Information System
Angela Love – MVLWB
Stephinie Mallon – ECCC

DE BEERS GROUP

Gahcho Kué Mine

2022 Annual Wildlife Report

March 2023

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1 INTRODUCTION

De Beers Canada Inc. (De Beers) operates the Gahcho Kué Mine (Mine), located at Kennady Lake about 280 kilometres (km) northeast of Yellowknife, NT. Kennady Lake is north of the East Arm of Great Slave Lake and the small community of Lutsle K'e by approximately 140 km (Map 1-1). Commercial operation of the Mine began in September of 2016. The construction and operation of the Mine are currently under Type A Water Licence (MV2005L2-0015) and Type A Land Use Permit (MV2021D0009), issued by the Mackenzie Valley Land and Water Board (MVLWB). Mine activities and infrastructure include dewatering of Kennady Lake, open pit mining of three kimberlite pipes, construction and operation of Coarse and Fine Processed Kimberlite (PK) Facilities, Mine Rock Piles, accommodation and maintenance facilities, all-season airstrip, site roads and annual winter access road (Map 1-2).

In August 2019, the Government of the Northwest Territories (GNWT) issued a new guidance document for development of wildlife management plans (GNWT-ENR 2019) to meet requirements of the NWT *Wildlife Act*. The GNWT then issued a directive letter to De Beers in October 2020 instructing De Beers that a Tier 3 Wildlife Management and Monitoring Plan (WMMP) for the Gahcho Kué Mine would be required to meet compliance with the NWT *Wildlife Act*. This WMMP was developed from the existing Wildlife and Wildlife Habitat Protection Plan (WWHPP) and Wildlife Effects Monitoring Program (WEMP) and updated to align with the Wildlife Management and Monitoring Plan (WMMP) Process and Content Guidelines (GNWT-ENR 2019). In compliance with the *Wildlife Act* and Land Use Permit MV2005C0032 (expired on August 10, 2021), Version 1 of the WMMP was submitted to the GNWT and MVLWB on April 26, 2021, and was subsequently issued for public review. On June 29, 2021, as part of the issuance of the renewed Land Use Permit MV2021D0009 (MVLWB 2021), the MVLWB determined the WMMP is no longer required in the Land Use Permit. Version 1.1 of the WMMP was submitted to the GNWT addressing reviewer comments from the GNWT, Environment and Climate Change Canada (ECCC), Ni Hadi Xa, and MVLWB in January 2022. The Mine's Tier 3 WMMP (Version 1.2, De Beers 2022) was approved by the GNWT-ENR on March 31, 2022 (GNWT-ENR 2022).

The WMMP outlines the policies, practices, designs, and procedures aimed at preventing and reducing Mine-related effects to wildlife and wildlife habitat, and providing Mine managers with information for making environmental management decisions. The WMMP also provides opportunities for regulators and Indigenous groups and communities to participate in the development of protection, mitigation, and monitoring of wildlife at the Mine site.

This WMMP draws together lessons learned from other mine sites in the NT including the De Beers Snap Lake Mine, Ekati and Diavik mines, as well as Traditional Knowledge (TK). In doing so, the WMMP will meet the requirements of the Species at Risk Act, the *Species at Risk (NWT) Act*, the Mackenzie Valley Land Use Regulations, the NWT *Wildlife Act*, and the Migratory Bird Convention Act, 1994 and Migratory Bird Regulations, as well as Review Panel Measures and corporate commitments.

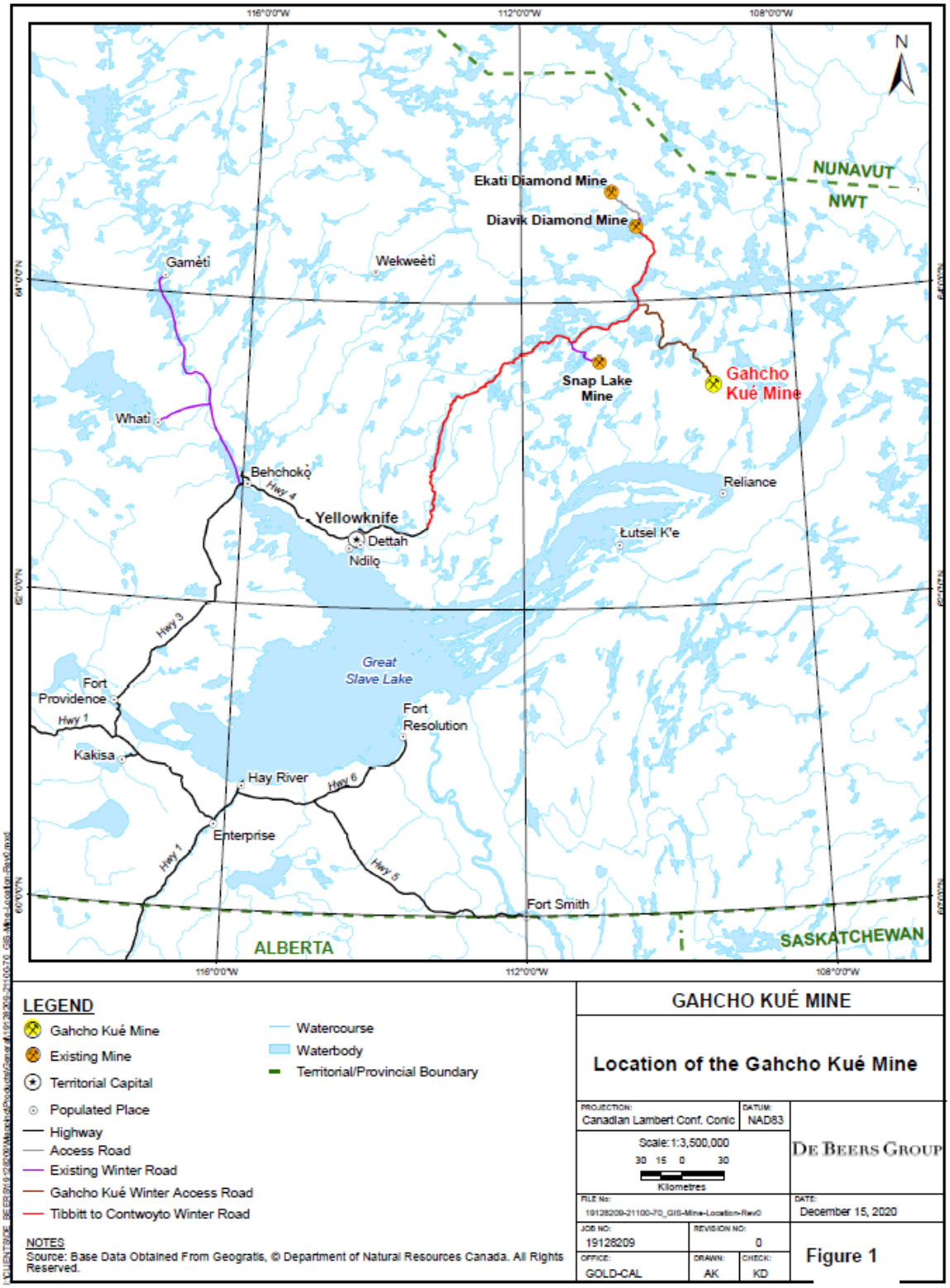
Pursuant to the WMMP (De Beers 2022), this report describes mitigation and monitoring activities at the Mine and in the regional study area (RSA) from January to December of the current reporting year and includes:

- a summary of all the monitoring programs that occurred at the Mine;
- updates or recommended changes to mitigation, environmental design features, or other actions required to meet the WMMP objectives;

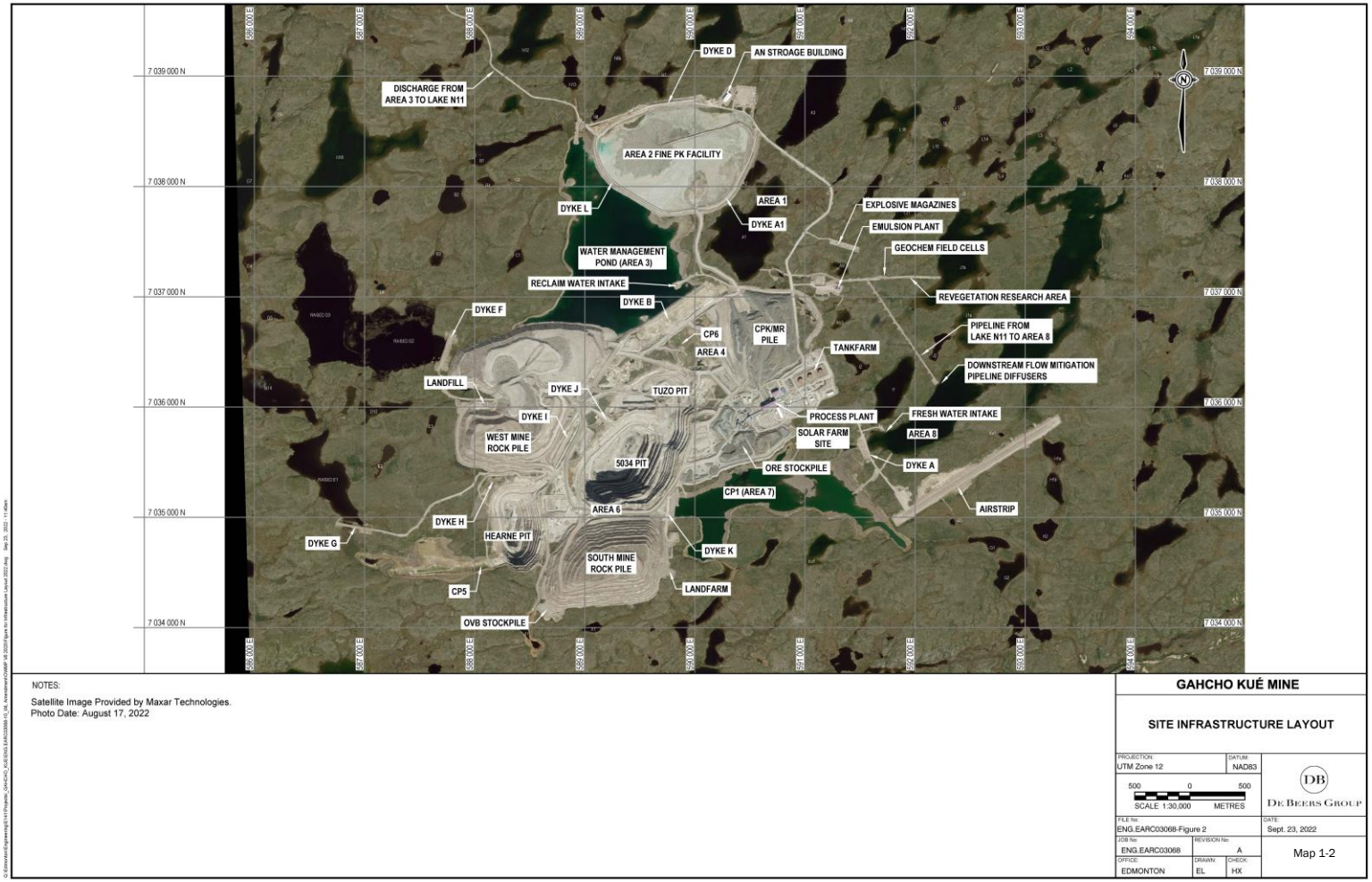
- occurrences of human-wildlife interactions, and incidents, accidents, injuries, and mortalities involving wildlife;
- disturbances to wildlife and wildlife habitat that were not predicted in the Environmental Impact Statement (EIS; De Beers 2010); and
- observations of recreational, traditional, and non-traditional activities near the Mine, including the winter access road.

A comprehensive analysis of mitigation and monitoring activities will be undertaken every five years. The first comprehensive analysis was done in 2019, with the next analysis scheduled for 2024. The comprehensive analysis report investigates Mine-related effects to wildlife, using all the relevant data available. In addition to programs designed for monitoring effects to wildlife from the Mine, monitoring of environmental indicators and contributed programs, such as small mammal monitoring, are completed to characterize natural changes or to contribute to regional monitoring initiatives. This schedule does not preclude focussed data analysis for specific issues or questions as they arise.

Map 1-1 Location of the Gahcho Kué Mine



Map 1-2 2022 Gahcho Kué Mine Site Infrastructure



Wildlife monitoring for the Mine was developed in consultation with regulators and Indigenous communities. As a participant in wildlife monitoring workshops hosted by the Department of Environment and Natural Resources of the GNWT (GNWT-ENR), De Beers updated monitoring programs for the Mine to be consistent with, and to support, regional monitoring for the assessment and management of cumulative effects by the GNWT. These changes included replacing past Mine-specific grizzly bear and wolverine monitoring with regional hair snagging programs for these species, and the addition of the Arctic Program for Regional and International Shorebird Monitoring (PRISM) in 2015. De Beers will continue to participate in ENR led monitoring initiatives and will update the wildlife monitoring and mitigation programs accordingly. In February 2021, the GNWT hosted wildlife monitoring workshops where it was determined among program partners that grizzly bear and wolverine hair snagging would be discontinued (GNWT-ENR 2021).

1.1 Content

The 2022 Annual Wildlife Report includes WMMP activities. The monitoring tasks may be continuous or seasonal, and on an annual or multi-year cycle. Supporting information is also collected through other monitoring programs (Table 1-1). This report will include descriptions and summaries of all of the wildlife monitoring that occurred during 2022.

Table 1-1 Schedule of Wildlife Monitoring under each Relevant Management Plan

Monitoring	Corresponding Monitoring Plans or Programs	Monitoring Schedule	Completed in 2022	Report Section
Mine Development Area and Direct Habitat Loss	WMMP	Mine development area updates will be provided at the end of construction and updated every year.	Yes	3.2
Noise	WMMP	Noise monitoring is anticipated to take place on a multi-year schedule at the Mine during operation in Years 1 (2017), 5 (2021), and 8 (2024).	No	3.3.1
Dust	WMMP Vegetation and Soils Monitoring Program	Dustfall collectors are monitored at the Mine annually and are measured every 30 days during the growing season (May to October).	Yes	3.3.2
Wildlife Sightings	WMMP	Wildlife sightings are monitored continually and reported annually.	Yes	3.3.3
Site Surveillance	WMMP	Monitoring is completed weekly, and reported annually.	Yes	3.3.4
Public Use of the Winter Access Road	WMMP	Monitoring is conducted daily when the winter access road is operational (usually February to March).	Yes	3.3.5
Wildlife Incidents	WMMP	Wildlife incident monitoring has been ongoing and will continue to be undertaken as required. Wildlife incidents are reported immediately to ENR, in addition to being reported annually.	Yes	3.3.6

Monitoring	Corresponding Monitoring Plans or Programs	Monitoring Schedule	Completed in 2022	Report Section
Caribou	WMMP	Caribou aerial distribution surveys were completed from 1999 to 2005 and 2010 to 2012. As there were likely insufficient caribou in the study area to detect a change in distribution, aerial surveys were not undertaken from 2013 to 2022. De Beers intends to use collared caribou data moving forward to assess for Mine-related effects of indirect habitat loss per the Mine's Tier 3 WMMP.	No	-
		Caribou interactions and mortalities at the Mine are monitored through the wildlife sightings log, site surveillance, wildlife interactions and behaviour monitoring.	Yes	3.3.3, 3.3.4, 3.3.6
		Aerial reconnaissance surveys are completed annually prior to the winter access road opening. The purpose of these surveys is to determine if caribou are present near the winter access road in numbers that would trigger caribou behaviour monitoring.	Yes	3.4.1
		Winter access road behaviour monitoring was first completed in 2014 and will occur annually when triggers for group size are met. Behavioural monitoring on the winter access road or at site was last completed in 2019.	Yes	3.4.2
		Snow berm measurements along the Mine's winter access road began in 2014 and are recorded annually.	Yes	3.4.3
Grizzly Bear	WMMP	Grizzly bear interactions and mortalities at the Mine are monitored through the wildlife sightings log, site surveillance, and wildlife incidents.	Yes	3.3.3, 3.3.4, 3.3.6
Wolverine	WMMP	Wolverine interactions and mortalities at the Mine are monitored through the wildlife sightings log, site surveillance, and wildlife incidents.	Yes	3.3.3, 3.3.4, 3.3.6
Raptors	WMMP	Raptor interactions and mortalities at the Mine are monitored through the wildlife sightings log, site surveillance, and wildlife incidents, as well as incidents of raptor nesting activity on Mine infrastructure.	Yes	3.3.3, 3.3.4, 3.3.6
		Raptor nest surveys in the RSA were completed in 2015. Results were contributed to GNWT-ENR for their regional nest monitoring database. A RSA was conducted by GNWT-ENR in 2020. Regional monitoring is anticipated to continue every five years with the next nest surveys scheduled for 2025.	No	3.6

Monitoring	Corresponding Monitoring Plans or Programs	Monitoring Schedule	Completed in 2022	Report Section
Upland Birds	WMMP Migratory Bird Nest Management Plan	Upland bird interactions and mortalities at the Mine are monitored through the wildlife sightings log, site surveillance, and wildlife incidents.	Yes	3.3.3, 3.3.4, 3.3.6
		Vegetation removal in areas surrounding Lakes D2/D3 and E1 was completed in 2015, 2016 and 2017 to fulfill commitments made in the Migratory Bird Nest Management Plan. Vegetation removal will continue as needed.	No	3.7
		De Beers will deploy bird deterrent devices, as per the Migratory Bird Nest Management Plan, to mitigate the risk of birds nesting in the remaining low-lying vegetation or on the ground during the spring in areas anticipated to flood.	Yes	3.7
		Arctic PRISM surveys were completed in 2017, 2019 and in 2022.	Yes	3.7
Small Mammals	WMMP	Monitoring and reporting of small mammal abundance will be completed annually. All small mammal samples collected are provided to the GNWT-ENR for identification and analysis.	Yes	3.8
Environmental Indicators	WMMP	Annual monitoring and reporting of weather-related variables began in 2015 and has continued since.	Yes	3.9
Measures of Mine Activity	WMMP	Annual monitoring and reporting of staff numbers, fuel consumption, volume of mine rock removed and ore processed, and domestic water consumption began in 2015 and has continued since.	Yes	3.10

PRISM = Arctic Program for Regional and International Shorebird Monitoring; GNWT-ENR = Department of Environment and Natural Resources, Government of the Northwest Territories; RSA = regional study area; WMMP = Wildlife Management and Monitoring Plan.

1.2 Engagement

De Beers signed a legally binding environmental stewardship agreement, Ni Hadi Xa Agreement, with five Indigenous parties, including Deninu Kué First Nations (DKFN), Łutsel K'e Dene First Nation (LKDFN), North Slave Métis Alliance (NSMA), Northwest Territory Métis Nation (NWTMN) and the Tłı̨chǫ Government (TG), in 2014. Yellowknives Dene First Nation (YKDFN) became the signatory of the Agreement in February 2019. The purpose of Ni Hadi Xa is to provide a meaningful way for Indigenous communities to participate in the ongoing development and review of monitoring programs and management plans, review data generated from those plans, and to allow for TK to be incorporated into operations. Ni Hadi Xa also creates an opportunity to build on collaborative relationships, increase efficiency in regulatory processes, and provide more opportunity for TK monitoring. Ni Hadi Xa currently employs one full-time environmental monitor stationed at the site and works closely with the De Beers Environment. Two TK monitors and one TK administrator are monitoring any potential impacts of the mining operations based in the Ni Hadi Xa Cabin, established approximately 40 km north of the Mine.

De Beers engaged with Indigenous communities in multiple forums throughout 2022 as outlined in the Engagement Plan (De Beers 2015). In 2022 COVID-19 travel and social gathering restrictions began lifting. De Beers was able to continue hosting previously scheduled in person engagement events, such as Mine site visits, community visits and fish tasting. Many of the engagement activities were undertaken through virtual platforms.

2 SPECIES OF CONCERN

The intent of the *Species at Risk Act* and the *Species at Risk (NWT) Act* is to protect species at risk from becoming extirpated or extinct as a result of human activity. While the former was enacted by the Government of Canada, the latter was enacted by the GNWT and applies only to wild animals and plants managed by the GNWT. For the purposes of this WMMP, species may be of concern due to their national, territorial, and/or Committee on Status of Endangered Wildlife in Canada (COSEWIC) status. As the *Species at Risk (NWT) Act* is implemented, the NWT Species at Risk Committee (NWT SARC) will make further assessments, and the Conference of Management Authorities will prepare the List of Species at Risk, providing legal protection for these species (NWT SARC 2021), and possibly leading to changes in the species at risk considered for the Mine.

There are twelve wildlife species of concern that may occupy or travel through the area of the Mine during part or all of the year. These species include barren-ground caribou (*Rangifer tarandus groenlandicus*), grizzly bear (*Ursus arctos horribilis*), wolverine (*Gulo gulo*), horned grebe (*Podiceps auritus*), peregrine falcon (*Falco peregrinus anatum-tundrius complex*), rusty blackbird (*Euphagus carolinus*), short-eared owl (*Asio flammeus*), bank swallow (*Riparia riparia*), barn swallow (*Hirundo rustica*), Harris's sparrow (*Zonotrichia querula*), red-necked phalarope (*Phalaropus lobatus*), and lesser yellowlegs (*Tringa flavipes*). Monitoring is proposed for species of concern (Table 2-1). In the WMMP, monitoring for species of concern is primarily focused on detection at the Mine site, so that site-specific protection can be implemented.

As part of the comments regarding the 2021 Annual Wildlife report barn swallow was identified as a species of concern (COSEWIC, 2021) not listed in this section. The Environment and Climate Change recommendations dated October 14, 2022 are listed in Appendix B of this report. In the 2022 Annual Report barn swallow has been added to section 2. Additional training and surveillance objectives will be put in place in 2023 to address these recommendations. Barn swallow is not currently listed in the WMMP (Version 1.2, De Beers 2022). Prior studies did not find evidence of the species and the Mine was thought to be outside their habitat range. Components of the WMMP will still be used for potential effects and monitoring. Future revisions of the plan will receive updates to include barn swallow.

Table 2-1 Species of Concern for the Mine, Potential Effects, and Related Monitoring Components in the Wildlife Management and Monitoring Plan

Species	NWT General Status Ranking[a]	*Species at Risk (NWT) Act*[b]	COSEWIC Assessment[c]	Federal *Species at Risk Act*[d]	Potential Mine Impacts	Components of the WMMP
Barren-ground caribou	At risk	Threatened	Threatened	Under consideration	• May be affected by habitat loss • May be sensitive to disturbance and human activity • Risk of harm or mortality	• habitat loss • surveillance monitoring • zone of Influence monitoring
Grizzly bear (western population)	Sensitive	No status	Special Concern	Schedule–1 - special concern	• May be attracted to developments if food is available • Sensitive to disturbance particularly when accompanied by young or during denning • Long generation time means one individual may be affected by disturbance seasonally over multiple years, resulting in potential regional population effects	• habitat loss • surveillance monitoring
Wolverine	Sensitive	No status	Special Concern	Special Concern	• May be attracted to developments if food or shelter are available	• habitat loss • surveillance monitoring
Horned grebe (western population)	Sensitive	No status	Special Concern	Schedule 1 – special concern	• Waterbirds that use mine-altered waters may be harmed • Loss of shoreline habitat for breeding • Staging habitat in Kennady Lake may be affected	• habitat loss • surveillance monitoring • PRISM
Peregrine falcon (*anatum-tundrius* complex)	Sensitive	No status	Not at risk	Special Concern (under consideration for)	• Peregrine falcons have been known to nest on mine infrastructure and in open pits, where they may be at risk of harm or may cause delays to operations	• habitat loss • surveillance monitoring • monitoring nest occupancy and productivity in the regional study area
Rusty blackbird	Sensitive	No status	Special Concern	Schedule 1 – special concern	• May nest on Mine infrastructure • Experiencing population declines as a result of changing environmental conditions on breeding and overwintering habitats	• habitat loss • surveillance monitoring • PRISM

Species	NWT General Status Ranking[a]	*Species at Risk (NWT) Act*[b]	COSEWIC Assessment[c]	Federal *Species at Risk Act*[d]	Potential Mine Impacts	Components of the WMMP
Short-eared owl	At risk	No Status	Threatened	Schedule 1 – special concern	• May be affected by habitat loss • Sensitive to noise and disturbance and human activity during nesting	• habitat loss • surveillance monitoring • PRISM
Bank swallow	At risk	No Status	Threatened	Schedule–1 - threatened	• May nest on sand/ gravel mounds or aggregate quarries associated with the Mine • May be affected by habitat loss	• areas with suitable habitat will be contoured to have slopes <70 degrees for stability • surveillance monitoring
Barn swallow*	Sensitive	No Status	Special Concern	Schedule–1 - threatened	• Barn swallows demonstrate high nest site fidelity and dependence on human-made structures • May nest on Mine infrastructure	• habitat loss* • surveillance monitoring* • PRISM*
Harris's sparrow	Sensitive	No Status	Special Concern	Schedule-1-Special Concern	• May be sensitive to noise and disturbance from human activities • May be affected by loss of breeding habitat	• habitat loss • surveillance monitoring • PRISM
Red-necked phalarope	Sensitive	No Status	Special Concern	Schedule 1 – special concern	• Waterbirds that use mine-altered water may be harmed • May be affected by loss of breeding habitat	• habitat loss • surveillance monitoring • PRISM
Lesser yellowlegs	Sensitive	No Status	Threatened	Under consideration	• Waterbirds that use mine-altered water may be harmed • May be affected by loss of breeding habitat	• habitat loss • surveillance monitoring • PRISM

a) Working Group on General Status of NWT Species (2016). Ranking levels, from highest to lowest conservation concern, is: at risk, may be at risk, sensitive, secure, undetermined.

b) NWT SARC (2023).

c) Government of Canada (2023).

d) *Species at Risk Act* (2002).

* Species not directly listed in the current version of the WMMP

COSEWIC = Committee on the Status of Endangered Wildlife in Canada; WMMP = Wildlife Management and Monitoring Plan; PRISM = Program for Regional and International Shorebird Monitoring.

3 MONITORING AND RESULTS

3.1 Local and Regional Study Areas

The wildlife RSA is defined by a rectangle with an area of 5,600 km^2 (75 km by 75 km), centered on the Mine site (Map 3-1). The wildlife local study area (LSA) (about 2 km^2) was selected to assess the immediate direct and indirect effects of the Mine on individual animals and habitat. The wildlife RSA was used to assess Mine-specific and cumulative effects on upland migratory birds and raptor populations. The RSA was also selected to capture the maximum extent of effects beyond the LSA, which can influence groups of individuals from populations with large seasonal and annual ranges (e.g., caribou, grizzly bear, and wolverine).

3.2 Direct Habitat Loss

3.2.1 Mine Development Area

Wildlife habitat loss will occur from the construction of the Mine and from the flooding of areas resulting from dewatering of Kennady Lake and associated water diversions. Monitoring how much area is altered by the Mine is required to confirm that the permitted Mine development area has not been exceeded under Land Use Permit (MV2005C0032) and surface leases.

Methods

The Mine development area will be delineated through aerial photographs, satellite imagery, or ground surveys, and calculated using GIS software. The actual area of the Mine footprint will be compared to the permitted area, and monitored over the life of the Mine at key phases of development (e.g., end of construction and periodic points in operations [De Beers 2014a]).

Results

The Mine currently has a land footprint of 697 hectares (ha), and water (deep and shallow water) footprint of 669 ha, for a total footprint of 1366 ha (Table 3-1). This is currently 95.59% of the total 1,429 ha predicted Project footprint in the approved 2020 Updated Project Description as part of the Water Licence Amendment.

The largest amount of disturbance, by area, has been to deep water, which is the dominant Ecological Land Class in the LSA (De Beers 2010). The footprint calculations in 2022 included all of Areas 1-7 of Kennady Lake, which have been disturbed through de-watering or storage of water in the Water Management Pond.

Map 3-1 Wildlife Management and Monitoring Plan Study Areas

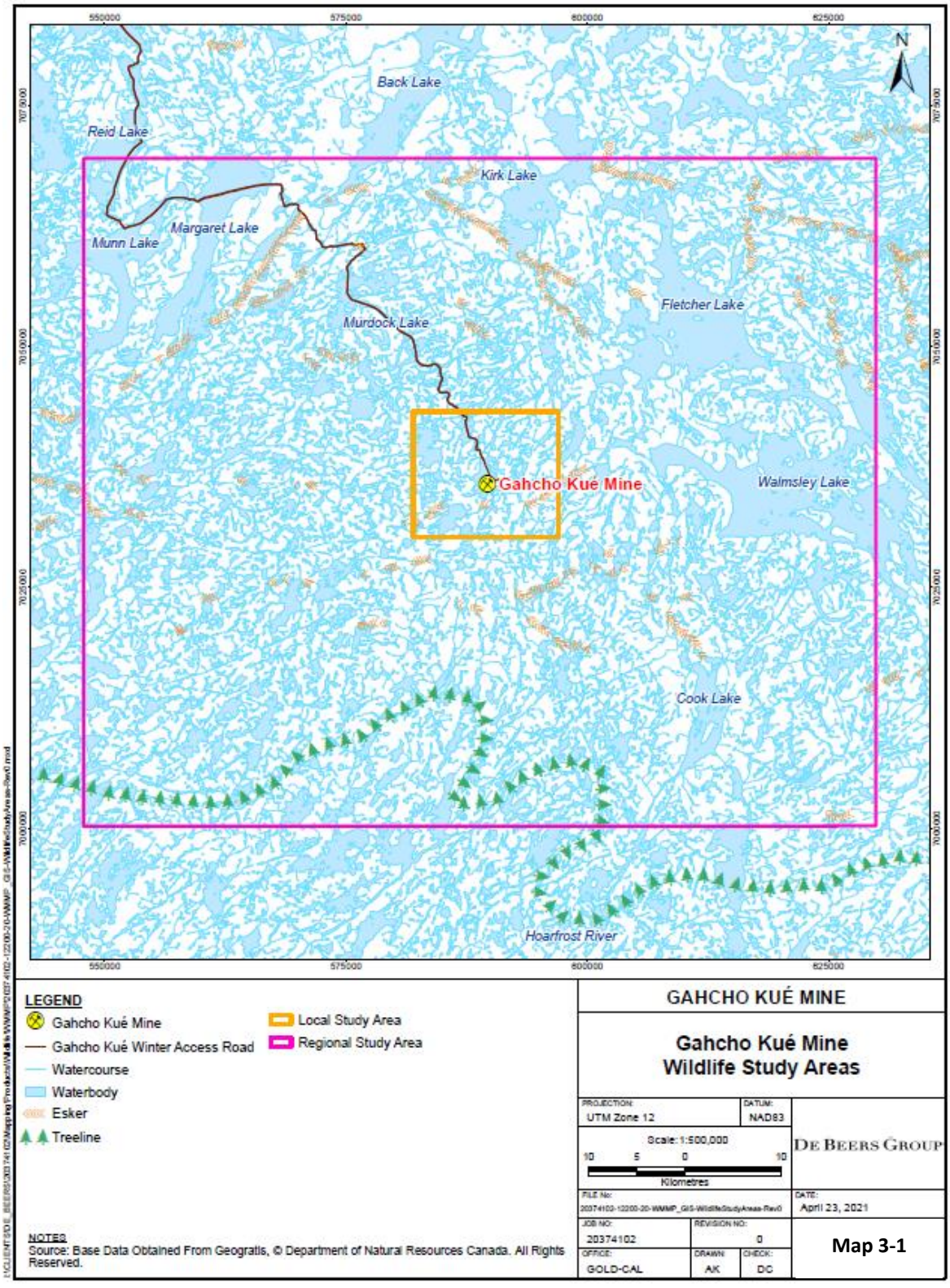


Table 3-1 Expected and Actual Loss of Habitat Types Associated with the Mine Footprint to the end of 2022

Ecological Land Class	Expected Distrubance (ha)[a]	Actual Disturbance (ha)[b]	Difference between Actual and Expected Disturbance (ha)[c]
Bedrock Association	10	9	1
Birch Seep	43	39	4
Boulder Association	8	7	1
Deep Water	494	493	1
Heath Bedrock	68	55	13
Heath Boulder	33	30	3
Heath Tundra	113	104	9
Peat Bog	134	127	7
Sedge Wetland	134	127	7
Shallow Water	176	176	0
Spruce Forest	51	47	4
Tall Shrub	44	41	3
Tussock Hummock	111	102	9
Esker Complex	0	0	0
Unclassified	10	10	0
Total	1,429	1,366	63

(a) Based on the 2020 Updated Project Description for the Gahcho Kué Project (De Beers 2020a)

(b) Delineated through ground surveys and calculated using GIS software.

ha = hectare.

3.3 Indirect Habitat Loss

3.3.1 Noise

Noise is believed to cause sensory disturbance to some wildlife species, and may result in avoidance or reduction of time spent in otherwise suitable habitat. Although noise was not aniticpated to be a primary driver of indirect habitat loss for any of the wildlife valued components at the Mine, it is still a form of potential disturbance that should be minimized. Activities at the Mine that will generate noise include aircraft, vehicles, generators, blasting and the general presence of people.

Baseline noise levels were established by monitoring ambient noise at the Mine site as part of the EIS. A continuous, 24-hour assessment of baseline noise was completed at selected sites in June 2010. Using known sound emissions from anticipated Mine equipment and infrastructure, a model was developed that predicted the maximum distances Mine noise would attenuate to background levels.

The objectives of the noise monitoring are to confirm noise level predictions from the EIS (De Beers 2010) and to use measured data to inform the effectiveness of noise management practices at site. Monitoring of noise was completed in Year 1 (2017) and Year 5 (2021) of Mine operations with future assessments planned for Year 8 (2024) of the operation phase.

Methods

According to Alberta Energy Regultor (AER) Directive 038 (EUB 2007), the relevant parameter for characterizing cumulative noise levels is the energy equivalent sound level (L_{eq}), expressed in A-weighted decibels (dBA). Noise levels are scaled to A-weighting to reflect the frequency sensitivity of the human auditory system. L_{eq} is a single value that represents the average noise level over a given period of time. AER Directive 038 indicates that noise levels should be time-averaged over a daytime period ($L_{eq,day}$) defined as 7 am to 10 pm, and a nighttime period ($L_{eq,night}$) defined as 10 pm to 7 am. Note that the EIS and the Year 1 noise monitoring program adjusted the AER Directive 038 definition of daytime and nighttime for consistency with Health Canada guidance (Health Canada 2005); in the EIS, Year 1, and Year 5 noise monitoring program, daytime is defined as 7 am to 11 pm and nighttime is defined as 11 pm to 7 am.

During the Year 5 noise monitoring program, $L_{eq,\ day}$ and $L_{eq,\ night}$ cumulative noise levels were measured at four locations in and around the Mine during mid June (Table 3-2). These four locations used in the Year 5 monitoring program were selected for consistency with the assessment completed for the EIS (De Beers 2010) and the Year 1 noise monitoring program (Golder 2017).

Table 3-2 Year 5 Noise Monitoring Locations

Year 5 Noise Monitoring Location	Description	Universal Transverse Mercator Coordinates [Zone 12]	
		Easting [m]	Northing [m]
RA	Accommodations complex (west side)	590,632	7,035,849
RB	Accommodations complex (east side)	591,005	7,035,997
RC	Unoccupied location on proposed East Arm National Park boundary	594,248	7,034,625
RD	Unoccupied location 1.5 km from the Mine boundary	591,106	7,033,986

Time-weighted noise averages were measured using daytime and nighttime energy equivalent sound levels over a 24-hour sampling period as per AER Directive 038, both within the Mine footprint and at a designated location 1.5 km from the Mine (location with highest predicted noise level). This schedule may be adjusted to align with other regional monitoring efforts or to accommodate changes in mining activities.

The Year 5 noise monitoring program was conducted in general accordance with methods described in AER Directive 038. Following the conclusion of the noise monitoring program, data were processed to obtain representative estimates of $L_{eq,\ day}$ and $L_{eq,\ night}$ noise levels for each monitoring location. The data was filtered to eliminate contaminated, abnormal, or invalid noise sources such as technician activity during deployment. All other noise sources (e.g., mine equipment, helicopters and other aircraft, insects, birds, and other wildlife) were considered valid and representative of normal conditions at the monitoring locations.

Noise monitoring was not conducted in 2022 (Golder 2022). The last study was conducted in 2021 where it was determined, daytime and nighttime noise levels from the Year 5 monitoring program were less than corresponding Year 5 model predictions from the EIS. This indicates that actual noise effects from Year 5 operations were less than predicted in the EIS. The Year 5 (2021) noise monitoring program validated and confirmed the conclusions of the EIS. The next study will take place for year 8 of operations in 2024.

3.3.2 Dust

The Mine will create dust through various sources including blasting and crushing rock, road construction, and traffic. Through engagement with communities and government, concerns have been expressed about the effects of dust on the environment and wildlife health, particularly caribou.

De Beers is committed to minimizing the amount of dust; however, dust cannot be completely eliminated and is predicted to settle in the area within and near the core Mine site. Fugitive dust will be reduced through the application of water in the area surrounding the Mine. Monitoring is conducted to measure the extent of fugitive dust deposition from emissions.

Methods

As described in the Vegetation and Soils Monitoring Program (VSMP) Version 3 (De Beers 2014b), dustfall collectors were deployed in August 2013 and monitoring has continued through 2022.

Dustfall was measured approximately every 25 to 60 days throughout the growing season (May to October). In addition, dustfall was collected over the approximately 250 day winter period (2015-2022). Dust deposition is measured at nine sampling stations, at distances of 0 m, 50 m, 150 m, 500 m, 1 km, 5 km, 10 km, 15 km, and 20 km from the Mine. Dust deposition results from 2013 to 2014 were used as baseline data for comparing dustfall values collected during construction and operation. Dust deposition data will be used to determine if changes in plant communities and soil chemistry are related to dust from the Mine, and as a potential mechanism of the zone of influence on caribou (Golder 2019).

To examine the spatial and temporal patterns of dust deposition, geometric mean fixed dustfall deposition rates were examined both graphically and statistically. For 2022 data, spatial patterns of the dust deposition results were examined for the entire study area and within sampling areas. Temporal patterns were examined by comparing the geometric mean fixed dustfall deposition rate among sampling seasons across years: 2013 to 2014 as baseline years, 2015 and 2016 to represent mine construction, and 2017 to 2022 for Mine operations. To examine the spatial patterns of dust deposition rates with increasing distance from the Mine, regression analysis was conducted using R (R Core Team 2020). Bayesian linear mixed-effects regression (Chung et al. 2013) was performed with fixed dust deposition rates (mg/100 cm^2/30 days) and distance from the Mine (km). Fixed dustfall values greater than 115.3 mg/100 cm^2/30 days were considered anomalous outliers (n = 5) and omitted from analysis, based on the calculated statistical distribution defined by the mean and three standard deviation units.

Results

Dustfall is reported annually as part of the Vegetation and Soils Monitoring Program report (De Beers 2022). The results provided herein represent a summary of key findings from that report. Dustfall collection jars were deployed and collected six times at all sampling areas (Five sampling areas at the Northeast transect and nine sampling areas at the Southwest transect) over the course of the 2021/2022 monitoring year. Collections occurred over six periods beginning:

- September 23, 2021 to April 24, 2022 (winter);
- April 24, 2022 to May 31, 2022 (spring);
- May 31, 2022 to June 30, 2022 (spring);

- June 30, 2022 to August 1, 2022 (summer);
- August 1, 2022 to August 30, 2022 (summer); and
- August 30, 2022 to September 30, 2022 (fall).

A total of 78 samples (including duplicates) were collected and submitted for dustfall analysis (none were damaged in the 2022 sampling program).

In 2022, 35 of 78 (44.9%) measured values of fixed dustfall deposition during spring, summer, and fall were below the detection limit of 3.0 mg/100 cm^2/30 days (includes duplicate samples). In 2021, 45 of 65 (69.2%) measured values of fixed dustfall deposition during spring, summer, and fall were below the detection limit of 3.0 mg/100 cm^2/30 days (includes duplicate samples). In 2020, 16 of 52 (30.8%) measured values of fixed dustfall deposition during spring, summer, and fall were below the detection limit of 3.0 mg/100 cm^2/30 days (includes duplicate samples). In 2019, 29 of 50 (58.0%) measured values of fixed dustfall deposition during spring, summer, and fall were below the detection limit. In general, dustfall deposition increased from baseline through construction (2015 to 2016) and into the initial phase of operation (2017 to 2018). Dustfall rates have declined substantially since 2018 and in 2022 are within or below the range of baseline values.

Fixed dustfall deposition values measured in 2022 at the Northeast transect for the AQEMMP included 9 of 30 values below the detection limit from May to August (Table 3-3). Mean fixed dustfall deposition rates for sampling locations during baseline, construction, and operational sampling periods are shown in Table 3-4.

Table 3-3 Fixed Dustfall Deposition Rates at the Northeast Transect, 2022

Month	Fixed Dustfall [mg/100 cm^2/30 d][b]				
	NEDF01	NEDF02[a]	NEDF03	NEDF04	NEDF05
Overwinter[c]	6	6	7.2	4.8	<3.0
May	3.9	<3.0	<3.0	<3.0	<3.0
June	142.8	36.3	40.8	<3.0	4.2
July	27.3	17.55	28.8	7.5	11.4
August	6.6	5.7	5.4	6.6	3.6
September	3.6	<3.6	<3.6	4.2	<3.6
Annual[d]	**31.7**	**11.48**	**14.25**	**4.35**	**4**

[a] Duplicate samples were taken at this station. The average value is presented.

[b] Calculated on a 30-day basis.

[c] Overwinter sampled from September 23, 2022 to April 24, 2021.

[d] Values below detection limit were assumed to be the detection limit for annual averages.

[e] mg/100 cm^2/30 d = milligrams per 100 square centimetre per 30 days; < = less than, with the value after it representing the detection limit.

Table 3-4 Mean fixed dustfall deposition rates (mg/100 cm2/30 days) for Southwest Transect sampling locations during baseline years (2013-14), construction (2015-2016) and operational (2016-2022) sampling periods

Sampling Period		Sampling Area									
		Approx Sampling Period (days)	0 km	0.05 km	0.15 km	0.5 km	1 km	5 km	10 km	15 km	20 km
Spring	2013[a]	-	-	-	-	-	-	-	-	-	-
	2014[b]	32	25.5	29.6	26.1	24.4	-	19.3	20.5	21.4	35.4
	2015[c]	44	24.9	18.1	24	29.6	23.7	26.6	20.2	19.9	19.2
	2016[d]	36	45.2	25.1	25.4	26.4	44.2	27.2	30.1	26.7	32.8
	2017	35	29.8	34.1	67.8	60	37.6	28.4	28.6	28.7	30.8
	2018[f]	28	30.4	47	52.8	50.2	75.6	52.3	42.9	73.6	37.1
	2019[g]	-	-	-	-	-	-	-	-	-	-
	2020[h]	-	-	-	-	-	-	-	-	-	-
	2021[I]	58	38.4	30.6	28.2	<3.0	4.5	3.3	<3.0	<3.0	<3.0
	2022[J]	67	30.6	74.25	111.3	13.8	<3.0	168.9	40.35	120	<3.0
Summer	2013[a]	-	-	-	-	-	-	-	-	-	-
	2014[b]	-	-	-	-	-	-	-	-	-	-
	2015[c]	35	23.9	25.3	22.7	25.6	25.4	19.4	18.8	24.7	26.3
	2016[d]	28	27.1	25	17.7	35.7	44.7	37.1	34.6	<5.0	23.7
	2017[e]	26	-	-	-	-	-	-	-	-	-
	2018[f]	34	61.3	145	54.7	24.7	49.7	20.9	33.6	28.2	32.4
	2019[g]	40	12.9	26.1	12.3	<3.0	24.9	70.5	<3.0	<3.0	<3.0
	2020[h]	32	15.6	21.6	11.1	21.0	12.6	5.4	<3.0	8.1	12.0
	2021[I]	38	3.3	14.4	8.7	<3.0	7.2	3.9	<3.0	<3.0	<3.0
	2022[J]	32	10.2	22.65	30.9	<3.0	<3.0	55.5	107.55	72.3	<3.0
Early Fall	2013[a]	44	10.3	13	22.2	11.6	17.8	13.4	14.6	15.9	12.9
	2014[b]	-	-	-	-	-	-	-	-	-	-
	2015[c]	-	-	-	-	-	-	-	-	-	-
	2016[d]	40	33.5	27.2	29.4	32.7	21.8	17.6	45.9	41.4	20.9
	2017	31	23.5	37	33.3	35	22.8	27.5	26.4	28.8	25.6
	2018[f]	37	13.3	12.7	26.3	19	43.4	19.1	24.6	13.6	19.8
	2019[g]	37	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Sampling Period		Sampling Area									
		Approx Sampling Period (days)	0 km	0.05 km	0.15 km	0.5 km	1 km	5 km	10 km	15 km	20 km
Late Fall	2020[h]	24	55.8	9.6	8.1	7.5	9.6	7.2	4.5	<3.0	4.5
	2021[i]	29	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	2022[j]	28	<3.0	<3.0	3.15	<3.0	<3.0	<3.0	3.45	<3.0	<3.0
	2013[a]	-	-	-	-	-	-	-	-	-	-
	2014[b]	42	<5.0	4.8	<5.0	6.6	6	-	<5.0	9	11.4
	2015[c]	35	19.9	23.6	38.4	17.4	28.7	24.1	23.6	25.3	21.3
	2016[d]	30	23.4	15.4	24.7	<5.0	24.5	38.15	29.8	31.1	29.5
	2017	28	25.3	40.1	26	21.3	35.5	28.6	34	32.3	33.1
	2018[f]	21	<3.0	5.7	<3.0	5.4	<3.0	<3.0	<3.0	<3.0	<3.0
	2019[g]	21	<3.0	5.7	<3.0	5.4	<3.0	<3.0	<3.0	<3.0	<3.0
	2020[h]	32	3.6	4.2	7.8	<3.0	3.3	<3.0	<3.0	<3.0	<3.0
	2021[i]	21	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	2022[j]	23	<3.6	<3.6	<3.6	<3.6	<3.6	4.5	<3.6	<3.6	<3.6
Winter	2013-14[a]	241	25.5	5.3	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
	2014-15[b]	256	18.9	29.5	43.6	22.3	25.6	-	-	21.4	23.5
	2015-16[c]	241	11.2	15.9	13.7	7.9	6.1	<5.0	<5.0	<5.0	-
	2016-17[d]	234	<5.0	10	-	8	-	<5.0	-	<5.0	<5.0
	2017-18[f]	247	6.7	12.2	-	14.5	5.8	5	5.6	5.9	<5.0
	2018-19[g]	252	29.1	19.8	19.2	10.5	8.7	6.9	5.1	4.5	4.5
	2019-20[h]	260	6.0	21.6	9.0	5.1	6.9	<3.0	<3.0	<3.0	<3.0
	2020-21[i]	234	<3.0	3.9	4.8	3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	2022[j]	214	4.5	6	3.45	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

- = No data

Lowest Detection Limit = 5 mg / 100 cm^2 / 30d

(a) Transect not established until August 2013 (Golder 2014); 2013 sampling periods were August to September (Early Fall), October 2013 to May 2014 (Winter 2013-14)

(b) 2014 sampling periods: May-June (Spring), August to October (Late Fall) and October to May 2015 (Winter)

(c) 2015 sampling periods: June (Spring), July (Summer), August to October (Late Fall) and October 2015 to May 2015 (Winter)

(d) 2016 sampling periods: June (Spring), July (Summer), August (Early Fall), September (Late Fall) and October 2016 to May 2017 (Winter)

(e) Summer 2017 results are anomalous, and included outlier values due to sample contamination and are thus not included

(f) 2018 sampling periods: June-July (Spring), July-August (Summer), August-September (Early Fall), September (Late Fall) and September 2017 to June 2018 (Winter)

(g) 2019 sampling periods: June-July (spring), July-August (Summer), August-September (Early Fall), and October 2018 to June 2019 (Winter)

(h) 2020 sampling periods: June-July (spring), July-August (Summer), August-September (Early Fall), and September 2019 to June 2020 (Winter)

(i) 2021 sampling periods: April-June (Spring), June-July (Summer), August (Early Fall), August-September (Late Fall), and September 2020 to April 2021 (Winter)

(j) 2022 sampling periods: April-June (Spring), June-July (Summer), August (Early Fall), August-September (Late Fall), and September 2021 to April 2022 (Winter)

3.3.3 Wildlife Sightings Log

The wildlife sightings log provides staff working at the Mine an effective means to record and report wildlife observations to the mine environment department. While the information is not collected systematically and likely contains repeated observations of the same animals, it provides an indication of the presence of wildlife and the potential for wildlife incidents or problem wildlife. It also increases staff involvement with the environment programs and fosters awareness of wildlife issues.

Methods

Wildlife sightings logs were maintained at various locations around the Mine site to record observations of wildlife and wildlife sign. Staff were encouraged to add observations to the log, including observations of unusual species and potential problem wildlife. Reporting of sightings of medium to large wildlife (i.e., fox-size and larger) by staff and contractors is mandatory. Observations of species that pose a potential risk to human safety are reported to Environment staff immediately in addition to being documented in the wildlife sightings log.

Results

There were a total of 295 independent wildlife observations in 2022. The number of observations represents the number of independent and incidental observations of wildlife, and is not an indication of the number of individuals of a species observed. The number of people present at the Mine during 2022 is reported in Section 3.10.

Arctic hare was the most commonly observed species in 2022, with 60 observations. Caribou was also a commonly observed species during 2022, with 54 observations recorded. Other frequent species observed were the red fox and muskox (36 and 34 observations respectively). In 2022, 5 wolf were recorded, with the first sighting occurring January 28th and last recorded sighting on December 4th. Five grizzly bear observations were recorded in 2022. A full summary of observations recorded on Wildlife Sightings Logs for 2013-2022 can be found in Table 3-5.

Table 3-5 Wildlife Sightings Log Summary of Observations, 2013 to 2022

Species	Type	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
American robin	Bird	-	-	1	-	2	-	-	1	-	-
Arctic ground squirrel (sik sik)	Mammal	-	4	11	4	23	3	3	2	8	15
Arctic hare	Mammal	3	32	45	9	29	5	22	26	37	60
Bald eagle	Bird	-	-	1	4	1	2	11	5	7	3
Barn Swallow	Bird	-	-	-	-	-	-	-	-	-	1
Beaver	Mammal	-	-	-	-	1	-	1	-	-	1
Cackling goose	Bird	-	-	-	-	-	-	-	-	3	-

Canada goose	Bird	-	1	2	-	2	-	1	3	5	1
Caribou	Mammal	17	37	45	-	2	61	16	6	14	54
Common loon	Bird	-	-	-	-	-	-	-	-	-	2
Common merganser	Bird	-	-	-	-	-	-	-	-	2	-
Common radpoll	Bird	-	-	-	-	-	-	-	-	1	-
Common raven	Bird	-	10	16	13	15	11	27	15	44	11
Coyote	Mammal	-	-	-	-	-	-	-	-	-	3
Duck spp.	Bird	-	-	-	-	-	-	-	-	2	4
Falcon spp.	Bird	-	-	-	-	-	-	-	-	-	3
Fox spp.	Mammal	5	33	155	85	104	91	48	15	33	-
Gadwall duck	Bird	-	-	-	-	-	-	-	-	1	-
Golden eagle	Bird	-	-	-	-	-	-	-	-	4	2
Goose spp.	Bird	-	-	4	6	3	-	7	1	15	3
Greater white-fronted goose	Bird	-	1	5	1	-	-	-	3	5	1
Grey wolf	Mammal	7	27	22	2	4	4	40	2	-	-
Grizzly bear	Mammal	-	-	3	3	2	4	11	4	1	5
Grouse	Bird	-	-	-	-	-	-	-	-	1	-
Gull spp.	Bird	-	1	3	-	2	-	1	-	2	2
Gyrfalcon	Bird	-	-	1	1		-		-	1	1
Hare spp.	Mammal	-	-	-	-	-	5	14	1	12	-
Hawk spp.	Bird	-	-	-	-	-	-	-	-	-	2
Jaeger spp.	Bird	-	-	1	-	-	-	-	1	-	-
Loon spp.	Bird	-	-	2	-	2	-	1	-	-	-
Mallard	Bird	-	-	-	-	-	-	-	-	-	1
Mink	Mammal	1	-	-	-		-	-	-	-	-
Moose	Mammal	-	-	5	-	4	1	5	2	2	5
Mouse spp.	Mammal	-	-	3	2	2	7	2	1	2	1
Muskox	Mammal	1	4	14	10	14	20	24	15	30	34
Muskrat	Mammal	-	-	-	2	5	-	1	-	-	1
Northern harrier	Bird	-	-	-	-	-	-	-	-	1	1
Northern pintail	Bird	-	-	-	1	-	-	-	1	2	1
Owl spp.	Bird	-	-	2	4	-	-	-	-	-	-
Pelican spp.	Bird	-	-	-	-	-	-	-	-	1	-
Peregrine falcon	Bird	-	1	12	1		2	1	-	4	8
Pine siskin	Bird	-	-	-	-	1	-	-	-	-	-
Plover spp.	Bird	-	-	-	-	-	-	-	-	1	1
Porcupine	Mammal	-	-	-	-	-	1	-	-	-	-
Ptarmigan spp.	Bird	3	16	10	10	4	9	4	6	15	15
Red fox	Mammal	-	-	-	-	-	-	-	-	127	36

Rock ptarmigan	Bird	-	-	-	-	-	-	-	-	7	-
Ross's goose	Bird	-	1	-	-	-	-	-	-	-	-
Rough-legged hawk	Bird	-	2	-	-	-	-	1	1	5	2
Sandhill crane	Bird	-	-	-	1	1	-	-	1	-	-
Scoter spp.	Bird	-	-	1	-	-	-	-	-	-	-
Short-eared owl	Bird	-	1	1	-	1	-	-	-	-	-
Snow bunting	Bird	-	-	-	-	-	-	-	1	2	4
Snow goose	Bird	-	-	1	-	-	-	-	2	4	1
Snowy owl	Bird	-	-	-	-	1	1	1	2	4	-
Sparrow spp.	Bird	-	-	1	-	-	-	-	-	-	-
Teal duck	Bird	-	-	-	-	-	-	-	-	2	-
Tundra swan	Bird	-	1	1	-	-	-	1	-	-	1
Unidentified duck	Bird	-	-	2	1	1	-	2	-	-	-
Unidentified raptor	Bird	-	-	2	1	3	4	-	-	-	-
Unidentified shorebird	Bird	-	-	-	-	-	-	-	-	3	-
Unidentified songbird	Bird	-	-	2	1	1	2	-	-	3	-
Willow ptarmigan	Bird	-	-	-	-	-	-	-	-	1	-
Wolf spp.	Mammal	-	-	-	-	-	-	-	-	6	5
Wolverine	Mammal	-	-	-	-	8	27	43	4	-	3
Yellow warbler	Bird	-	-	-	-	-	-	-	-	1	-

(a) The number of observations represents the number of independent observations for each species, and is not an indication of the number of individuals present.

- = none observed.

3.3.4 Site Surveillance

Wildlife are expected to be present near the Mine throughout construction, operation, and closure. Site surveillance monitoring, which is a regular scheduled program that occurs once per week, provides information of wildlife activity at the Mine, and direct feedback to Mine operations regarding the effectiveness of waste management and wildlife mitigation practices. Examples of wildlife activities that are documented through site surveillance monitoring include presence of wildlife in areas where food may be available, use of buildings for shelter or nesting, and use of water management ponds by waterfowl.

Through systematically monitoring for the presence of wildlife within and around the Mine site, Environment staff remain appraised of current and emerging issues, and are able to implement management actions to address these issues as required. To use a common example, site surveillance monitoring may detect that wildlife has gained access to a building on site or is taking shelter beneath it. The typical mitigation is to block the access through improved skirting, and follow-up with surveillance monitoring to confirm whether the mitigation was successful, or if further action is required.

Effective waste management practices and staff education are key to decreasing the availability of wildlife attractants at mine sites. Environmental design features, mitigation, and waste management are implemented at the Mine to limit the attraction of wildlife, and the associated increased risks of wildlife interactions and mortality. The effectiveness of the waste stream management system, as it pertains to wildlife attractants, is monitored through regular waste bin inspections, as per the Waste Management Plan (De Beers 2015b), and site waste audits.

Methods

Systematic site surveys of the Mine were conducted weekly to record all wildlife observations, recent wildlife sign (e.g., tracks, scat), and misdirected waste. Surveys were completed on foot and by truck. Staff recorded the area surveyed, with the nature and location of all observations. Surveillance monitoring included regular visits to areas of the Mine where there is risk of wildlife attractants (e.g., waste management areas), risk of wildlife using the Mine for shelter, denning or nesting, and where there were people working outdoors.

De Beers actively monitors for bird nesting activity around the Mine site, and in particular in areas scheduled for clearing or disturbance each year (Section 3.9.1). Bird deterrents are deployed in areas scheduled for clearing during the breeding season to avoid and minimize the disturbance of any active nests of migratory birds, consistent with the *Migratory Birds Convention Act*. Bird deterrents are also deployed in and around pits each spring. Monitoring is conducted to detect raptors, and actively deter them prior to nest initiation on Mine infrastructure.

In 2017, De Beers initiated systematic surveys of the water management pond and other water collection ponds on site to monitor for the presence and use of these water bodies by water birds. Collecting observations of water bird use of the site provides a better understanding of which species are present at different times of the year at and near the Mine. This program was continued in 2022.

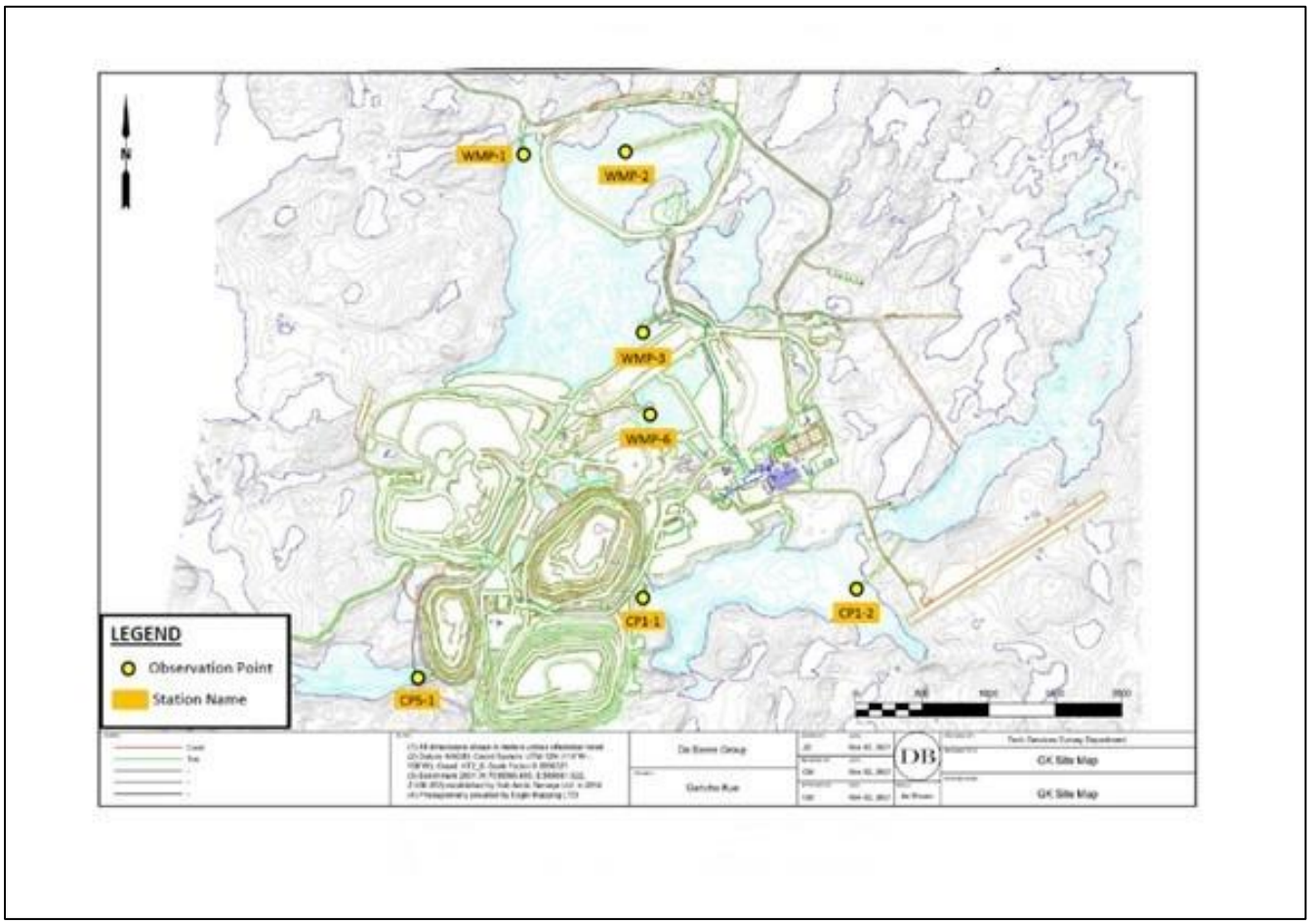
To monitor the use of site water bodies by birds, 7 stations were selected as fixed observation points from which the 2022 surveys were conducted. Two of these stations are located at the Water Management Pond, two stations monitoring collection Pond 1 (CP1-1 and CP1-2), one station monitoring the Collection Pond 6 (WMP-6), one station monitoring Collection Pond 5 (CP5-1), and one station monitoring FPK Area 2 (WMP-2). Previous stations that had been in place during the 2021 season have been removed, as these collection ponds have been removed by mining activity and no longer exist (WMP-7). The location of each of these survey stations is provided in Map 3-2 and the UTM coordinates for each station are provided in Table 3-6. At each station, the observer conducts a 180° sweep using binoculars, focusing on both open water and shoreline habitats. Surveying at each station generally takes 10-15 minutes to complete. The observer records information including species type, activity (including evidence of nesting behavior), and number of individuals.

Table 3-6 Locations of Collection Pond Stations, 2022

Station Coordinates	Easting	Northing
WMP-1	0588811	7038360
WMP-2	0589694	7038355
WMP-3	0589814	7037102
WMP-6	0590451	7036293
CP1-1	0589803	7035085

CP1-2	0589735	7035163
CP5-1	0588133	7034571

Map 3-2 Collection Pond Survey Locations, 2022



Results

In 2022, a total of 51 weekly site surveillance surveys were completed. Wildlife or sign of wildlife (e.g., tracks, scat) was observed during 50 surveys (98%). Caribou were the most commonly observed species in 2022, with 2723 individuals with 117 observations. Red fox observations were common with 56 observations and another 5 of an unknown fox species during weekly surveys. Other commonly observed species were ptarmigan species, common raven, and Arctic hare. A full summary of wildlife observations from weekly wildlife surveys can be found in Table 3-7.

Table 3-7 Wildlife and Wildlife Sign Observed During Site Surveillance Surveys, 2022

Species	Number of Surveys with Wildlife Observations	Total Number of Individuals Observed	Number of Surveys with Wildlife Sign
American pipit	11	18	

American robin	12	14	
American tree sparrow	6	9	
Arctic ground squirrel	1	1	
Arctic hare	54	51	29
Bank swallow	6	18	
Barn swallow	5	11	
Black scoter	8	19	
Cackling goose	3	130	
Canada goose	2	23	
Caribou	117	2723	8
Cliff swallow	14	51	
Common loon	4	10	
Common merganser	1	1	
Common raven	77	128	3
Duck spp.	14	54	
Eagle spp.	1	1	
Fox spp.	5	3	5
Goose spp.	2	11	
Greater white-fronted goose	1	15	
Ground squirrel	15	16	
Gull spp.	34	67	
Harris' sparrow	9	12	
Horned lark	2	4	
Lapland longspur	8	11	
Least sandpiper	1	6	
Lesser scaup	7	42	
Lesser yellowlegs	2	5	
Long tailed duck	14	35	
Loon spp.	2	3	
Mew gull	1	1	
Muskox	15	40	1
Northern harrier	2	2	
Northern pintail	18	196	
Northern shoveler	2	4	
Owl spp.	1	1	
Pectoral sandpiper	1	3	
Peregrine falcon	3	4	
Plover spp.	1	3	
Ptarmigan spp.	36	196	13

Ptramigan	2	24	
Red fox	56	54	40
Red-throated loon	1	2	
Red-breasted merganser	6	7	
Rock ptarmigan	1	20	
Rough-legged hawk	3	3	
Sandhill crane	1	2	
Sandpiper spp.	6	10	
Savannah sparrow	15	27	
Scaup greater	1	1	
Scaup spp.	3	8	
Scoter spp.	2	3	
Seagull	1	1	
Semipalmated plover	10	16	
Semipalmated sandpiper	3	5	
Snow bunting	4	35	
Snow goose	1	12	
Songbird Spp.	5	18	
Sparrow spp.	8	21	
surf scoter	4	10	
Swallow spp.	1	7	
Swan spp.	1	12	
Teal ducks	7	31	
Tree swallow	1	1	
Unidentified shorebird	1	4	
Unidentified songbird	29	60	
Unknown	1	5	
Water fowl spp.	1	10	
White-crowned sparrow	8	10	
Willow ptarmigan	1	25	
Wolf	5	5	1

In 2022, Collection Pond Surveys were conducted on a bi-weekly basis from May 19th to September 30th. During 10 different survey events, a total of 117 bird observations were made consisting of 509 individuals. A summary of these results is provided in Table 3-8. The survey had positively identified 23 different species. Often birds could not be identified to species, and were classified to family group or as unidentified. A summary of the results is provided in Table 3-9. Nesting activity was observed in the CP1-2 survey. A seagull nest was viewed on the south end of CP1. The seagull was actively nesting and three chicks were observed in later surveys. This nest was not near mining activities but the closest accessible road was barricaded to avoid any nest disturbance. Another nesting event occurred within the WMP-6/CP6 area. A Greater white-fronted goose nest was discovered near Dyke B, after the adults were observed with four goslings. This nest was

located within active work areas but was not impacted by daily operations. Signage was posted for workers in the area to watch for the adults with their young. These individuals were monitored in later surveys until they left for the season.

Table 3-8 Birds Observations Collected During Collection Pond Surveys, 2022

Station	Number of bird groups observed	Number of Individuals Observed	Average number of individuals per station per survey
CP1-1	11	111	10
CP1-2	14	94	6
WMP-1	9	16	1
WMP-2	4	25	6
WMP-3	12	39	3
CP5-1	10	173	17
CP6/WMP-6	9	51	5

Table 3-9 Birds Observed During Collection Pond Surveys, 2022

Species	Number of Individuals Observed	Number of survey events where species was observed
Greater white-fronted goose	14	3
Goose spp.	144	2
Northern pintail	68	3
Long-tailed duck	25	6
Northern shoveler	2	1
Scaup spp.	9	2
Duck spp.	25	6
Surf scoter	20	4
Common merganser	4	3
Common loon	1	1
Red-throated loon	4	3
Loon spp.	1	1
Gull spp.	28	15
Semipalmated plover	13	7
Sandpiper spp.	2	2
American pipit	38	13
American robin	5	5
Harris' sparrow	1	1
American tree sparrow	3	3

Savannah sparrow	2	2
Sparrow spp.	13	3
Lapland longspur	3	2
Horned lark	1	1
Bank swallow	21	6
Cliff swallow	10	1
Barn swallow	2	1
Tree swallow	4	2
Unidentified songbird	29	12
Northern harrier	1	1
Common raven	8	4
Total	**509**	**117**

3.3.5 Public Use of the Winter Access Road

De Beers operates a winter access road from MacKay Lake to the Gahcho Kué Mine site from early February to late March each year (Map 1-1). De Beers conducts surveillance of the winter access road to document public use and provide safety and support to truck traffic. Public use of the road is typically dominated by hunting parties.

Methods

Each day the winter access road is open, security personnel drive from the Mine to MacKay Lake, and record wildlife observations and hunting/recreational activity. Observations of public use of the road are documented on a Winter Access Road User Survey Form (De Beers 2014a).

Results

In 2022, the winter access road was operational from January 31st to March 27th (i.e., 56 days). There were 1,890 loads on the winter road to supply the Mine with fuel, ammonium nitrate and general freight and equipment. During the daily security patrols, wildlife and wildlife sign observed included of wolf, wolverine, fox, ptarmigan, and caribou. Hunting parties were reported on the winter access road by security personnel on multiple occasions, no major incidents were reported.

3.3.6 Wildlife Incidents

A wildlife incident is defined in the WMMP as:

- human-wildlife interactions that present a risk to either people or animals;
- wildlife-caused damage to property or delay in operations;
- wildlife deterrent actions; and
- wildlife injury or mortality.

Following the principles of adaptive management, monitoring of wildlife incidents is undertaken to identify all incident types and to prevent future incidents or escalation of problems.

Methods

Wildlife incidents throughout the year are reported, investigated, and have immediate follow-up actions by Environment staff. If wildlife are deterred to reduce the risk of a wildlife-human incident, then an effort is made by Environment staff to start with the least intrusive method available, with all deterrent actions recorded in the wildlife deterrent log. All wildlife mortalities are reported immediately to Environment and Climate Change Canada and/or GNWT-ENR. Documentation of wildlife incidents include photographs, names of people involved, the nature of the incident, and supporting information such as the time, date, location, and the follow-up actions that occurred.

Results

In 2022, two wildlife mortality incidents were reported. An Arctic hare carcass was found on the ring road outside of Tuzo Pit on November 24th. As per section 4.3.7of the WMMP, a notification of the incident was sent the same day to the Wildlife and Environment Manager at the GNWT-ENR. The cause of death was likely a vehicle strike. The vehicle involved in the incident was not identified. Following the incident, the right-of-way policy was reviewed with the mine site field crews. The wildlife right-of-way policy is a part of the Site Drivers Permit training , Pit Drivers Permit, and Winter Road training.

The second mortality was a young bull caribou on Feb 19th that was found deceased near the South end of Dyke A. The caribou was submitted to the GNWT-ENR Wildlife Health Program for a full necropsy investigation and diagnostics to determine cause of death. The full necropsy was completed on March 21st at the North Slave Regional Laboratory. Results found the Caribou died of severe sepsis (or systemic/body-wide infection by bacteria). Culture results confirmed the causative agent as Pasteurella multocida, which is a naturally occurring bacterium found in many animals. In this caribou individual, there was abnormal overgrowth of this bacteria that led to sepsis and death. This mortality was considered to be natural and not the result of a Mine-related interaction.

3.4 Caribou

The Bathurst caribou herd is known historically to move through the RSA during the northern migration to the calving grounds near Bathurst Inlet, and to the wintering grounds at or south of the treeline during the post-calving migration (De Beers 2010). Bathurst caribou may also occupy the RSA in winter. Beverly/Ahiak caribou are also known to occupy the RSA during the winter months.

Objectives of caribou monitoring for the Mine are:

- to determine if caribou behaviour changes with distance from the Mine;
- to determine what the zone of influence is and whether it changes in relation to Mine activity; and,
- to determine if caribou abundance and distribution changes in the study area over time.

The monitoring objectives are met through:

- participation in the GNWT-ENR led Zone of Influence Technical Task Group;

- aerial reconnaissance surveys of the winter access road;
- snow berm measurements along the winter access road; and,
- caribou behaviour monitoring.

3.4.1 Aerial Surveys

De Beers has contributed to the GNWT-ENR monitoring programs supporting the Barren-ground Caribou Management Strategy (ENR 2011). De Beers also participates in the GNWT-ENR-led Zone of Influence Technical Task Group for development of a standardized set of guidelines to monitor the zone of influence for caribou. De Beers has committed to completing aerial reconnaissance surveys to determine if caribou are present near the winter access road. The information collected during this survey is used to inform haul truck drivers of the presence and location of any caribou groups near the road, and is used as a trigger for caribou behaviour monitoring (Section 3.4.2).

Methods

In 2022, an aerial reconnaissance survey was completed on January 26, 2022 along the Gahcho Kué winter access road via helicopter aircraft at an altitude of approximately 150m and speeds of 80-100 km/h. The helicopter flew east along the north side of the winter access road to Mackay Lake. The number of wildlife and wildlife sign observations were recorded by Mine Environment staff. An aerial survey is completed each year prior to the winter access road opening to provide information to the haul truck drivers of the presence and location of caribou near the road, and determine whether caribou behavioural monitoring is triggered. Then monitoring trigger is 20 caribou groups or 100 total caribou.

Results

A total of thirty individual caribou were observed during the reconnaissance. An additional fourteen were observed but assumed to be the same group from a prior sighting during the survey. In total there were forty-four caribou sightings. The survey also included sightings of four muskox. Althought thresholds were not exceeded, the winter access road caribou behavioural monitoring (Section 3.4.2) was triggered for the 2022 season.

3.4.2 Behaviour Monitoring

The objective of determining if caribou behaviour changes with distance from the Mine for behaviour monitoring is based on recommendations from the Diamond Mine Wildlife Monitoring Workshop (Marshall 2009; Handley 2010). As noted for monitoring changes in caribou distribution, monitoring caribou behaviour around the Mine could contribute to future environmental assessments and the assessment and management of cumulative effects by government under different development scenarios. Caribou behavioural monitoring from the winter access road is conducted through the WMMP (De Beers 2022).

Large numbers of observations are required to detect differences in caribou behaviour, which is strongly affected by environmental conditions, such as wind, temperature, and insect (in summer) and predator abundance (BHPB 2004; Witter et al. 2012). For example, a power analysis based on Ekati and Diavik monitoring results indicated that a minimum of 55 caribou groups are required in each distance strata, assuming power of 0.8 and a type I error rate of 0.1 (Golder 2015). Behaviour monitoring of caribou groups in the RSA may be discontinued in favour of using collared caribou data, which was discussed at the February

2021 Diamond Mine Wildlife Monitoring Meetings (GNWT-ENR 2021). De Beers intends to engage Indigenous communities before making this decision.

The winter access road is located within the range of the Bathurst caribou herd, and De Beers has committed to implementing a behaviour monitoring program along the winter access road if sufficient caribou are present. Behaviour monitoring will be triggered when either 100 caribou or 20 caribou groups are observed along the length of the winter access road during either the aerial reconnaissance survey (Section 3.4.1) or during public use monitoring (Section 3.4.3). Caribou in proximity to the winter access road is a cause for concern for both the safety of the animals and the drivers. It is also an opportunity to better understand the interactions between caribou and winter roads in the NWT through behavioural monitoring. Monitoring is anticipated to continue from construction through closure of the Mine.

Methods

Behavioural monitoring methods are consistent with those implemented at other NWT mines. The behaviour monitoring will be conducted by a crew of two observers stationed along the winter access road or other Mine roads in a truck. Both focal surveys of individuals and scan surveys of caribou groups will be undertaken. Focal surveys provide information on activity budgets (i.e., the amount of time an animal is engaged in different behaviours), the temporal sequence of behaviours relative to stressors or other stimuli, and the length of time it takes the animal to return to a non-stressed state following a stressor event. Scan samples of a group of animals are more useful for quantifying the frequencies of dominant behaviours in a group over a period of time (ERM Rescan 2014).

For focal surveys, an individual is selected from a group for observation. Behaviour and time of behaviour changes are recorded. Focal surveys will be undertaken on both cows and bulls, for a minimum of 20 minutes. For scan surveys, observers will make instantaneous behaviour observations of caribou groups at 8 minute intervals for at least 40 minutes (a minimum of four observations per group).

For both scan and focal surveys, the response of caribou to stressors, such as vehicle or aircraft traffic, will also be recorded. Behavioural observations will be repeated at multiple locations along the road where caribou are present. In addition to behaviour, observers will record the number, group composition, location of each group and total group size. Observers will also record caribou tracks seen and or caribou tracks observed. advise as to any additional factors that seem to stress caribou or alter their behaviour negatively (e.g., vehicle speed and type, and wolves).

Results

Caribou behavioural monitoring was performed by WSP Golder in conjunction with De Beers Environment staff from February 4th to March 25th 2022. The crews completed a total of 197 group scans and 183 focal (individual) scan surveys. On two occasions visibility conditions decreased the ability to see the caribou and influenced the number and duration of surveys.

During caribou group scans, the field crew recorded the number of individuals in the group displaying each type of behaviour (Feeding, Bedded, Standing, Alert, Walking, Trotting, or Running) at one moment in time at 8-minute intervals. A minimum of four, and a maximum of eight observations are required per group (32 minutes and 64 minutes). Crews recorded the group size (i.e., number of individuals), group demographic composition (i.e., sex, age, class, group composition), and location of each group in relation to the winter road. The goal of this task was to observe and record data on as many groups as possible over the course of the field program.

During focal scans, The field crew monitored a single individual from a group of caribou continuously for a minimum of 20 minutes to measure how long the caribou was exhibiting each behaviour type/reaction to stressor. The behaviour type and time of the behaviour changes were recorded for the focal individual.

The results of the Group and Focal Scans are listed in Appendix A including; stressors, behaviours and characteristics.

3.4.3 Snow Berm Management

Snow berms associated with the winter access road may act as a partial barrier to caribou movement by deflecting caribou from crossing roads. For example, caribou have been shown to deflect from a road when snow berms are 1.6 m or greater in height (ERM Rescan 2011). Determining the aspects of the winter access road that influence caribou movements (e.g., snow berm heights) provide information specific to the operation of the Mine and potentially to features of the winter access road that may be mitigated, such as lowering of snow berm heights.

The objective of this component of the monitoring program is to determine heights of snow berms along the winter access road.

In 2015, De Beers made the commitment to implement additional mitigation to reduce snow berm heights if any measurements were observed over 1.6 m. This mitigation was implemented from 2016 onwards.

Methods

Snow berm measurements along the winter access road were recorded during three separate surveys:

- Survey 1 – February 10th, 2022
- Survey 2 – March 6th, 2022
- Survey 3 – March 20th, 2022

Snow berm height and slope were measured every 2 km along the winter road, at both lake and portage locations, to determine factors affecting the permeability of the winter road to caribou (i.e., whether snow berm heights exceed deflection thresholds for caribou). These data were also used to inform the road maintenance crew of any snow berm heights in excess of 1.6 m.

Results

The total length of the winter access road occurring on lakes is 100 km (83.0%), whereas 20 km is constructed over portages (17.0%). The percent of snow berm measurements along the winter access road was 81% at lakes and 19% at portages. Thus, the measurements correspond to availability of snow berm conditions potentially encountered by caribou. In 2022, the average snow berm heights for lake section surveys of the winter road were 0.71 m, 0.64 m, and 0.79 m, during survey 1, 2 and 3, respectively, with a maximum berm height recorded of 1.66 m during Survey 3. The average snow berm slopes were 24.9°, 30.2°, and 30.0°, with a maximum recorded slope of 80° during Survey 2. On portage sections, average heights were 0.03 m, 0.00 m, and 0.14 m, with a maximum height of 0.70 m during Survey 1. Average snow berm slopes recorded on portages were 0.55°, 0.00°, and 7.05°, with a maximum slope of 40° recorded during Survey 3. Over all three surveys, Summary of survey data is located in Table 3-10.

Table 3-10 Snow Berm Monitoring Results for the Winter Access Road, 2022

Measurements		Survey 1 (n = 122)		Survey 2 (n = 122)		Survey 3 (n = 122)	
		Lake	Portage	Lake	Portage	Lake	Portage
height (m)	average	0.72	0.03	0.65	0.00	0.79	0.14
	min	0.00	0.00	0.00	0.00	0.00	0.00
	max	1.61	0.70	1.41	0.00	1.66	1.00
slope (°)	average	24.96	0.55	30.29	0.00	30.00	7.05
	min	0.00	0.00	0.00	0.00	0.00	0.00
	max	61.00	12.00	80.00	0.00	75.00	40.00

n = number of measurements.

Results from the snow berm monitoring program indicate that 99.4% of the snow berms measured along the winter access road were at or below 1.6 m during the operational season (Table 3-11). Two measurements of greater than 1.6 m were made at 1.61m (Survey 1) and 1.66 (Survey 3). When Snow berms were observed to be over 1.6 m during the snow berm measurement surveys, De Beers notified the winter access road maintenance crew so that they could be decreased. No additional maintenance was required from observations recorded during winter road berm monitoring.

Table 3-11 Proportion of Snow Berm Height Measurements for the Winter Access Road, 2022

Height (m)	Survey 1	Survey 2	Survey 3	Average
<1.6	99.14%	100%	99.14%	99.43%
≥1.6	0.86%	0%	0.86%	0.57%

≤ = less than or equal to; ≥ = greater than or equal to;% = percent.`

3.5 Arctic Program for Regional and International Shorebird Monitoring Surveys

De Beers is contributing to the Environment and Climate Change Canada Program for Regional and International Shorebird Monitoring (PRISM) surveys. These surveys are designed to document population numbers of Arctic shorebirds and contribute to regional knowledge in an effort to set population targets and assist with management and conservation of shorebird species (EC 2012).

Methods

Monitoring methods adhered to standard techniques for PRISM surveying (CWS 2008). De Beers first partnered with Environment and Climate Change Canada to conduct ground-based rapid assessment surveys of 12 ha plots in 2015. PRISM surveys were conducted in 2017, 2019, and 2022.

Results

In 2022, eleven PRISM plots were surveyed and a total of 21 bird species were identified (Tables 3-12, 3-13). The PRISM survey was conducted from June 16 to 19, 2022. American tree sparrow (*Spizella arborea)* was

the most frequently observed species and was recorded at eight PRISM survey plots. Incidental observations of birds outside of the plots were also recorded, notably including a breeding pair of Smiths longspur (*Calcarius pictus)*. Three confirmed and one probable American tree sparrow nests were observed during the surveys. One abandoned or inactive nest was also observed. Four Harris's sparrow (*Zonotrichia querula)* and two Red-necked phalarope (*Phalatopus lobatus)* both listed as species of Special Concern were witnessed. All eleven PRISM plots surveyed in 2022 have been surveyed previously during either 2015 or 2017. Habitat and sub-habitat types encountered in 2022 werew similar to those encountered during the previous surveys. The total habitat surveyed was comprised of 47% dry upland habitat, 28% wet lowland habitat, and 25% permanent water.

Table 3-12 Species observed during 2022 PRISM survey

Common Name	Scientific Name	Number of Plots where species was observed
American golden-plover	*Pluvialis dominica*	1
American tree sparrow	*Spizella arborea*	8
Black scoter	*Melanitta americana*	1
Blackpoll warbler	*Dendroica striata*	2
Common merganser	*Mergus merganser*	1
Common redpoll	*Acanthis flammea*	5
Grey-cheeked thrush	*Catharus minimus*	2
Harris' sparrow	*Zonotrichia querula*	4
Herring gull	*Larus argentatus*	2
Horned lark	*Eremophilia alpestris*	1
Lapland longspur	*Calcarius lapponicus*	3
Long-tailed duck	*Clangula hyemalis*	1
Pacific loon	*Gavia pacifica*	1
Red-necked phalarope	*Phalatopus lobatus*	2
Savannah sparrow	*Passerculus sandwichensis*	7
White-crowed sparrow	*Zonotrichia leucophrys*	5
Willow ptarmigan	*Lagopus*	1
Yellow warbler	*Dendroica petechia*	4
Unidentified upland bird	-	1
Unidentified gull species	*Larus sp.*	1
Unidentified redpoll species	*Acanthis sp.*	1
Unidentified shorebird species	-	1
Unidentified sparrow species	-	1

Table 3-13 Incidental species observations during 2022 PRISM survey

Common Species Name	Scientific Name
Hermit thrush	*Catharus guttatus*

Common Species Name	Scientific Name
Northern pintail	*Anas acuta*
Smith's longspur	*Calcarius pictus*
Song sparrow	*Melospiza melodia*
White-throated sparrow	*Zonotrichia albicollis*

3.6 Raptors

Raptor species (i.e., birds of prey) observed nesting within the RSA include peregrine falcon (likely anatum-tundrius complex), gyrfalcon, rough-legged hawk (*Buteo lagopus*), and short-eared owl. The short-eared owl is currently listed as special concern by COSEWIC. Both the peregrine falcon and short-eared owl have a general status rank of sensitive in the NWT (NWT SAR 2023). Both species are scheduled for assessment by the Northwest Territories Species at Risk Committee in March 2023 (NWT SAR 2022). Analysis of 13 years of nest site use and productivity monitoring data in the Ekati and Diavik mines study area found no relationship with proximity to mines (Coulton et al. 2013). The nearest active raptor nest site identified in the RSA is 18 km from the Mine site. Considering the distance of the Mine to the nearest known raptor nest, the Mine is not anticipated to affect local raptor populations.

There are two programs for raptors conducted by the Mine. The first is the Regional Raptor Nest Monitoring Program, which is conducted within the RSA and contributed by De Beers to the GNWT-ENR. The second is monitoring and deterrence of raptors from nesting in the pits. Both are conducted as part of the WMMP (De Beers 2022).

3.6.1 Regional Raptor Nest Monitoring Program

The objective of the raptor nest monitoring program is to contribute nest survey data to the GNWT-ENR for inclusion in regional databases (De Beers 2014c).

Methods

De Beers conducted regional raptor nest data through collaborative aerial surveys at both the Gahcho Kué and Snap Lake mines. The timing and methods of these surveys are developed in partnership with the GNWT-ENR and other operators in the region.

Visits to known nest sites are conducted by helicopter, using fly-by methods to identify occupying species, and to count eggs and young. Surveys are not carried out in the rain, and visits are kept as short as possible to limit disturbances to the birds. Nests are considered occupied if at least one adult bird was observed. Eggs are counted if visible. Nests are recorded as successful if at least one chick is observed in the nest. The number of chicks are also recorded. Although the monitoring is focused on raptor species, observations of other species (e.g., ravens) are recorded during the surveys and included in the summary statistics.

Results

Regional raptor nest monitoring was initially completed in 2015. The monitoring in the RSA was not conducted in 2021 due to the COVID-19 restrictions. The next regional survey will occur in 2025.

3.6.2 Pit Raptor Monitoring and Deterrence Program

As described in the WMMP (De Beers 2022), raptor interactions and mortalities at the Mine are also monitored through the wildlife sightings log, site surveillance, and wildlife incidents (Sections 3.3.3, 3.3.4 and 3.3.6), as well as incidents of raptor nesting activity on Mine infrastructure (De Beers 2014a). Raptors that are observed in dangerous areas of the Mine, such as open pit areas, will be actively deterred from nesting. Deterrent methods include bear bangers, propane noise cannons, air horns and predatory effigies. The objective of this aspect of the program is to deter raptors from nesting on Mine infrastructure or pit walls.

Methods

De Beers actively deters raptors from nesting in the open pits through the use of visual and auditory deterrents and routine monitoring. The 2022 bird deterrent and surveillance program began on May 1, where initial visual observations commenced for the presence of nesting bird species within the 5034, Hearne, and Tuzo open pits, as well as the surrounding pit areas and active construction zones. The visual monitoring of nesting birds within pit areas was performed by Environment staff during day shift using binoculars. Initial propane scare cannon deployment began on May 10th around the pit areas. Eleven cannons were placed around Hearne; two on the north wall near Geohut #3, one by Geohut #4 (west wall), three located on a bench in the southwest wall, and three placed at the blaster lookout (northeast wall). Additionally, two more cannons were added to Hearne to cover the east wall. Initially cannons were placed along the east wall of 5034 pit, near a 2021 peregrine falcon nest site. On May 15th, four more cannons were added to 5034 pit; these placements included the west wall near Geohut #2 and the north wall where the blaster lookout was located. This area encompassed the southern end of Tuzo pit, and was the only accessible location to place deterrents within the Tuzo pit. Six cannons were also distributed around the airstrip as a preventative measure for waterfowl presence on the airstrip. The cannons were removed from the airstrip on May 31st as no waterfowl occupied the area. These cannons were used at the north wall of the Coarse Processed Kimberlite (CPK) dump. There were 22 cannons set up around 5034 pit and Hearne pit during the peak of the season. These cannons were adjusted or repositioned throughout the season based on bird activity and specific areas of concern.

In addition to propane cannon deployment, predator decoys were also utilized in the pit areas. Kite decoy deployment increased in the 2022 Bird Program with an average of 15 kites being flown at once. Kites were flown constantly throughout the nesting season; these visual deterrents were located above each wall of both pits. More kites were added as the season progressed by establishing the poles in rock piles in areas of potential nesting interest. Kites were used outside of the pit areas as well. Deterrent placements were adjusted throughout the program to accommodate mining and construction activities as well as extreme weather events. One full-time bird monitor was brought on to manage deterrents, conduct daily surveillance, and monitor nest sites as required. Bethany Nesbitt, who conducted the Bird Program in 2021, completed these tasks with Mine Environment staff when needed. All bird sightings were documented on a daily field sheet.

Results

There were a total of 1479 individual birds observed in or around the 5034, Hearne, and Tuzo pits in 2022 (Table 3-14). Of the the birds observed in or near the pits, the most common were the bank swallow with 196 individuals counted over 32 occasions.

In early May, the main species observed around the pit areas were peregrine falcons and rough-legged hawks. By mid-May, the primary concern became peregrine falcons as two pairs were seen frequenting both pits and courtship displays were observed. Nesting concerns in active construction areas and mine operation sites (outside of open pit areas) included the following species: bank swallow, cliff swallow, American robin, common raven, barn swallow, and shorebird species.

On August 13th to 18th, peregrine falcon sightings of 3 juvenilles and 2 adults occurred on top of the north wall of 5034 pit 1 bench below the main road. The Environment Department conducted surveys of the area from a distance intended to negate any stress. The last sighting of a single fledgling was observed on August 18th.

In May and June, several bank swallow colonies were observed within the Coarse Processed Kimberlite (CPK) facilities. Upon consultation with Environment and Climate Change Canada via telephone on June 1st,, a monitoring action plan was initiated. A 100 m setback of heavy equipment operation was implemented from the colonies in order to minimize the potential impact to nesting habitat, damage of nesting burrows and any excessive stress upon adults and young. Setback barriers were installed within the CPK facility and all operators working within the area were notified.

Table 3-14 Recorded observations of individual species count and total number of observations, 2022

Species	Number of observations	Number of individuals
Peregrine falcon	58	86
Bank swallow	32	196
Cliff swallow	21	164
Barn swallow	10	18
Tree swallow	1	1
Common raven	45	68
American pipit	37	43
American robin	28	29
Semipalmated plover	20	54
Least sandpiper	10	24
Lesser yellowlegs	1	1
Sandpiper spp.	3	3
Greater white-fronted goose	10	182
Snow goose	5	56
Cackling goose	9	179
Goose spp.	6	31
Northern pintail	11	67
Black scoter	8	38
Long-tailed duck	4	11
Green-winged teal	4	18
Surf scoter	3	5

Northern shoveler	1	2
Scaup spp.	2	3
Duck spp.	4	23
Common loon	2	2
Loon spp.	1	1
Common merganser	1	1
Northern harrier	2	2
Rough-legged hawk	6	6
Bald eagle	4	4
Golden eagle	3	3
Raptor spp.	2	2
Gull spp.	12	61
Lapland longspur	9	14
Snow bunting	1	5
Horned lark	2	2
Savannah sparrow	10	11
Harris' sparrow	7	7
American tree sparrow	5	7
White-crowned sparrow	6	7
Unidentified songbird	17	34
Willow ptarmigan	6	6
Ptarmigan spp.	1	3
Total	**430**	**1479**

Note: the number of individuals is biased high as the same individuals may be observed during surveys.

3.7 Upland Breeding Birds

In 2015, a Migratory Bird Nest Mitigation Plan was developed and submitted to and approved by Environment and Climate Change Canada (De Beers 2015c). The objective of the nest management program is to avoid destruction of active upland migratory bird nests in areas scheduled for flooding or disturbance by mining. This plan described mitigation actions to limit harm to migratory birds and the disturbance or destruction of nests and eggs and to comply with the *Migratory Birds Convention Act*. Each fall De Beers pro-actively clears standing vegetation in areas anticipated to flood the subsequent spring, therefore reducing the attractiveness of these areas to tree and shrub nesters. Each spring, prior to the 50% snow melt when nesting activity is typically initiated, De Beers deploys bird deterrents to those same areas targeting ground nesting birds. Additionally, during the nesting season, De Beers re-visits these areas to confirm functionality of the deterrents and observe bird activity.

Upland birds include shorebirds, ptarmigan, and songbirds (excluding raven). The rusty blackbird, bank swallow, barn swallow, harris's sparrow, lesser yellowlegs, horned grebe and the red-necked phalarope are birds of concern that may occur in the RSA. They are also listed by COSEWIC as either threatened or special

concern (COSEWIC 2023). From 1998 to 2004, rapid assessment upland bird surveys were completed to provide a comprehensive species list in the RSA. In 2004 and 2005, permanent sample plots were established in the RSA to estimate the variation in upland breeding bird density and richness in the RSA and LSA, and to assess the importance of habitats in the LSA for upland bird nesting. Impacts to upland breeding birds are anticipated to be localized at the Mine site and not to influence regional populations (De Beers 2010). The objective of monitoring for upland birds is to detect changes in regional bird populations over time. This objective is achieved through participation in Environment and Climate Change Canada PRISM surveys (Section 3.5). De Beers contributes PRISM monitoring during the operating life of the Mine to fill existing information gaps in ECCC's N7 Bird Conservation Region (Section 3.5).

3.7.1 Nest Management Program

Development and operation of the Mine has the potential to inadvertently disturb upland breeding birds and their nests through land clearing activities to develop site infrastructure and the raising of Lakes D2 and D3 (Lakes D2/D3) and E1. For the latter, during the operation of the Mine, terrestrial habitat around Lakes D2/D3 and E1 will be flooded through the establishment of diversion dykes in the D and E lakes watersheds (Table 3-14). Water levels in these lakes have increased following freshet each year since the diversion dykes were constructed in 2015. They were predicted to continue to rise until reaching full supply level in Year 2-3 for Lake E1, and Year 4 for Lakes D2/D3, after which water levels will stabilize until the dykes are removed at closure (Table 3-16). The actual extent of flooding in 2022 at Lakes D2/D3 and E1 is reported in Table 3-15. As the water levels will rise most rapidly during freshet, the period of flooding will overlap with the migratory bird nesting season, which is defined to occur annually from the middle of May to mid-August (ECCC 2022).

Table 3-15 Predicted Timing and Extent of Predicted and Actual Flooding at Lakes D2/D3, and E1

Timing of Flooding	Incremental Extent of Flooding							
	Lake D2/D3				Lake E1			
	Predicted		Actual		Predicted		Actual	
	Elevation (masl)	Area (ha)	Elevation (masl)	Area (ha)	Elevation (masl)	Area (ha)	Elevation (masl)	Area (ha)
2015	424.2	0	424.2	0	425.2	0	425.2	0
Year 1 (June - October 2016)	425.7	19.7	426.1	34.2	426.0	5.1	425.8	4.5
Year 2 (June - October 2017)	426.3	18	426.6	10.2	426.0	1.1	425.9	0.5
Year 3 (June - October 2018)	426.8	9.8	426.7	3.1	n/a	n/a	425.9	0
Year 4 (June - October 2019)	427.0	4.6	427.0	4.6	n/a	n/a	n/a	n/a
Year 5 (June – October 2020)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Year 6 (June – October 2021)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Year 7 (June – October 2022)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Total	**n/a**	**52.1**	**n/a**	**52.1**	**n/a**	**6.2**	**n/a**	**5.0**

Note:
Lake D2/D3 and E1 reached their spillover elevation in June 2019 and 2018, respectively. Following the spillover, changes to the lake water elevations were due to natural fluctuations.

Methods

The hydrometric station at Lake D2/D3 was established in 2015 and continuous monitoring of water surface elevations (WSE) have been ongoing annually since 2015. The hydrometric station on Lake E1 was established in 2016 and water level measurements and continuous monitoring of WSE have been conducted annually since 2018. Flooding (WSE) is monitored to verify predictions of water elevations. If water levels are on the rise, a vegetation clearing program will be put in place as mitigation.

Results

There was no vegetation clearing program conducted in 2022. The actual peak elevation in 2022 for Lake D2/D3 was similar to that estimated by the EIS with associated flooding being slightly higher than predicted. The peak WSE and actual area for Lake E1 was also similar to the predicted values from the EIS. The timing and extent of flooding predicted in the EIS is compared to actual observations is shown in Table 3-16 for both lakes. Until predictions can be verified, monitoring will continue.

3.8 Small Mammals

The periodic population cycles of small mammals can have strong influences on other species in the Arctic ecosystem such as clutch and litter size of raptors and foxes, respectively. The nearest small mammal monitoring location to the Mine is at the Daring Lake research facility (approximately 200 km northwest of the Mine), operated by the GNWT-ENR. In 2015, De Beers began annual monitoring of small mammals, including lemmings and voles, to provide an additional regional monitoring site to the GNWT-ENR.

The methods for the small mammal survey follow those outlined by Carrière (1999) and Outcrop Communications (2005). The small mammal program in 2022 was conducted from August 12th to 17th over five nights, with 100 traps set per night. The same two transects established in 2015 northeast of Area 2 of Kennady Lake were used again in 2022. This habitat is considered representative of tundra features typical to the Taiga Shield High Subarctic Ecoregion. Both transects measured 250 m in length and are parallel to each other, roughly 100 m apart. Historically, a mixture of oats and peanut butter were utilized as bait for all museum traps. The 2022 survey also utilized fresh apple cuttings, approximately 1 cm in length & 0.5 cm in width, on transect 1 only with one apple cutting set per trap. This process was employed to compare the efficacy of bait On both transects, bait was replaced as needed. On transect 1, the apple cuttings were replaced every other day. The bait on transect 2 was replaced on August 16th due to rain the night before (washed off peanut butter from several traps).

Results

Catch results are summarized in Table 3-16. A total of nine animals were captured over the five consecutive trap nights which occurred August 13th to 17th. One juvenile Lapland longspur and eight small mammals. Specimens were identified using the NWT Small Mammal Identification Guide (GNWT-ENR 2005). Three voles and one lemming were unidentified. All animals trapped were intact at the time of collection and appeared to be in good physical condition. Transect 1, baited with apple, proved to yield significantly more catch than transect 2, baited with peanut butter. It was noted that Transect 1 ran though wetter areas than Transect 2.

Arrangements are being made to ship these samples to the GNWT-ENR laboratories in Yellowknife during the first quarter of 2023.

Table 3-16 Small Mammal Monitoring Program Catch Summary, 2022

Date	Transect No.	Site No.	Trap No.	Species
13-Aug-2022	1	10	1	Meadow vole
14-Aug-2022	1	1	1	Southern red-backed vole
14-Aug-2022	1	10	1	Meadow vole
14-Aug-2022	1	13	1	Lapland longspur*
15-Aug-2022	1	14	2	Unknown vole
16-Aug-2022	1	20	2	Unknown vole*
17-Aug-2022	1	10	1	Meadow vole
17-Aug-2022	1	14	2	Unknown vole
17-Aug-2022	1	25	2	Unknown lemming

* Both individuals found alive in trap but severely injured.

3.9 Environmental Indicators

To provide estimates of the annual changes in local environmental conditions surrounding the Mine, De Beers committed to monitoring basic environmental indicators or covariates (De Beers 2014b).

Methods

The indicators recorded by Environment staff included the following:

- snow melt (date of 50% snow cover and 10% snow cover);
- lake thaw (date of 50% ice cover and 10% ice cover on selected lakes);
- lake freeze (date of first ice across selected lakes);
- first snow (date of first snowfall that does not melt); and,
- migratory bird arrival (date of first and second observation of common and easily identified migratory birds, including raptor, waterfowl and upland bird species).

Results

The environmental indicators that were recorded in 2022 are summarized in Table 3-17.

Table 3-17 Gahcho Kué Environmental Indicators, 2022

Environmental Indicator	Date
Snow melt	June 1, 2022 (50% snow cover)
	June 12, 2022 (10% snow cover)
Kennady Lake thaw	June 21, 2022 (50% ice cover)

	June 26, 2022 (10% ice cover)
Lake freeze	October 22, 2022 (100% ice cover on Kennady Lake
First snow	October 12, 2022 (date of first snow that did not melt)
Migratory bird arrival	May 14, 2022 (Unidentified Geese flying over Kennady Lake)

3.10 Mine Activity

Sensory disturbances, such as noise, smells, dust, or the presence of people resulting from mining activity may alter the behaviour or distribution of wildlife in habitats adjacent to development (Bayne et al. 2008; Boulanger et al. 2012). De Beers committed to record covariates contributing to overall Mine activity to help explain possible changes in wildlife behaviour and distribution (De Beers 2014c).

Methods

The indicators recorded monthly by the Mine include the following:

- occupancy (number of site staff);
- fuel consumption;
- mine rock moved;
- ore processed; and
- domestic water consumption.

Results

In 2022, average monthly occupancy ranged from 329 in January to 369 in October (Table 3-18). The total fuel consumption for 2022 was 47,346,991L of diesel. The total amount of mine rock mined was 33,947,188 tonnes. The total amount of ore processed was 3,102,219 tonnes. The total amount of water consumed for domestic use was 27,417,000, which does not include the additional water drawn from the Water Management Pond for site operation activities such as dust suppression within the Controlled Area (14,822,000L).

Table 3-18 Gahcho Kué Camp Occupancy, 2022

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Occupancy	329	350	366	355	363	361	351	343	359	369	367	349

4 WILDLIFE MITIGATION AND MONITORING PLAN AUDIT

Mitigation measures are described in the WMMP and stem from current practices at existing mines or are derived from suggestions during the environmental assessment process. In order to evaluate mitigation measures an audit is implemented annually. The results of the audit should include, site mitigation measures that are regularly implemented by Mine staff, and results from any additional special studies undertaken to further understand effectiveness of mitigation actions intended to reduce residual effects.

Section 5.2 of the WMMP states that the mitigation proposed in the WMMP should be evaluated to confirm that mitigations work as intended, and new mitigation identified through adaptive management should be documented. The mitigation policies and actions evaluate:

- if all mitigation has been implemented;
- which mitigation was observed or demonstrated to be successful or effective;
- if new mitigation has been implemented in response to new issues; and
- if some mitigation is redundant.

Methods

The audit was conducted in 2022 based upon 2021 mitigations. For the audit, WSP Golder was contracted to work with Mine Environmental staff to review mitigations provided in the WMMP. Mine Environmental staff were asked the following questions:

1) Was the mitigation implemented in 2021?

2) Was the mitigation observed or demonstrated to be effective?

3) Was the mitigation redundant in application with any other mitigation?

4) Are there any special studies required to support determining effectiveness of the mitigation?

GNWT-ENR indicated in the conditional approval letter for the WMMP that the effectiveness of snow berm reduction on the winter access road (113 km) could not be evaluated with the current mitigation management measures outlined in Version 1.1. In response, WSP Golder conducted an evaluation of the Mine's snow berm management and compared the management to caribou observations that occurred in years where behaviour monitoring was triggered. WSP Golder analyzed the snow berm data and caribou behaviour data locations as part of the mitigation audit deliverable to examine how frequently and where snow berm management has been required.

Results

The results of the WMMP mitigation audit indicates that the 2021 mitigations implemented appear effective according to the observations of Mine staff. Seventy mitigations from the WMMP (97%) were implemented in 2021, all of which were observed by Mine staff to be effective. Two mitigations identified in the WMMP were not applicable. A summary of mitigations is listed in table 4-1.

The detection of bank and cliff swallows during 2021 resulted in new management actions to minimize disturbance to nesting birds from mining activity.

Snow berm monitoring from 2014 to 2022 identified infrequent instances (<5% of all recorded measurements) that equal or exceed the threshold height of 1.6 m. The majority (89%) of snow berms greater than 1.6 m were at lake locations (54 measurements) compared to portage locations (7 measurements). In years where caribou monitoring was triggered and data were available (2014, 2018, 2022), four or fewer locations per year had snow berm measurements greater than 1.6 m, which appears to be a threshold height for deflecting caribou from roads (Rescan 2011). Observations of caribou from behaviour monitoring detected caribou occurrences on both sides of the winter access road before and after snow berm reduction. This suggests it is unlikely that the snow berms established from ploughing the winter access road are hindering movement for caribou. Although snow berms exceeding 1.6m are uncommon, it could not be verified whether caribou are using locations where snow berms have been reduced. As a recommendation for 2023 WSP Golder suggested placing wildlife cameras at locations where snow berms have been reduced.

Table 4-1 Summary of Mitigations Implemented in 2021

Mitigation Implemented?	Count of Mitigations	Proportion (%) of Total Implemented Effective	Mitigation not Implemented	Rationale for no Implementation
Yes	70	100%	N/A	N/A
Not Applicable	2	-	Backfill Mined out Pits.	Mined out pits have not been backfilled because it is not applicable at this phase of development of open pits.
			Suspending mining activities in areas where caribou are present at the mine site.	Caribou were present on-site during winter months, but operations proceeded as per usual, as it is not a requirement to shut down the entire active Mine when caribou are present.

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6 ACRONYMS AND ABBREVIATIONS

AEMP	Aquatic Effects Monitoring Program
ANOVA	Analysis of Variance
AN PAD	Ammonium Nitrate Pad
ARKTIS	ARKTIS SOLUTIONS INC.
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
De Beers	De Beers Canada Inc.
DFO	Fisheries and Oceans Canada
DKFN	Deninu Kué First Nations
DNA	deoxyribonucleic acid
EBA	Tetra Tech EBA
EC	Environment Canada
ECCC	Environment and Climate Change Canada
EIS	Environmental Impact Statement
ENR	Department of Environment and Natural Resources, Government of the Northwest Territories
FRMC	Fort Resolution Metis Council
GIS	Geographical Information System
GNWT	Government of the Northwest Territories
Golder	Golder Associates Ltd.
GPS	Global Positioning System
ICRP	Interim Closure and Reclamation Plan
IEMA	Independent Environmental Monitoring Agency
LKDFN	Łutselk'e Dene First Nation
LSA	Local Study Area
Mine	Gahcho Kué Mine
Mine Ops.	Mine Operations
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVLWB	Mackenzie Valley Land and Water Board
NSMA	North Slave Métis Alliance
NWT	Northwest Territories
NWT SAR	Northwest Territories Species at Risk
NWTMN	Northwest Territories Métis Nation
PK	Processed Kimberlite
PKMRMP	Processed Kimberlite and Mine Rock Management Plan
PRISM	Arctic Program for Regional and International Shorebird Monitoring
RSA	Regional Study Area
SAR	Species at Risk
SHEOP	Safety, Health, and Environment Operational Procedure
sp.	species
spp.	multiple species
TCWR	Tibbitt to Contwoyto Winter Road
UPD	Updated Project Description
TG	Tłı̨chǫ Government

VSMP	Vegetation and Soil Monitoring Program
WEMP	Wildlife Effects Monitoring Program
WMMP	Wildlife Management and Monitoring Plan
WRD	Water Resource Division
WWHPP	Wildlife and Wildlife Habitat Protection Plan
YKDFN	Yellowknives Dene First Nation

7 UNITS OF MEASURE

≤	less than or equal to
≥	greater than of equal to
%	percent
+	plus or minus
>	greater than or equal to
°	degree
°C	degrees Celsius
h	hour
ha	hectare
km	kilometre
km/h	kilometres per hour
km^2	square kilometre
L	litre
m	metre
masl	metres above sea level
m^3	cubic metre

8 GLOSSARY

Abundance	The number of individuals
De Beers	De Beers Canada Inc.
Density	The number of individuals per unit area
Distribution	The pattern of dispersion of an entity within its range
Habitat use	The way and animal uses (or *consumes*, in a generic sense) a collection of physical and biological entities in a habitat
Hemostat	A plier-like locking medical instrument used to secure fine and delicate materials
Home range	The area traversed by an animal during its activities during a specific period of time
Mine	Gahcho Kué Mine
Population	Classically, a collection of interbreeding individuals
Transect	A method of sampling along a path or fixed line
Upland	Ground elevated above the lowlands along rivers or between hills; highland or elevated land; high and hilly country

APPENDIX A: 2022 CARIBOU BEHAVIOURAL MONITORING RESULTS

Survey # (ScanType-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Group 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Group	1	08:39:00		7	1		2								
Group 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Group	1	08:47:00		8											some walked over rise
Group 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Group	1	08:49:00		4		1	3			PUT x1	150	0	00:20		
Group 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Group	1	08:49:20		6											
Group 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Group	1	08:55:00	1	7										
Group 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Group	1	09:03:00		8											4 females, 4 males
Group 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Group	1	09:11:00		4			2								2 walking across road, one excavator and another light vehicle working about 1km away
Group 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Group	1	15:36:00		4											same group as in the morning: now near exit 421 standing 207m west of road
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:42:00		1	1										Adult male
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:44:00													
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:48:00					1								
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:48:30		1											
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:49:00				1				Pickup Truck x1	150	1	00:20	most animals look up briefly before return to feeding	
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:49:20		1										security truck went by on the road a bit and parked	
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:51:00					1								
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:52:00		1	1										
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:52:30		1											
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:53:10		1			1								
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	08:53:10		1			1								
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	09:01:20		1			1								
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	09:01:40		1			1								
Focal 1-1	6-Feb	-29	15	ESE	589367	7036600	130	N	25	10	Portage	on hill	Gahcho Kue Mine Site	2km from AN Building	F, M	50:50	Focal	1	09:03:00		1											Still feeding
Group 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Group	2	09:44:00													Arrive with 4 truck convoy and two pickups with trailers coming the other way. Animals generally exhibited moderate response to the initial stressor until they walked behind the hill	1 interval completed
Group 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Group	2	09:45:00		7	10		19		2	OTx1 HTx4 PUT	205	2	-		
Group 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Group	2	09:46:20		7			2			PUT x2	205	1	00:10		
Group 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Group	2	09:46:30		7											
Group 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Group	2	09:53:00					8								Most have walked around the rides
Group 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Group	2	09:56:00												2 cow/ blue, 4F x1M/1 cow, all F/ Pauline	
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:48:00			1										Male, not apparently disturbed by trucks but moving off slowly with the rest of the herd. Arrived at the group with 4 truck convoy and two pickups with trailers coming the other way @9:44am	Under
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:48:45					1								
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:49:00			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:49:50			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:40:00			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:49:10			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:49:30			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:50:30			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:50:20			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:50:20			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:51:00			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:51:00			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:52:00			1										
Focal 1-2	6-Feb	-27	15	ESE	584115	7048243	200	N	19	19	Lake	hill	Gahcho Kue Winter Road Spur	200 m N of road	F, M	8/10	Focal	2	09:53:00					1								walked behind ridge
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	7/3/1	Group	1	09:38:00	7				4								
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur		F, M, J	-	Group	1	09:42:00	4	3	1		3								
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur		F, M, J	-	Group	1	09:50:00	4	1	1		3			OTx1	150	0	00:10		
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur		F, M, J	-	Group	1	09:51:00	4	1	1		1								
																														two bulls who were walking toward the truck suddenly turn and run and chase each other back across the lake, keeping into the air before returning to the group. No reaction from the rest of group who were still 190m away on shore	
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur		F, M, J	-	Group	1	09:54:00	4	3					2	OTx1	50	0	03:00		
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M	3/2/1	Group	1	09:58:00	5											
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur		F, M, J	3/2/1	Group	1	09:58:00	5											three walked behind island
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur		F, M, J	3/2/1	Group	1	10:11:00			5					CRBU x 50	300	1	01:00		
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur		F, M, J	3/2/1	Group	1	10:37:00	6											still in view as continued to walk a few points
Group 2-1	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur		F, M, J	3/2/1	Group	1	10:43:00	8							HTx3	200	0	na		
Focal 2-1 (a)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	7/3/1	Focal	1 (a)	09:38:00			1										Bull, on lake	Under
Focal 2-1 (a)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (a)	09:39:00			1										
Focal 2-1 (a)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (a)	09:41:00			1										
Focal 2-1 (a)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (a)	09:42:00					1								
Focal 2-1 (a)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (a)	09:45:00					1								walked behind island and out of sight
Focal 2-1 (b)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (b)	09:48:00	1												cow
Focal 2-1 (b)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (b)	09:58:00	1												
Focal 2-1 (b)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (b)	10:02:47	1		1										
Focal 2-1 (b)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (b)	10:02:50	1												
Focal 2-1 (b)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (b)	10:05:00	1				1								
Focal 2-1 (b)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (b)	10:08:00	1				1								
Focal 2-1 (b)	7-Feb	-26	10	N	559509	7064568	190	N	11	11	Lake		Gahcho Kue Winter Road Spur	190m off road	F, M, J	-	Focal	1 (b)	10:10:00	1												45m baseline: moves from vertical/ end L-shift and remains this once further
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Group	2	10:14:00	2											walk toward group 1
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Group	2	10:19:00				25	10	50		HTx1, PUTx1	270	0	01:00	some of the group looks up, most of the herd continues walking around the ridge	
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Group	2	10:22:00	14											
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Group	2	10:30:00	3		14		2								
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Group	2	10:38:00	8		2										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Group	2	10:40:00	12							PUT x1	270	0	na		
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Group	2	10:43:00	12							HTx3	270	0	na		
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Group	2	10:46:00	8		4		2			CRBUx10	150	0	na	another herd walks by on ridge	
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:23:00			1										Female, antlers on lake
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:24:30			1										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:25:00			1										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:25:41			1										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:26:04			1										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:26:21			1										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:26:40			1										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:27:39			1										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:27:58			1										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:29:58													
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:30:44			1										
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:32:00													
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:38:00	1												
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:40:00	1							PUT x1	270	0	na		
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:43:00	1							HTx1	270	0	na		
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:45:00	1												Female dark antlers
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:46:00	1							CRBUx10	150	0	na		
Group 2-2	7-Feb	-26	10	N	559509	7064568	270	N	45	12	Lake		Gahcho Kue Winter Road Spur	270m from road	F, M	70:30	Focal	2	10:50:00	1												Still bedded
Group 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Group	3	11:11:00	10											All bedded
Group 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Group	3	11:19:00	10											Likely same group from drive up (group 3) but can't tell for sure
Group 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Group	3	11:27:00	9	5		2								under 3 intervals
Group 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Group	3	11:28:00	2	5	3				HTx3, PUTx5	370	1	03:00		
Group 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Group	3	11:31:00	10											
Group 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Group	3	11:38:00	10											
Group 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Group	3	11:46:00	10							HTx2	370	0	00:02	silence up briefly at each truck	
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:14:00			1										dark male
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:15:00	1		1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:15:50			1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:16:20					1								
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:16:32			1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:23:10			1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:23:40			1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:25:00			1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:26:00			1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:27:00			1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:28:00			1				HTx3, PUTx5	370	1	03:00		
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:30:30			1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:31:00			1										
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:31:20	1											
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:34:00	1											
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:39:50	1											
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:44:00	1											
Focal 2-3	7-Feb	-20	10	N	559501	7069285	370	NE	10	10	Lake	on hill slope near lake	Gahcho Kue Winter Road Spur	Road	F, M, J	6/2/1	Focal	3	11:48:00	1							HTx2	370	0	00:02	silence up briefly at each truck	
Group 2-4	7-Feb	-19	20	N	551218	7067298

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Group 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Group	1	09:17:00			25		10							part of the larger group joins group 1. There are more on the far side of the lake 1km off the road (CRBU.tail)	
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:52:27			1										
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:50:36													
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:51:20			1										
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:51:50					1							Moving away from rest of group, toward the far end of the lake.	
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:52:32			1										
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:52:59			1										
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:55:00			1										
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:55:13					1								
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:59:00								HTxt, grater x1	1000	3	01:32		
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:59:50													
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:59:56				1									
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:00:32													
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:01:00								HTxt1	1000	3	na		
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:04:00													
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:09:50													
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:13:00					1								
Focal 3-1	8-Feb	-31	10	NNE	570167	7064295	540		17	17	Lake		Gahoho Kue Winter Road Spur	540m from road	F, M	-	Focal	1	09:14:00												finished scan	
Group 3-2	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Group	2	09:18:00		18	2								on hill	Under 3 intervals
Group 3-2	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Group	2	09:17:00		17							HTx3	1000	3	na	lone moves down to join the other group	
Group 3-2	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Group	2	09:24:00		15	1								starting to move over the the crest of hill	
Group 3-2	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Group	2	09:32:00		4			2							
Group 3-2	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Group	2	09:33:00					3						most have moved over the hill but seem to be making their way along the ridge.	
Group 3-2	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Group	2	09:40:00		6									A small group of 6 formed futher down the ridge. all feeding	
Focal 3-2(a)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(a)	09:21:00		1									Bull	Under
Focal 3-2(a)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(a)	09:25:00		1									lost line of sight	
Focal 3-2(b)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(b)	09:26:00		1									New bull with antlers on top of hill	Under
Focal 3-2(b)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(b)	09:28:20												
Focal 3-2(b)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(b)	09:29:30			1									
Focal 3-2(b)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(b)	09:29:41												
Focal 3-2(b)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(b)	09:30:00											moved out of sight	
Focal 3-2(b)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(b)	09:31:00											back in view	
Focal 3-2(b)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(b)	09:31:29		1										
Focal 3-2(b)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(b)	09:31:50					1							
Focal 3-2(b)	8-Feb	-31	10	NNE	570198	7064078	1000	E	34	18	Portage	on hill	Gahoho Kue Winter Road Spur	1km E of road	F, M	-	Focal	2(b)	09:33:00											walked out of view, lost sight of him but he walked further down the ridge and joined a small group feeding	
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	10:45:00			2		10							
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	10:47:00				62	3			PUTx1	500	1	00:10		
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	10:47:10					50						walking past across lake	
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	10:55:00					55							
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	10:58:00				55				PUTx1	500	1	03:00		
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	11:03:00	21			34							the truck wrecked there but they are starting to lie down now	
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	11:07:00	53		4					PUTx1	500	3	na		
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	11:11:00	55											
Focal 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Focal	3	10:49:00					1						likely female with calf	
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	10:57:00					1						still walking with group	
Focal 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Focal	3	10:58:00					1			PUTx1	500	1	05:00		
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	11:03:00	1											
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Group	3	11:07:00	1							PUTx1	450	3	na		
Group 3-3	8-Feb	-30	10	NNE	551951	7082921	500	S	200	55	Lake		Gahoho Kue Winter Road Spur	winter road	F, M, J	1 calf	Focal	3	11:11:00	1										still bedded	
Group 3-4	8-Feb	-30	10	NNE	551951	7082921	1500	S	40	6	Lake		Gahoho Kue Winter Road Spur	1500m S of road	F, M	-	Group	4	10:53:00	6										Part of the initial group 3/4 herd but actino separately	under 3 intervals
Group 3-4	8-Feb	-30	10	NNE	551951	7082921	1500	S	40	6	Lake		Gahoho Kue Winter Road Spur	1500m S of road	F, M	-	Group	4	10:58:00	6							PUTx1	1500	3	na		
Group 3-4	8-Feb	-30	10	NNE	551951	7082921	1500	S	40	6	Lake		Gahoho Kue Winter Road Spur	1500m S of road	F, M	-	Group	4	11:06:00	6											
Group 3-4	8-Feb	-30	10	NNE	551951	7082921	1500	S	40	6	Lake		Gahoho Kue Winter Road Spur	1500m S of road	F, M	-	Group	4	11:07:00	6							PUTx1	1500	3	na		
Group 3-4	8-Feb	-30	10	NNE	551951	7082921	1500	S	40	6	Lake		Gahoho Kue Winter Road Spur	1500m S of road	F, M	-	Group	4	11:14:00	6											
Group 3-4	8-Feb	-30	10	NNE	551951	7082921	1500	S	40	6	Lake		Gahoho Kue Winter Road Spur	1500m S of road	F, M	-	Group	4	11:17:00	6							HTx2	1500	3	na		
Group 3-5	8-Feb	-30	10	NNE	550475	7066680	100	S	8	8	Lake		Gahoho Kue Winter Road Spur	100m S of road	F, M, J	3:1:4	Group	5	11:28:00			1								Walkino SE, video taken	under 1 interval
Group 3-5	8-Feb	-30	10	NNE	550475	7066680	100	S	8	8	Lake		Gahoho Kue Winter Road Spur	100m S of road	F, M, J	3:1:4	Group	5	11:36:00					1							
Group 3-5	8-Feb	-30	10	NNE	550475	7066680	100	S	8	8	Lake		Gahoho Kue Winter Road Spur	100m S of road	F, M, J	3:1:4	Group	5	11:39:00					8						they are walking out of sight. we won't approach further to avoid disturbing them.	
Focal 3-5	8-Feb	-30	10	NNE	550475	7066680	100	S	8	8	Lake		Gahoho Kue Winter Road Spur	100m S of road	F, M, J	3:1:4	Focal	5	11:51:00					1						Mare	under
Focal 3-5	8-Feb	-30	10	NNE	550475	7066680	100	S	8	8	Lake		Gahoho Kue Winter Road Spur	100m S of road	F, M, J	3:1:4	Focal	5	11:52:00												
Group 3-5	8-Feb	-30	10	NNE	550475	7066680	100	S	8	8	Lake		Gahoho Kue Winter Road Spur	100m S of road	F, M, J	3:1:4	Group	5	11:53:00					1						still alert to our presence, checking back over his shoulder periodically. Bringing up the rear while females lead the way and calves in the middle, prancing about.	
Group 3-5	8-Feb	-30	10	NNE	550475	7066680	100	S	8	8	Lake		Gahoho Kue Winter Road Spur	100m S of road	F, M, J	3:1:4	Group	5	11:58:01			1									
Focal 3-5	8-Feb	-30	10	NNE	550475	7066680	100	S	8	8	Lake		Gahoho Kue Winter Road Spur	100m S of road	F, M, J	3:1:4	Focal	5	11:38:00					1						Wolfdeer drown the lake out of view	
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	12:57:00	1	22	1								Small group on the right of the larger group spread out along the shore feeding or bedded on lake.	
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:05:00	2	35									"herd is on Lake 8/9. could be same herd as group 4 but hard to know for sure.	
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:13:00	2	17		6				HTx5, PUTx1	500	0	08:00	this stressor had an obvious compounding effect for some of the individuals as the trucks passed as i broke it up into four chunks to describe the reaction. All together the majority response of the group was a 0 and the time to previous behaviours for the rest was about 8 min	
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:14:00	2	18	1	6				HTx1	500	0	00:10		
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:15:00		18	2	4				HTx1	500	0	00:10		
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:18:00		19		3	1	2		HTx2, PUTx1	500	0	02:00	This group is mostly not concerned, other part of the herd were flushed from where they were bedded	
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:19:00		22	2								no lake	
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:27:00		31									Seem to be back to normal	
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:33:00		28		2							The rest of the herd is walking and joins up to feed.	
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:42:00		26	5					HTx1	500	0	na		
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:44:00		20	7	7				HTx2	500	0	na		
Group 3-6	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Group	6	13:48:00					29			HTx1	500	2		All herd moves over the hill and out of sight.	
Focal 3-6(a)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(a)	13:00:00		1									none	
Focal 3-6(a)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(a)	13:05:00		1									tucked behind hill	
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:22:00		1										
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:30:00		1										
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:31:00												
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:31:20		1										
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:32:10		1										
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:32:20		1										
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:36:00		1										
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:37:00		1										
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:42:00			1		1			HTx1	500	1			
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:43:00					1			HTx1	500	1			
Focal 3-6(b)	8-Feb	-30	10	NNE	552448	7082337	500		64	25	Lake	lake shore	Gahoho Kue Winter Road Spur	500m off road	F, M	close to 50:50	Focal	6(b)	13:44:00						1		HTx2	500	1		trotted over hill out of sight	
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:04:00		10									herd feeding between AN building and main site.	
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:08:00		10						PUTx1	180	0	na		
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:12:00		10		1				PUTx1	180	0	na		
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:13:00		10										
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:15:00		10		2	1			HTx1	180	0	02:00		
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:15:40		10										
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:19:00		7		1	2			HTx1, PUTx1	180	0	00:10		
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:19:10		10										
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:20:40		9		1				PUTx2	180	0	na		
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:21:00		10										
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:24:40		7			3			HTx1, PUTx2	180	0	na	3 do look uncomfortable but don't actually look up. just shuffling as the trucks go by.	
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:26:50		10										
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:27:10		9						HTx1	180	1	00:02	1 looks up for a few seconds	
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:27:12		10										
Group 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Group	7	16:29:00		10									All feeding	
Focal 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Focal	7	16:09:00		1									slow no antlers	
Focal 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Focal	7	16:08:00		1						PUTx1	180	0	na		
Focal 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Focal	7	16:09:30		1			1			PUTx1	180	0	na		
Focal 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Focal	7	16:09:40		1										
Focal 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Focal	7	16:12:00		1						PUTx1	180	0	na		
Focal 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Focal	7	16:15:00		1						HTx1	180	0	na		
Focal 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Focal	7	16:19:00		1						HTx1, PUTx1	180	0	na		
Focal 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Focal	7	16:20:40		1						PUTx2	180	0	na		
Focal 3-7	8-Feb	-28	15	NNE	590553	7036543	180		20	10	Portage	lundra	Gahoho Kue Mine Site	Mine road, AN building, main site	F, M	approx. 60:40	Focal	7	16:29:00		1										
Focal 4-1	9-Feb	-36	0	-	571456	7062224	800	SW	22	22	Portage	P-16	Gahoho Kue Winter Road Spur	800 m SW of road	F, M	1:1	Focal	1	08:42:00		1				

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal 4-3	9-Feb	-26	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:04:00		1											under
Focal 4-3	9-Feb	-30	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:07:10			1										
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:07:20		1											
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:10:30		1											1 rock/ice over at the mine site
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:11:39					1								
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:12:11		1											
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:12:30					1								
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:12:57		1											
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:13:05					1								
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:13:13		1											
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:13:41		1											
Focal 4-3	9-Feb	-36	10	S	593277	7035858	130	S	3	3	Portage	Mine site	Gahcho Kue Mine Site	130 m S of airstrip	F	3:0	Focal	3	04:13:50		1											
Group 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Group	4	04:44:00	16				1								under 3 intervals
Group 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Group	4	04:51:00	26											
Group 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Group	4	04:52:00	36							8	PTx1	150	3	00:10	Nearby truck startles some but quickly return to feeding
Group 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Group	4	04:52:00	36											
Group 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Group	4	04:53:08	28		3	3	2			HTx1	150	2	00:50	
Group 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Group	4	05:00:00	35		1	7								
Group 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Group	4	05:03:00	20		9	7				HTx1, PTx2	150	2	02:00	
Group 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Group	4	05:05:00	36											Lots of walking around
Group 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Group	4	05:08:00	34				2							
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:44:00		1											Cow
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:47:00		1				1							
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:47:32		1											
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:47:50		1											
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:47:50		1											
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:48:28		1											
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:48:37		1	1										
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:48:49		1											
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:49:40					1								Confirmation: bailing for feeding area
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:49:56		1											
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:52:10		1											Rears up and kicks a nearby caribou
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:52:19		1											
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	04:59:09		1							HTx1	50	3	NA	
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	05:05:30		1			1								
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	05:05:50		1											
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	05:06:13		1											
Focal 4-4	9-Feb	-36	10	S	589831	7034834	150	NE	56	36	Portage	Mine site	Gahcho Kue Mine Site	150 m to mine road and laydown	F, M	1:1	Focal	4	05:06:29		1											
Group 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (a)	09:47:00	2				2							2 walk over hill
Group 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (a)	09:55:00	2											
Group 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (a)	09:56:00	3			2				HTx2	800		00:10	
Group 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (a)	09:59:30	3											
Group 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (a)	10:03:00	4											last sight
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:12:00	5			3	1			HTx2, OTx1	800	1	00:10	Moved truck back on the road about 200 m
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:12:10	5											
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:20:00	7											
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:26:00	7											
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:28:20	5			4				HTx2	800	2	00:40	
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:29:00	5											some walked over hill
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:32:00	5											
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:32:50	5	1	3									
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:33:00	5		3		2							walked over hill
Group 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Group	1 (b)	10:33:50	5											seem to have relaxed
Focal 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (a)	09:55:00	1											one
Focal 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (a)	09:59:00	1											
Focal 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (a)	10:01:50	1		1									
Focal 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (a)	10:02:02	1											
Focal 5-1 (a)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (a)	10:03:00	1											last sight behind trees
Focal 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (b)	10:12:00	1			1				HTx2, OTx1	800	1	00:10	
Focal 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (b)	10:12:10	1											
Focal 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (b)	10:21:00	1											
Focal 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (b)	10:26:00	1											
Focal 5-1 (b)	10-Feb	-40	15	ENE	571269	7062572	800	W	8	8	Lake	Lake 15-16	Gahcho Kue Winter Road Spur	800 m from road	F, M	1:1	Focal	1 (b)	10:26:30	1											
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:30:00	15			18	80			HTx2, OTx1	800	1	02:00	
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:32:00	53			18				PTx1	800	1	04:00	
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:33:00				26								
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:34:00	50			30		3						
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:35:00	15		48									
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:38:00	40							HTx2	800		02:00	
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:43:00	30			10	28			HTx2	800	3	06:00	2 lame crocus breaking away and walking up hill
Group 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:46:00	14			1	60							
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:47:00	13			1								remaining group on lake seem to have relaxed
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:49:00	9		5	3								
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:51:00	18											
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	11:59:00	17			1								some bedded are difficult to see in drifting snow
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	12:00:00	18				2			HTx2	800	3	NA	
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	12:00:30	19					2						
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	12:01:50	19				2							
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	12:07:00	19											
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	12:08:00	19							HTx1	800	3	NA	
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	12:13:00	19							PTx1	800	3	NA	
Group 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Group	2	12:15:00	19											
Group 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	801 m W of road	F, M	3:3	Group	2	14:16:00	13			1	8			OT x 1	800	1	NA	Will continue , not survivorist this herd lactos
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Focal	2	11:49:00	1											Bull
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Focal	2	11:51:00	1											
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Focal	2	12:00:00	1							HTx2	800	3	NA	
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Focal	2	12:08:00	1							HTx1	800	3	NA	
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Focal	2	12:13:00	1							PTx1	800	3	NA	
Focal 5-2	10-Feb	-40	15	ENE	553274	7072459	800	W	72	72	Lake	Reid Lake	Gahcho Kue Winter Road Spur	800 m W of road	F, M	3:2	Focal	2	12:15:00	1											
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	09:42:00	20			30	80			HTx3, OTx1, PTx1	100	1	03:00	
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	09:45:00	3		3		8							worked a small rescue. 3 fatalities
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	09:53:00	4		4		11							herd breaks into smaller around and heads over the hill
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	10:01:00	4	3	3		11							
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	10:03:00	1	4	2	8	3			HTx3	1000	3	NA	did not return to innocous behaviour
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	10:04:20	2	2	2	2	10							
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	10:05:50	2		2	1	9	2						
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	10:07:44					34							
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	10:10:50			5		13							
Group 6-1	11-Feb	-31	20	W	553275	7072480	100	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	100 m S of road	F, M, J	Unknown	Group	1	10:12:00		1			1							All remaining walk over hill
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:49:00					1							Bull
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:51:00	1				1							
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:51:20					1							
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:52:00		1										
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:54:00					1							
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:55:00		1										
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:56:00												
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:57:00												
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:58:00												
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	09:58:20												
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	10:01:00		1										
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho Kue Winter Road Spur	1 km S of road	F, M, J	Unknown	Focal	1	10:03:00								HTx3	1000	3	NA	
Focal 6-1	11-Feb	-31	20	W	553275	7072480	1000	S	134	14-34	Lake	Reid Lake	Gahcho

Survey # (ScanType-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal 7-1	12-Feb	-35	10	NW	567781	7064311	800	S	3	3	Lake	shore	Gahoho Kue Winter Road Spur	Winter road	F, M	2:3	Focal	1	09:21:00					1							walks out of sight	
Group 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Group	2	09:30:00		27	1		4								
Group 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Group	2	09:38:00		28	1		2								
Group 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Group	2	09:42:00		31	1						PUT x1	1000	0	na		
Group 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Group	2	09:46:00		26			1								
Group 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Group	2	09:54:00		30			2								
Group 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Group	2	10:02:00		26			2								
Group 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Group	2	10:10:00		25		1	7								
Group 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Group	2	10:15:50		28			2	1			HTx3	1000	0	na		
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	09:58:10		1			1							Cow	
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	09:59:50		1			1							some loafing with other feeders	
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:00:00													
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:02:00		1											
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:10:00												Seems to be looking over at the other herd	
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:15:50			1									Now lost direction- not looking at anything in particular	
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:11:30		1											
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:13:50		1											
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:15:50					1				HTx1	1000	2	08:00	walking away south- looking at trucks and then back at the herd	
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:15:57					1								
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:18:05					1								
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:19:30			1										
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:20:52					1								
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:21:10			1										
Focal 7-2	12-Feb	-35	10	NW	567813	7064305	1000	W	37	37	Portage	P-12/13	Gahoho Kue Winter Road Spur	1km W of Road	F, M	-	Focal	2	10:24:00		1											
Group 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Group	3	09:34:00		80	1										
Group 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Group	3	09:39:00		45										43 are now visible	
Group 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Group	3	09:42:00		42	1						PUT x1	1400	2	na		
Group 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Group	3	09:50:00		39											
Group 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Group	3	09:58:00		33			1							large group in tall shrub area, move in and out of sight while feeding	
Group 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Group	3	10:06:00		36			2								
Group 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Group	3	10:26:00												Group 3 is still mainly 100% feeding on hillside, ~30 are still visible. This one sex is unknown, difficult to tell at this distance in profile	
Focal 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/14	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Focal	3	10:54:00		1											
Focal 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/15	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Focal	3	10:56:00		1											
Focal 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Focal	3	10:42:00		1			1				PUT x1	1400	0	na	Looks like a cow	
Focal 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Focal	3	10:44:50		1			1							Walks toward the rest of the group who have slowly moved further along the hillside.	
Focal 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Focal	3	10:45:30		1	1										
Focal 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Focal	3	10:45:30			1										
Focal 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Focal	3	10:46:20			1										
Focal 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Focal	3	10:46:40		1											
Focal 7-3	12-Feb	-35	10	NW	567813	7064305	1400	SW	52	52	Portage	P-12/13	Gahoho Kue Winter Road Spur	1400m SW of road	F, M, J	-	Focal	3	10:48:00		1											
Group 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Group	4	13:17:00					4								
Group 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Group	4	13:22:00				12					OTx1	800	1	02:00	Minus truck to end #31	
Group 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Group	4	13:23:40					13							All walking SE across lake	
Group 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Group	4	13:25:00			6		15								
Group 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Group	4	13:33:00				15		15			OTx1	900	1	00:20	Back up alarm	
Group 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Group	4	13:33:20						15							
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:38:00			1		13				OTx1	700	0	00:10	Moved to new position	
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:20:00					11							a few are behind island	
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:41:00					18							still walking SE	
Group 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Group	4	13:49:00					30								
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:25:00			1										
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:42:50					1								
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:26:00			1										
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:26:50					1								
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:31:00					1								
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:33:00					1				OTx1	900	1	00:20	back-up alarm, had to readjust the truck to maintain line of sight	
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:33:20					1								
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:38:00					1				OTx1	700	0	na	moved truck to maintain line of sight	
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:39:00			1										
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:40:00					1								
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:44:00			1										
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:45:00					1								
Focal 7-4	12-Feb	-32	10	NW	551037	7064097	850	SW	20	20	Lake		Gahoho Kue Winter Road Spur	Winter road	F, M	-	Focal	4	13:49:00					1								
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:30:00		3											
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:38:00		3											
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:43:00		2			1				HTx1	500	2	15:00		
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:44:00					1	2								
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:46:00						2								
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:49:00						2						more trucks are approching far down the lake	
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:49:00						3						all walking south	
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:54:00						3							
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:55:10				2	1				PUT x1	500	1	00:50		
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:56:00		1			2								
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:58:00		2			1							move futher down shore and begin feedins	
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	15:02:00		3											
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	15:04:30		1	1	1					HTx2	800	1	01:00		
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	15:08:30		2			1								
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	15:10:00		3											
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:30:00		1										glances up at road to south every once in a while. On island	
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:30:00		1											
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:40:10		1											
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:40:20		1											
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:41:20			1										
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:41:40		1											
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:42:10			1										
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:42:20		1											
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:42:40					1								
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:42:56					1								
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:43:00					1				HTx3	500	1	13:00	35 seconds to continue walking. 3 farm hollow retrunrns to feeding	
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:43:10					1								
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:43:20					1							walks behind island	
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:48:00					1							reemerges from behind island- walkies south	
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:49:00			1										
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:49:10					1								
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:52:30			1										
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:52:40					1								
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:54:00														
Group 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Group	5	14:56:30					1				PUT x1	500	1	00:50		
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:56:00		1										back to eating on lake shore	
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	14:58:00		1											
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	15:01:00		1											
Focal 7-5	12-Feb	-32	10	NW	555290	7064424	500	E	3	3	Lake	Islands	Gahoho Kue Winter Road Spur	Winter road	F	3 female	Focal	5	15:04:30					1				HTx2	800	1	01:00		
Focal 7-6	12-Feb	-32	10	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Winter road	F, M, J	-	Focal	6	15:05:36		1											
Focal 7-6	12-Feb	-32	10	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Winter road	F, M, J	-	Focal	6	15:06:00			1										
Focal 7-6	12-Feb	-32	10	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Winter road	F, M, J	-	Focal	6	15:08:00													
Focal 7-6	12-Feb	-32	10	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Winter road	F, M, J	-	Focal	6	15:10:00													
Focal 7-6	12-Feb	-32	10	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Focal	6	09:02:00		13											
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:10:00		9			4	1			HTx5	250	0	01:00		
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:14:00	-	-	-	-	-	-	-	HTx3	250	2	05:00	yellow highlighted lines have been grouped into this line to reflect the majority group response to the combined stressor	
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:16:40	-	-	-	-	-	-	-	HTx1	250	2			
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:18:00	0:00:20				0:00:05				HTx1	250	2		Remainder walked behind hill	
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:26:00		6	1		1								
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:34:00		10			2								
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:35:00		8			3				PUT x1	250	1	04:40		
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:36:00		3			2								
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:37:00		3			4	2			HTx1, PUT x1	250	1	02:00		
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13	Gahoho Kue Winter Road Spur	Road/portage	F, M, J	-	Group	1	09:39:00		4			2				HTx1	250	1	na	2 walking off	
Group 8-1	13-Feb	-34	20	NW	567636	7064376	250	W	31	13	Portage	P-12/13

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal: 8-2	13-Feb	-35	25	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	13:42:25			1										
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	13:43:00					1								
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	13:43:15	1												
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	13:45:40					1								
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	13:45:45		1											
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	13:46:00	1												
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	13:58:00		1											
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	13:58:30		1											
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	14:05:30		1						HTx3	700	0	na		
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	14:09:00					1								
Focal: 8-2	13-Feb	-30	20	NW	567731	7064308	700	SE	36	36	Lake	near P-12/13	Gahcho Kue Winter Road Spur	700m S of road	F, M, J	1 calf	Focal	2	14:11:30													
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	08:54:00	17		1										
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	63	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:01:00	13				2			HTx1	700	1	NA	2 flushing.	
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	63	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:02:00	12		2										
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:09:15	3	1	1	12				HTx1	700	1	00:45		
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:10:00	12	3											
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	63	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:11:30	11	4	1	2				HTx1	700	1	01:30		
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	63	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:13:00	18	2											
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	63	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:16:00	11	4		3				HTx1	700	0	NA	Shuffling but no obvious reaction.	
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	63	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:18:00	3	21	2	5									
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:19:30	1			9			8	HTx1	700	3	02:00		
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:21:30	10	5		5								Moat back to normal but many walked over hill out of sight.	
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:22:00	4			9				HTx1	700	2	04:00		
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	66	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:23:30	2			1	4							Remainder of group moved over hill away from sit.	
Group 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Group	1	09:26:00	5											Most of the herd has gone over the hill.	
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	08:58:00	1											Bull	
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	63	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	08:59:20	1												
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	08:59:40	1												
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	09:01:00								HTx1	700	0	NA		
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	09:08:00		1											
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	09:08:30													
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	09:09:00					1								
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	09:09:30													
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	09:09:45	1												
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	09:10:00								HTx1	700	1	NA		
Focal 9-1	14-Feb	-34	10	NW	588145	7039155	50	S	65	25	Portage	Mine site	Gahcho Kue Mine Site	Hearne pit! ~100 m	F, M	1:1	Focal	1	09:19:00	1												
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:06:00	1	5										Herd is 200 m NW of observation point	
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:07:20	1	5			1			PTx1	40	0	NA		
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:10:00	1	5			1							A few have moved over rise out of sight.	
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:14:50	2							Forklift x1	40	0	NA	Walkins towards the road	
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:22:00	2											Seem very comfortable with traffic on road	
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:22:30	2	1						Rock-Truck x1	40	0	NA		
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:27:15	1							PTx1	40	0	NA		
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:30:00	2	1											
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:30:40	2	1						PTx1	40	0	NA		
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:34:50	2	1						Bus x1, PTx1	40	0	NA		
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:35:00	2	1						HTx1, PTx1	40	0	NA		
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:37:30	2	1						HTx1, PTx1	40	0	NA		
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:38:00	2	1											
Group 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Group	2	10:38:30	2	1						PTx1	40	0	NA		
Focal 9-2	14-Feb	-30	8	NW	591149	7037211	40	E	7	7	Portage	Mine site	Gahcho Kue Mine Site	40 m E of AN Road	F, M	4:3	Focal	2	10:38:50	1												
Group 9-3	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Group	3	11:11:00	4											under 1 interval	
Group 9-3	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Group	3	11:22:50	1	3			2			HTx1, PTx1	200	0:00	NA	All moved over ridge while feeding.	
Group 9-3	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Group	3	11:26:00	1	2	1										
Group 9-3	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Group	3	11:31:00	1	1											
Focal 9-3 (a)	14-Feb	-34	8	NW	588872	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (a)	11:18:00	1											Cow	
Focal 9-3 (a)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (a)	11:22:50	1				1			HTx1, PTx1	200	2	NA		
Focal 9-3 (a)	14-Feb	-34	8	NW	588872	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (a)	11:24:45			1										
Focal 9-3 (a)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (a)	11:25:30													
Focal 9-3 (a)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (a)	11:25:50			1										
Focal 9-3 (a)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (a)	11:26:00					1							Walked over hill.	
Group 9-3 (b)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (b)	11:16:00	1											Cow	
Focal 9-3 (b)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (b)	11:22:50	1							HTx1, PTx1	200	0	NA		
Focal 9-3 (b)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (b)	11:28:00	1												
Focal 9-3 (b)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (b)	11:28:55		1											
Focal 9-3 (b)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (b)	11:29:20													
Focal 9-3 (b)	14-Feb	-34	8	NW	588879	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (b)	11:30:20		1											
Focal 9-3 (b)	14-Feb	-34	8	NW	588872	7038897	200	W	6	6	Portage	Mine site	Gahcho Kue Mine Site	200 m W of the Beach road	F, M	5:1	Focal	3 (b)	11:30:35													
Group 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Group	4	12:28:00	2	3	2									Walked over hill.	
Group 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Group	4	12:36:00	3	1										A few x are behind trees	
Group 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Group	4	12:37:30	3	2		2				HTx1	500	1	00:60		
Group 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Group	4	12:39:20	3	3											
Group 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Group	4	12:44:00	3	3										Theme: see black/ wooo/ behind trees	
Group 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Group	4	12:52:00	3	3										Others walked behind trees	
Group 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Group	4	13:00:00	3	2		2									
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:39:00	1				1							Cow	
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:46:00	1				1								
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:48:00	1				1								
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:48:30	1				1								
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:53:00	1				1								
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:53:45	1												
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:54:30	1				1								
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:55:20	1												
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:55:40	1												
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:56:05	1				1								
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	12:56:15	1				1								
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	13:01:30	1				1								
Focal 9-4	14-Feb	-34	8	NW	568052	7064282	500	S	9	9	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	500 m south of road	F, M	Unknown	Focal	4	13:01:45	1												
Group 9-5	14-Feb	-30	8	NW	568052	7064282	250	S	4	4	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	250 m north of road	F	1:0	Group	5	12:43:00	1	3										400 m NE of observation point.	under 3 intervals
Group 9-5	14-Feb	-30	8	NW	568052	7064282	250	S	4	4	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	250 m north of road	F	1:0	Group	5	12:51:00	1	3										One moved behind trees	
Group 9-5	14-Feb	-30	8	NW	568052	7064282	250	S	4	4	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	250 m north of road	F	1:0	Group	5	12:59:00	1											Other two have likely bedded. Not visible in shrubs	
Group 9-5	14-Feb	-30	8	NW	568052	7064282	250	S	4	4	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	250 m north of road	F	1:0	Group	5	13:07:00	2											Cow	
Focal 9-5	14-Feb	-30	8	NW	568052	7064282	250	S	4	4	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	250 m north of road	F	1:0	Focal	5	12:43:00	1											Laying in shrubby area fairly close to road	
Focal 9-5	14-Feb	-30	8	NW	568052	7064282	250	S	4	4	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	250 m north of road	F	1:0	Focal	5	12:58:00	1												
Focal 9-5	14-Feb	-30	8	NW	568052	7064282	250	S	4	4	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	250 m north of road	F	1:0	Focal	5	13:08:00	1												
Focal 9-5	14-Feb	-30	8	NW	568052	7064282	250	S	4	4	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	250 m north of road	F	1:0	Focal	5	13:10:00	1											Remained bedded the entire survey.	
Group 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Group	6	13:16:00	1	10	3	3									
Group 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Group	6	13:23:15	1	10	4					HTx1	200	1	01:45		
Group 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Group	6	13:25:00	1	10	4		1							1 calf standins	
Group 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Group	6	13:32:00	1	10	3		1								
Group 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Group	6	13:40:00	15	2		1									
Group 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Group	6	13:48:00	13	2		1								Three more seen	
Group 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Focal	6	13:19:00												Female rubbing antlers on twigs	
Group 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Focal	6	13:23:15	1		1					HTx1	200	0	NA		
Group 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Focal	6	13:32:30					1								
Focal 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Focal	6	13:33:00					1								
Focal 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Focal	6	13:41:40			1										
Focal 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Focal	6	13:41:50					1							Pushed another female with her antlers	
Focal 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Focal	6	13:42:30			1										
Focal 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m south	F, M, J	7:4:1	Focal	6	13:42:45			1										
Focal 9-6	14-Feb	-30	8	NW	567725	7064314	200	S	19	19	Portage	P-12/13	Gahcho Kue Winter Road Sp

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal: 10-2	15-Feb	-33	30	NNW	555537	7066557	500	NW	10	10	Portage	-	Gahoho Kue Winter Road Spur	500m NW of road	F, M	1:6	Focal	2	12:24:30		1											
Focal: 10-2	15-Feb	-33	30	NNW	555537	7066557	500	NW	10	10	Portage	-	Gahoho Kue Winter Road Spur	500m NW of road	F, M	1:6	Focal	2	12:28:00		1											
Focal: 10-2	15-Feb	-33	30	NNW	555537	7066557	500	NW	10	10	Portage	-	Gahoho Kue Winter Road Spur	500m NW of road	F, M	1:6	Focal	2	12:28:15					1								
Focal: 10-2	15-Feb	-33	30	NNW	555537	7066557	500	NW	10	10	Portage	-	Gahoho Kue Winter Road Spur	500m NW of road	F, M	1:6	Focal	2	12:28:20													
Focal: 10-2	15-Feb	-33	30	NNW	555537	7066557	500	NW	10	10	Portage	-	Gahoho Kue Winter Road Spur	500m NW of road	F, M	1:6	Focal	2	12:33:00		1						HTx2	500	0	na		
Focal: 10-2	15-Feb	-33	30	NNW	555537	7066557	500	NW	10	10	Portage	-	Gahoho Kue Winter Road Spur	500m NW of road	F, M	1:6	Focal	2	12:39:00					1								
Focal: 10-2	15-Feb	-33	30	NNW	555537	7066557	500	NW	10	10	Portage	-	Gahoho Kue Winter Road Spur	500m NW of road	F, M	1:6	Focal	2	12:39:20			1										
Focal: 10-2	15-Feb	-33	30	NNW	555537	7066557	500	NW	10	10	Portage	-	Gahoho Kue Winter Road Spur	500m NW of road	F, M	1:6	Focal	2	12:40:00					1								
Focal: 10-2	15-Feb	-33	30	NNW	555537	7066557	500	NW	10	10	Portage	-	Gahoho Kue Winter Road Spur	500m NW of road	F, M	1:6	Focal	2	12:40:30	1												
Group 10-3	15-Feb	-33	30	NNW	567736	7066310	600	SE	54	24	Portage	-	Gahoho Kue Winter Road Spur	600m SE of road	unknown	-	Group	3	13:10:00	22		4		1								bedded on grassy esker
Group 10-3	15-Feb	-33	30	NNW	567736	7066310	600	SE	54	24	Portage	-	Gahoho Kue Winter Road Spur	600m SE of road	unknown	-	Group	3	13:18:00	24												some of the herd further back in the trees are not included
Group 10-3	15-Feb	-33	30	NNW	567736	7066310	600	SE	54	24	Portage	-	Gahoho Kue Winter Road Spur	600m SE of road	unknown	-	Group	3	13:26:00	24							HTx1	600		0	na		
Group 10-3	15-Feb	-33	30	NNW	567736	7066310	600	SE	54	24	Portage	-	Gahoho Kue Winter Road Spur	600m SE of road	unknown	-	Group	3	13:34:00	24												
Group 10-3	15-Feb	-33	30	NNW	567736	7066310	600	SE	54	24	Portage	-	Gahoho Kue Winter Road Spur	600m SE of road	unknown	-	Group	3	13:42:00	24												
Group 10-3	15-Feb	-33	30	NNW	567736	7066310	600	SE	54	24	Portage	-	Gahoho Kue Winter Road Spur	600m SE of road	unknown	-	Group	3	13:50:00													more became visible upon seeing them move
Focal: 10-3	15-Feb	-33	30	NNW	567736	7066310	600	SE	54	24	Portage	-	Gahoho Kue Winter Road Spur	600m SE of road	unknown	-	Focal	3	03:19:00	1												
Focal: 10-3	15-Feb	-33	30	NNW	567736	7066310	600	SE	54	24	Portage	-	Gahoho Kue Winter Road Spur	600m SE of road	unknown	-	Focal	3	03:26:00	1							HTx1	600		0	na		
Focal: 10-3	15-Feb	-33	30	NNW	567736	7066310	600	SE	54	24	Portage	-	Gahoho Kue Winter Road Spur	600m SE of road	unknown	-	Focal	3	03:42:00	1												
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:30:00	6			3		4							under 3 intervals
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:36:40							13	PUT x1	1000	3		03:00	all set up from bedded and started sunning
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:39:00					13								
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:39:40													
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:43:30						11		PUT x11	1000	3			both vidcues parked nearby
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:45:00					11								
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:46:30					11								
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:47:00					11								
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:50:30			11										
Group 10-4	15-Feb	-34	30	NNW	553223	7072843	1000	W	100	13	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M	-	Group	4	14:54:00							11	PUT x2	800	3			two vidcues drive off. Group of about 20 caribou ran up over the hill (to north) and out of sight
Group 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Group	5	15:03:00			6		3								
Group 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Group	5	15:11:00			4		1								
Group 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Group	5	15:19:00	4		6										
Group 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Group	5	15:19:50	4			5				HTx4	1000			05:00	
Group 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Group	5	15:25:00						40							our group got mixed up in the rest of the herd. 15 from the lesser herd were standing alert
Group 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Group	5	15:27:00						35							
Group 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Group	5	15:35:00						60							Walkins N. many wreersino from behind hill. and a larse orous is still bedded on lake.
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:04:00													bull
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:09:00			1										
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:09:40													
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:12:00			1										
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:16:00			1										fishbiuz
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:18:20			1										
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:18:30			1										fishbiuz
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:19:50			1					HTx6	1000	3			
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:21:40					1								
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:21:40													
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:24:50													
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:25:50					1								
Focal: 10-5	15-Feb	-33	30	NNW	553202	7073648	1000	W	150	9	Lake	Reid Lake	Gahoho Kue Winter Road Spur	1km west of road	F, M, J	-	Focal	5	15:26:00													
Group 11-1	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Group	1	09:25:00	3	2		2	15			OTx1	400	2		07:15	bedded behind hill
Group 11-1	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Group	1	09:30:00	2	1			12								
Group 11-1	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Group	1	09:32:15	5	2			5								back to normal
Group 11-1	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Group	1	09:33:00	14				3								back to normal
Group 11-1	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Group	1	09:41:00	12	2			2								some have walked behind ridge to south. some have emerged from hill to north
Group 11-1	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Group	1	09:47:30	2		6	2	4			HTx1	400	1		01:30	
Group 11-1	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Group	1	09:49:00	5			4	1								around of wind vidcu
Group 11-1	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Group	1	09:57:00	2												more continue to walk behind hill
Group 11-1	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Group	1														all walking behind hill. Only some responded to stressors, herd may have been walking away with or without stressors
Focal: 11-1(a)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(a)	09:00:00					3								
Focal: 11-1(a)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(a)	09:27:15					1								bull
Focal: 11-1(a)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(a)	09:27:15							1						under
Focal: 11-1(a)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(a)	09:29:15					1								
Focal: 11-1(a)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(a)	09:31:00			1										
Focal: 11-1(a)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(a)	09:33:00					1								
Focal: 11-1(a)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(a)	09:35:00													lost sight behind hill
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:37:00	1												
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:38:00													
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:38:15	1												
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:38:50					1								
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:38:55	1												
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:39:00	1												
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:39:15	1												
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:41:50	1												
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:42:00					1								lostled over to the other group
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:42:20													
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:42:30	1												
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:44:30			1										
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:44:30					1								walked behind hill out of view
Focal: 11-1(b)	16-Feb	-35	24	NW	550819	7064850	400	NW	20	20	Portage	-	Gahoho Kue Winter Road Spur	400m NW of road	F, M, J	-	Focal	1(b)	09:46:00													
Group 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Group	2	10:08:00	17												around the opposite side of the hill from Group 1
Group 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Group	2	10:14:00	18				3								a few fresco emergent from highest ridge
Group 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Group	2	10:22:00	19				3								
Group 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Group	2	10:29:00	21			2				HTx2	800	0		01:00	2-3 reacted to the bucks
Group 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Group	2	10:30:00	21												back to normal
Group 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Group	2	10:38:00	14	1											some have moved back across the ridge
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:08:00	1												bull
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:08:30	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:08:50	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:13:00					1								
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:13:40	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:14:00	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:15:50	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:16:00	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:16:50	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:19:20	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:19:50	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:20:20	1				1								
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:20:40	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:29:00	1							HTx2	800	0	na		
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:36:10	1												
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:36:30			1										
Focal: 11-2	16-Feb	-34	25	NW	550387	7066785	700	S	23	23	Lake	Hillside near P-8	Gahoho Kue Winter Road Spur	700 S of road	F, M	-	Focal	2	10:36:35	1												
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	12:58:00	10				2								walked out of sight behind hill
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	13:08:00	12												
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	13:13:00	12				1			HTx1	600		0	na		
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	13:14:00	12	1											
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	13:22:00	15												
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	13:27:00	12			2				PUT x1	600			00:40	
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	13:27:40	15												
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	13:30:00	13				3								
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	13:31:00	15							HTx3	600	0	na		
Group 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Group	3	13:39:00	15												4 north of orous seen after
Focal: 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Focal	3	13:02:00	1												one
Focal: 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Focal	3	13:06:20													
Focal: 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Focal	3	13:08:40	1												
Focal: 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22	Lake	Lake 12/13-14	Gahoho Kue Winter Road Spur	600m S of road	F, M	-	Focal	3	13:13:00	1							HTx1	600		0	na		
Focal: 11-3	16-Feb	-32	26	NW	567742	7064317	700	SE	24	22

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Group 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Group	1	07:58.00		4	1		2								
Group 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Group	1	08:06.00		7											
Group 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Group	1	08:14.00		6			2								
Group 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Group	1	08:18.00		7			4								
Group 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Group	1	08:19.00		6			2				PUT:x1		0	01:00	
Group 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Group	1	08:22.00		10			1								a few joined the group from over hill
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	07:50.00	1											male
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	07:51.00	1							PUT:x2	60	0	na	
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	07:52.00	1							HTx1	60	0	na	
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	07:56.00	1			1								
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	07:96.50	1											
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	07:57.30	1											
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	07:57.40	1			1								
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	07:58.00	1											
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	07:98.30	1											
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	08:00.40	1											
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	08:01.30	1											
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	08:03.50	1				1							
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	08:04.00	1				1							
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	08:19.00	1				1			PUT:x1	90	2	00:02	
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	08:19.00	1											
Focal 12-1	17-Feb	-35	16	WNW	588910	7039555	110	SE	14	7	Portage	access road near entrance to winter road	Gahcho Kue Winter Road Spur	60m off access road, 3km from main site	F, M	-	Focal	1	08.22.00	1											
																														16 CRBU 2+ km away, not surveyed. 1 on portage 12/13, +7 more on hillside, 3 standing moved to
Group 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Group	2	09:15.00		6	4									lake when QT arrived. +8 on south end of lake. +4 on west side of lake
Group 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Group	2	09:23.00		1			3								
Group 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Group	2	09:31.00		1	5									
Group 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Group	2	09:39.00		1	3									
Group 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Group	2	09:41.00			4					PUT:x1	300	2	08:45	
Group 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Group	2	09:44.00			2					HTx2	300	2	08:00	
Group 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Group	2	09:47.00			3								1 not visible in shrubs
Group 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Group	2	09:50.00											
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:16.00		1										Female
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:24.00												Looking at group on lake
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:24.40		1										
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:28.10		1	1									
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:28.30		1	1									
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:38.30		1	1									
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:38.40		1	1									
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:41.05		1	1					PUT:x1	300	2	07:40	
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:41.50		1	1									
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:42.30			1								looking at the pickup truck parked on road
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:42.40			1									
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:43.00			1									
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:43.20			1								walking towards streams
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:44.00			1					HTx2	300	2	04:45	not visible, walked into the shrubs
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:45.30											visible again
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:46.30			1								
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:47.00			1								
Focal 12-2	17-Feb	-34	16	WNW	569099	7064288	350	S	42	4	Portage	P-12/13	Gahcho Kue Winter Road Spur	350m south of road	F, M	-	Focal	2	09:48.40											
Group 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Group	3	10:15.00					2						+3 further down shore
Group 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Group	3	10:22.50		5						HTx1	280	0	na	3 looked up for a second but then continued feeding
Group 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Group	3	10:23.00		4										
Group 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Group	3	10:31.00		5										
Group 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Group	3	10:39.00		6										
Group 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Group	3	10:47.00		5										
Focal 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Focal	3	10:16.00					1							walked down the lake and the back up on hill/ female
Focal 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Focal	3	10:19.10												
Focal 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Focal	3	10:22.50		1						HTx1	280	0	na	looked up very briefly then kept feeding
Focal 12-3	17-Feb	-33	20	WNW	556680	7064721	400	NE	9	5	Lake	Munn Lake/hill	Gahcho Kue Winter Road Spur	280m NW of road	F, M	2:3	Focal	3	10:47.00		1										still feeding
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:16.00	10		2									75% bedded. 25% feeding for the entire herd
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:19.30	10		2					HTx1	190	2	04:30	a bit of the herd set up from being bedded (~20%)
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:23.00	2		8	2								
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:24.00	5		11									2 fighting, remainer facing away from the road
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:27.00	12		12	3								herd is back to feeding/bedded
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:30.00	10		3					PUT:x1	190	0	na	only 1 shot from video. Was working from herd
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:32.00	25		2									
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:38.30	18	6	2									
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:39.00	18	6	2					PUT:x1, HTx1	190	0	na	
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:40.00	18	6	2									lightly sacked herd difficult to see same group
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:48.00	25	5										
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	11:16.00												visible
Group 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Focal	4	11:19.30								HTx1	190	3	03:15	seem to sit still be bedded
Focal 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Focal	4	11:22.45												
Focal 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Focal	4	11:30.00	1							PUT:x1	150	0	na	
Focal 12-4	17-Feb	-32	20	WNW	553699	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Focal	4	11:39.00								PUT:x1, HTx1	190	0	na	
Group 12-5	17-Feb	-32	20	WNW	553697	7080871	250	E	500	27	Lake	Lake 8/9	Gahcho Kue Winter Road Spur	150m from road	F, M	-	Group	4	12:04.00	13							PUT:x1	190	0	na	
Group 12-5	17-Feb	-29	25	WNW	552507	7079117	1200	NW	570	13	Lake	North end of Reid Lake	Gahcho Kue Winter Road Spur	1.2km rw of road	F, M	-	Group	5	12:41.00								PUT:x1, HTx1	1200	0	na	difficult to see some of the herd may be running but most are still bedded. Our group temporarily now visible
Group 12-5	17-Feb	-29	25	WNW	552507	7079117	1200	NW	570	13	Lake	North end of Reid Lake	Gahcho Kue Winter Road Spur	1.2km rw of road	F, M	-	Group	5	12:43.00	13											seem to all still be bedded
Focal 12-5	17-Feb	-29	25	WNW	552507	7079117	1200	NW	570	13	Lake	North end of Reid Lake	Gahcho Kue Winter Road Spur	1.2km rw of road	F, M	-	Focal	5	12:12.00	1											
Group 12-5	17-Feb	-29	25	WNW	552507	7079117	1200	NW	570	13	Lake	North end of Reid Lake	Gahcho Kue Winter Road Spur	1.2km rw of road	F, M	-	Focal	5	12:15.00	1							PUT:x1, HTx1	1200	0	na	
Focal 12-5	17-Feb	-29	25	WNW	552507	7079117	1200	NW	570	13	Lake	North end of Reid Lake	Gahcho Kue Winter Road Spur	1.2km rw of road	F, M	-	Focal	5	12:34.00												touch to see them one with blowing snow
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	12:35.00		2		2		4		HTx4, OTx1	180	3	11:00	arrived at 12:35 with 4 HT. 4 who were walking across lake toward the road turned and ran away.
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	12:40.00		3			5							Three feeding resumed fairly quickly (1.2km from road)
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	12:47.00		2		2								two groups both feeding now about 1km apart
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	12:48.00		7										
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	12:53.00		1						HTx4	1200	0	na	
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	12:56.00		6		1				HTx4	1200	0	na	
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	13:04.00		5										3 are still feeding 1.2 km away. 4 are further down the lake 2.0km away
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	13:09.00		5		2				HTx7	1200	0	na	two of the close group is walking away from the road toward other group
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	13:12.00		3		2								
Group 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Group	1	13:14.00		2		2								
Focal 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Focal	1	12:36.00					1			HTx4, OTx1	1200	1	00:15	arrived with HTx male
Focal 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Focal	1	12:36.10											resumed feeding
Focal 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Focal	1	12:53.00		1						HTx4	1200	0	na	
Focal 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Focal	1	13:09.00		1						HTx7	1200	0	na	
Focal 13-1	18-Feb	-30	30	NW	556883	7065457	1200		8	8	Lake	Munn Lake	Gahcho Kue Winter Road Spur	1.2-2.0km from road	F, M	6:2	Focal	1	13:14.00		1						PUT:x1	1200	0	na	
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	13:36.00	-	-	-	-	-	-	HTx7, OTx1	180	0	na	Initial stressor ~10% ran/not away from road. ~50% of herd remains bedded
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	13:40.00	-	-	-	-	-	-	-	-	-	-	Trucks have moved, some still scatter away
																														herd is almost all bedded in the lee side of low hills and islands along the lake. A few are feeding and
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	13:43.00	9											walking on hills behind
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	13:44.00	9							snow slow x1	180	0	na	
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	13:51.00	9											
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	13:59.00	9											not a ot of movement in the herd on the whole. they seem to be hunkered down for the wind
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	14:07.00	9											
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	14:09.00	9							PUT:x1	180	0	na	only 2 of the group sticks their heads up to watch the trucks drive by.
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	14:10.00	2		7		2			CRBU:x1	5		00:30	another bull walked over and chased 2 away. then started feeding
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	14:10.30	9	1	2									
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	14:11.00	9	1						snow slow x1	180	0	na	
Group 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Group	2	14:15.00	7	1										finished/ crew
Focal 13-2	18-Feb	-30	30	NW	553308	7070999	180		600	9	Lake	Middle reid lake	Gahcho Kue Winter Road Spur	180m off the road	F, M, J	touch to tail w	Focal	2

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Group 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Group	5	17:23:00		8	4		2							mostly back to normal	
Group 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Group	5	17:28:00		2	2		7							group on hill moving to join the others on lake	
Group 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Group	5	17:38:00		8	1		1							a few have moved behind the hill now	
Group 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Group	5	17:44:00		7			1								
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:12:00		1										male	
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:14:00													
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:15:00					1								
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:15:40			1										
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:15:45					1								
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:18:00													
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:18:00								1	sled box	90	3	11:00		
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:18:25													
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:19:00			1									no longer looking at where the fox was	
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:24:00													
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:25:00			1										
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:26:00													
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:26:10			1										
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:26:50					1								
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:29:00			1										
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:29:30													
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:31:00			1									Pushed another CRBU out of a feeding spot, moves to push the other one out after the other one clears the snow. This happens a few times.	
Focal 13-5	18-Feb	-32	20	NW	585001	7046739	290	E	12	12	Lake	hillside	Gahcho Kue Winter Road Spur	290m E of road	F, M	-	Focal	5	17:40:00			1										
Group 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Group	1	11:02:00	4	15									Herd is spread out all along the hills and shore of Lake 8-9, wells far from the road	
Group 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Group	1	11:10:00	4				13			wolf x2	150	1	02:00	walked by on lake and bedded down on lake behind ridge from herd	
																														wolf scared another group over to our group and once out of sight they all resume feeding. Wolves are last hearing around lying down out of sight	
Group 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Group	1	11:12:00	4	26										
Group 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Group	1	11:18:00	4	16										
																														may not be the same group because some have move behind hill while others are moving up from the South	
Group 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Group	1	11:26:00	3	16									do not notice the truck at this distance	
Group 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Group	1	11:31:00	3	12						HTx1	1300	0	na		
Group 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Group	1	11:34:00	3	11			1								
Group 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Group	1	11:42:00	4	14						HTx2	1300	0	na	wolves still bedded on lake nearby but out of sight of herd	
Focal 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Focal	1	11:02:00	1										male, lamb	
Focal 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Focal	1	11:10:00	1							wolf x2	200	0	na	does not react to wolf further back in the herd	
Focal 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Focal	1	11:13:00	1	1										
Focal 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Focal	1	11:16:00	1				1						walking into crowd	
Focal 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Focal	1	11:16:50	1				1							
Focal 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Focal	1	11:19:00	1											
Focal 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Focal	1	11:20:00	1											
Focal 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Focal	1	11:23:00	1											
Focal 14-1	19-Feb	-36	20	N	5510016	7084155	1300	W	170	17	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1.3km W of winter Road	F, M	-	Focal	1	11:34:00	1											
																														scattered groups, 31 close =groups of 2, 7, and further down shore 18 = 58 which could be consolidated a loose herd	
Group 14-2	19-Feb	-34	20	N	568415	7064349	950	SE	58	11	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	550m SE of road	F, M	-	Group	2	13:05:00	7	4										
Group 14-2	19-Feb	-34	20	N	568415	7064349	950	SE	58	11	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	550m SE of road	F, M	-	Group	2	13:13:00	8	3										
Group 14-2	19-Feb	-34	20	N	568415	7064349	950	SE	58	11	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	550m SE of road	F, M	-	Group	2	13:21:00	8	3										
Group 14-2	19-Feb	-34	20	N	568415	7064349	950	SE	58	11	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	550m SE of road	F, M	-	Group	2	13:29:00	8	5										
																														2 more joined the group	
Group 14-2	19-Feb	-34	20	N	568415	7064349	950	SE	58	11	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	550m SE of road	F, M	-	Group	2	13:32:15	8	5						HTx2	500	0	na	a few of the bedded ones lifted their heads, one looked over alert. One stood up from bedded after the trucks passed	
Group 14-2	19-Feb	-34	20	N	568415	7064349	950	SE	58	11	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	550m SE of road	F, M	-	Group	2	13:37:00	8	5										
Focal 14-2	19-Feb	-34	20	N	568415	7064349	950	SE	58	11	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	550m SE of road	F, M	-	Focal	2	13:05:00	1											
Focal 14-2	19-Feb	-34	20	N	568415	7064349	950	SE	58	11	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	550m SE of road	F, M	-	Focal	2	13:32:15	1							HTx2	500	0	na		
Focal 14-2	19-Feb	-34	20	N	568415	7064349	950	SE	58	11	Lake	Lake 12/13-14	Gahcho Kue Winter Road Spur	550m SE of road	F, M	-	Focal	2	13:37:00	1											
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	13:47:00	1	8										
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	13:58:00			1		2		3	HTx6	150	3	16:00	Lost sight as they all went behind hill	
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	13:58:30			1		1							came out the other side of small hill
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	13:59:30			2		1							re-entrained on lake. Crossing to the other side of lake away from road
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	14:03:00			4		3							more emerged from behind hill, some starting to feed as they cross the lake, back to normal after crowins the lake
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	14:11:00	4	1			1							
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	14:12:45	4	1			1			HTx1	600	0	na	
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	14:15:30	4				1							all the females continued behind hill previously except 1
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	14:19:00	3											
Group 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Group	3	13:47:00	1											
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	13:54:20												
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	13:54:45	1											
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	13:55:00					1			HTx4	150	3	na	did not return to feeding during scan (14-15=min)	
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	13:56:00							1					started running when the 3rd truck went by. lost sight
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	13:59:30												back in view, re-entrained on lake
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	14:01:00			1									
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	14:01:15												
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	14:05:45			1									
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	14:06:00												
Focal 14-3	19-Feb	-31	20	N	570007	7064622	150	E	11	7	Portage	P-14	Gahcho Kue Winter Road Spur	150m from road, moved to 600m N of road	F, M	4M, 2F	Focal	3	14:08:00			1									walked behind hill on other side of lake
Group 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Group	4	14:11:00	4	1										
Group 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Group	4	14:39:00	2	6										
Group 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Group	4	14:47:00	3	7										
Group 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Group	4	14:55:00	3	8										
Group 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Group	4	14:55:30	4	8										crossing having to cross fox. feels for crossing by tracel then left. some crossing as before
Group 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Group	4	14:58:00	4	5						HTx3	500	0	01:00	gen 7 caribou rejected to feed trucks on 3rd truck	
Group 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Group	4	14:59:00	3	7										
Group 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Group	4	15:03:00	3	9										
Group 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Focal	4	14:31:00	1										2 are behind trees	
Focal 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Focal	4	14:55:30	1							HTx3	500	0	na		
Focal 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Focal	4	14:57:30					1							
Focal 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Focal	4	14:57:45	1											
Focal 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Focal	4	14:58:00	1											
Focal 14-4	19-Feb	-31	20	N	570013	7064222	900	W	10	10	Portage	P-14 South	Gahcho Kue Winter Road Spur	500m west of road	F, M	-	Focal	4	14:59:00	1											
Group 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Group	1	09:24:00	11											walked behind bees
Group 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Group	1	09:30:00	11			5				PUFx1	500	0	na		
Group 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Group	1	09:32:00	11											starkers came in at 34 and turned around
Group 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Group	1	09:37:00	11											
Group 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Group	1	09:38:30	8	3						PUFx1	150	1	01:30		
Group 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Group	1	09:38:50	11											
Group 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Group	1	09:40:00	11											
Group 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Group	1	09:48:00	11			3								one moved over rise
																														8 seem to be moving along the hill towards road, trotting occasionally. They move down hill and cross the road toward AN building	
Group 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Group	1	09:56:00	8			2	5							
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:24:00	1											
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:30:00	1				1						male	
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:30:40	1			1								
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:30:55	1											
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:31:10	1							PUFx1	500	0	na		
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:35:30	1				1							
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:36:00	1											
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:37:00	1							PUFx1	150	0	na		
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:40:10	1			1								
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:48:20	1				1							
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:48:30	1											
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:49:20	1				1							
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:49:30	1				1							
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:49:40	1											
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:49:45	1											
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:53:30	1											
Focal 15-1	20-Feb	-37	20	NW	588869	7039845	150		11	11	Lake	Lake 28-29/Beach	Gahcho Kue Winter Road Spur	150m from road, 3.5km from site	F, M	-	Focal	1	09:56:00	1											
Focal 15-2	20-Feb	-35	20	NW	567770	7064318	200	SW	11	8	Portage	P-12/13	Gahcho Kue Winter Road Spur	200m SW of road	F, M, J	2,4:1	Group	2	10:50:00	1	8										
Group 15-2	20-Feb	-35	20	NW	567770	7064318	200	SW	11	8	Portage	P-12/13	Gahcho Kue Winter Road Spur	200m SW of road	F, M, J	2,4:1

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*						Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R					
Focal-15-4	20-Feb	-31	20	NW	551110	7093587	1300	NW	17	8	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1300m NW of road	F, M	-	Focal	4	13:24:00		1					PUTx1	1300	0	na		
Focal-15-4	20-Feb	-31	20	NW	551110	7093587	1300	NW	17	8	Lake	Lake 8-9	Gahcho Kue Winter Road Spur	1300m NW of road	F, M	-	Focal	4	13:30:00												
Group-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Group	5	13:40:00	11	2									<135 herd size (15 feeding; 120 bedded; more behind hill)	
Group-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Group	5	13:48:00	8	2									some stood up and walked into another group	
Group-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Group	5	13:56:00	8	2					PUTx1	700	0	na	Some from the larger herd were alerted to the truck	
Group-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Group	5	14:04:00	8	2										
Group-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Group	5	14:12:00	4	6		1							the larger herd is slowly moving from the hillside down to the flats by lake.	
Focal-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Focal	5	13:45:00												
Focal-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Focal	5	13:48:30				1								
Focal-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Focal	5	13:48:45												
Focal-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Focal	5	13:56:00		1					PUTx1	700	0	na		
Focal-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Focal	5	14:02:30												
Focal-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Focal	5	14:03:45		1										
Focal-15-5	20-Feb	-32	20	NW	550091	7087393	700	W	200	13	Portage	P-8	Gahcho Kue Winter Road Spur	700m w of road	F, M, J	self in group	Focal	5	14:12:00		1										
Group-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Group	1	07:45:00		17									Male several walk/run along the road to p-28 and cross the road for feeding. Some were already moving in that direction and they end up across the road feeding	
Group-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Group	1	07:50:20		14			2	2	HTx1, PUTx1	250	0	na		
Group-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Group	1	07:53:00		14	2									
Group-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Group	1	08:01:00		13			3							
Group-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Group	1	08:09:00		12			4							
Group-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	08:17:00		15	1			1					All seem to trot across the face of the hill on their way to cross the hill and join the other group, even when the stressor is not present. May still be agitated by OT.	
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:45:00		1									Three walk alone hill toward the mine	
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:50:00						1					Running toward along the road	
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:50:10							1				reaction may have begun here before the truck was in view, or he was just running to join the other moved/agitated by the OT vehicle/ machine	
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:50:15												
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:50:20					1		HTx1	250	3	08:30	HT came here, a few were already trotting over that way when it arrived in view.	
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:50:22						1						
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:51:00					1							
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:51:10						1						
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:51:30			1									
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:51:40						1						
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:52:00			1				PUTx1	100	3	04:25	still reacting/moving to join the others across the road	
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:52:30						1						
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:52:50						1						
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:53:10			1									
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:53:20			1									
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:53:40			1			1						
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:54:00			1									
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:54:25			1							Briefly walks out of sight	
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:56:30			1							Walked across road to p-28, and resumed feeding	
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:58:30					1							
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	07:59:00			1									
Focal-16-1	21-Feb	-36	30	NW	588482	7039315	250		18	18	Lake	L 27-28hill	Gahcho Kue Winter Road Spur	250m off road, 4km from site	F, M	-	Focal	1	08:00:00			1							Moves into sun and out of sight. Lost him in a group that are right in the sun. All seem to be either walking or feeding for the remainder of our survey. Jen@08:140	
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Group	2	08:32:00					10		OTx1	50	2	05:00	were about 50m from road when we arrived. Moved back from road. Walkino NE away from road.	under 2 intervals
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Group	2	08:36:00		1	1	8								
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Group	2	08:37:00		3	2	1								
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Group	2	08:45:00		3										
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:44:00		1					Grater x1	400	3	na		
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:50:00		1									All moved out of sight	
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:37:00		1									Male	Leader
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:44:50		1			1							
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:45:00		1										
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:46:00		1										
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:46:22					1							
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:46:40		1										
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:46:49					1		Grater x1	400	3	na		
Group-16-2	21-Feb	-36	30	NW	584746	7047283	400		10	10	Lake	Lake 23-24	Gahcho Kue Winter Road Spur	400m NE of road	F, M	-	Focal	2	08:47:30					1					moved over hill	
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Group	3	09:25:00		10			1							
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Group	3	09:33:00		11	1									
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Group	3	09:41:00	2	10										
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Group	3	09:41:50	3	8					HTx1	400	1	02:00	2 vocalize out once noises in (HTx1)	
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Group	3	09:44:15	1	10			1					one bedded get up and walked away from trucks	
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Group	3	09:49:00		11								some stood behind hill	
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Group	3	09:53:25	3	11					HTx1	400	1	na	now hackled/ lookout on at truck	
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Group	3	09:57:00	3	10										
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Focal	3	09:26:00												
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Focal	3	09:42:20							HTx1	400	1	00:14		
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Focal	3	09:43:39		1										
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Focal	3	09:44:05												
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Focal	3	09:44:15												
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Focal	3	09:53:04		1										
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Focal	3	09:53:15		1										
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Focal	3	09:53:25		1					HTx1	400	1	na		
Group-16-3	21-Feb	-34	30	NW	589292	7064793	500		SE	16	11	Portage	P-14/Grassy hill between L12/13 and L14	400m from P-14	F, M	-	Focal	3	09:57:00		1										
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	11:22:00	15	8									
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	11:26:00	13	10					HTx1	1000	0	na		
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	11:30:00	14	7									
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	11:36:00	14	7									
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	11:40:00	14	7					HTx1	1000	0	na		
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	11:42:00	14	7					PUTx1	1000	0	na		
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	11:46:00	14	7									
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	11:54:00	12	9									
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	12:02:00	9	12									
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	12:10:00	13	8									
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	12:11:30	8	12	5				HTx4, PUTx1	1000	0	na	all bedded ones that not un started feedins before all the trucks had passed by.	
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	12:14:00	17	4					PUTx2	1000	0	na		
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Group	4	12:18:00	3	16									
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:22:00	1									now (confirmed at 11:49)	
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:26:00	1						HTx1	1000	0	na		
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:40:00	1						HTx1	1000	0	na		
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:42:00	1						PUTx1	1000	0	na		
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:47:00	1				1					stood up and started walking	
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:47:40	1				1						
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:48:30	1										
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:48:40	1				1						
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:56:19	1				1						
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	11:56:47	1										
Group-16-4	21-Feb	-33	30	NW	549225	7089279	1000		SE	368	21	Portage	P-6	Gahcho Kue Winter Road Spur	1000m SE of road	F, M	-	Focal	4	12:02:00	1									Still feeding	
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	13:52:00		1	6				PUTx1	300	2	00:00	truck parks close to watch them (ENR)	
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	13:53:00			7									
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	13:54:00			7									
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	13:56:00			7								All watch the truck leave	
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	13:57:00			7								back to walking toward the hill with the rest of herd	
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	14:05:00		1		5							moving east/ across lake toward hill	
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	14:13:00	1											
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	14:14:30	5						HTx1	400	0	00:30	overall zero reaction	
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	14:15:00	5											
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	14:19:00			7				Unknown	? <100	2	06:00	some of herd runs down to the lake and looks back at the trees	
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	14:21:00		1		6								
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	14:22:00			8									
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	14:27:00		8			8						reloat with other moose	
Group-16-5	21-Feb	-29	30	NW	561132	7093583	1000	E	49	7	Lake	Margaret Lake	Gahcho Kue Winter Road Spur	300m from road SW	F, M, J	-	Group	5	14:29:00			7		1						All walkino south alone hill now	
Focal-24-1	24-Feb	-28	8	NW	589939	7038752	150	W	18	18	Portage	N-11	Gahcho Kue	150m from the winter road W	M	-	Focal	1	08:27:00		1										
Focal-24-1	24-Feb	-28	8	NW	589939	7038752	150	W	18	18	Portage	N-11	Gahcho Kue	150m from the winter road W	M	-	Focal	1	08:36:10		1					Light Truck x1	150m	1	4 seconds		
Focal-24-1	24-Feb	-28	8	NW	589939

Survey # (ScanType-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Group-24-5	24-Feb	-28	10	NW	551356	7092547	800		25		Lake	P-9	Gahcho Kue	800m	F,M	-	Group	5	14:10:23	25												
Group-24-5	24-Feb	-28	10	NW	551356	7092547	800		25		Lake	P-9	Gahcho Kue	800m	F,M	-	Group	5	14:16:36	24												
Group-24-5	24-Feb	-28	10	NW	551356	7092547	800		25		Lake	P-9	Gahcho Kue	800m	F,M	-	Group	5	14:16:49	24				1								
Group-24-5	24-Feb	-28	10	NW	551356	7092547	800		25		Lake	P-9	Gahcho Kue	800m	F,M	-	Group	5	14:18:51	25												
Group-24-5	24-Feb	-28	10	NW	551356	7092547	800		25		Lake	P-9	Gahcho Kue	800m	F,M	-	Group	5	14:26:43	25												
Group-24-6	24-Feb	-28	10	NW	550767	7083111	800		110		Lake	P-9	Gahcho Kue	800m	F,M,C	-	Group	6	14:30:31	107	10	5		19								
Group-24-6	24-Feb	-28	10	NW	550767	7083111	800		110		Lake	P-9	Gahcho Kue	800m	F,M,C	-	Group	6	14:38:25	72	11	5		22								
Group-24-6	24-Feb	-28	10	NW	550767	7083111	800		110		Lake	P-9	Gahcho Kue	800m	F,M,C	-	Group	6	14:39:50	72	11	5		22			Light Truck x1	850m		0	NA	No reaction
Group-24-6	24-Feb	-28	10	NW	550767	7083111	800		110		Lake	P-9	Gahcho Kue	800m	F,M,C	-	Group	6	14:46:38	70	14	11		15								
Group-24-6	24-Feb	-28	10	NW	550767	7083111	800		110		Lake	P-9	Gahcho Kue	800m	F,M,C	-	Group	6	14:54:23	80	14	1		3								Lost sight of 12
Group-24-6	24-Feb	-28	10	NW	550767	7083111	800		110		Lake	P-9	Gahcho Kue	800m	F,M,C	-	Group	6	15:02:12	79	16	1		16								Lost sight of 14
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:53:28		8											under 3 intervals
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:55:43		5											one more caribou came into view
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:01:47		3		4									
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:08:23		3		1			Haul Truck x2	200m		0	NA	Lost site of 5 caribou- no reaction to stressor
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:16:34		1				3						
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:17:43		1											Two caribou walked out of sight
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:18:33						2							Two caribou within sight
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:18:58				1									
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:19:45				2									
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:21:23		1		1									
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:22:19		1		1									1 female now walked out of site.
Group-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Group	1	09:22:45													End of survey
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	08:53:29		1											
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	08:55:43						1							
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	08:57:23				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	08:57:45						1							
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	08:57:58		1											
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	08:58:29				1		1							
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	08:58:39		1											
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	08:58:57				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	08:59:43		1											
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:00:15				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:00:45				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:00:55						1							
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:00:59				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:01:45		1											
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:02:15						1							
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:02:32		1											
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:02:58				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:02:59		1											
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:06:15				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:06:58		1											
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:07:27				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:16:30				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:16:40						1							
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:16:45				1									
Focal-25-1	25-Feb	-28	8	NW	589337	7093336	200		11		Portage	P-28	Gahcho Kue		200	F	-	Focal	1	09:16:50						1							
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:39:42												
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:40:19				1									
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:40:48							Unknown Stress	Unknown		3	2 minutes 50 seconds	No haul trucks or road disturbances
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:41:23				1									
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:42:43												
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:42:50												Return to normal behaviour
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:43:20		1											
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:43:29						1							
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:44:15		1											
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:54:48		1				1							
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	09:54:57		1											
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:01:43		1											
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:01:53		1											
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:02:43		1											
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:03:23		1		1									
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:03:27		1											
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:06:21						1							
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:07:02				1									
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:07:49						1							
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:08:54				1									
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:09:10				1									
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:09:28						1							
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:10:15		1											
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		15		Portage	P-24	Gahcho Kue		500	M	-	Focal	2	10:10:19						1							
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		18		Portage	P-24	Gahcho Kue		500	F,M	-	Group	2	09:40:34	1	10	4											
Group-25-2	25-Feb	-28	8	NE	589283	7048077	500		18		Portage	P-24	Gahcho Kue		500	F,M	-	Group	2	09:40:40							15	Unknown stressor	Unknown		3	7mins: 45 seconds	No haul trucks or road disturbances. Possible wildlife (predator?), no visual confirmation.
Focal-25-2	25-Feb	-28	8	NE	589283	7048077	500		18		Portage	P-24	Gahcho Kue		500	F,M	-	Focal	2	09:47:50	1	10	2		1								Whole herd returning to normal behaviour
Group-25-2	25-Feb	-28	8	NE	589283	7048077	500		18		Portage	P-24	Gahcho Kue		500	F,M	-	Group	2	09:48:23	2	12			1									
Group-25-2	25-Feb	-28	8	NE	589283	7048077	500		18		Portage	P-24	Gahcho Kue		500	F,M	-	Group	2	09:56:48	2	12			1									
Group-25-2	25-Feb	-28	8	NE	589283	7048077	500		18		Portage	P-24	Gahcho Kue		500	F,M	-	Group	2	10:04:32	6	10			2								One caribou out of sight
Group-25-2	25-Feb	-28	8	NE	589283	7048077	500		18		Portage	P-24	Gahcho Kue		500	F,M	-	Group	2	10:12:42	5	11	2										18 herd size, some came over a ridge into view.
Focal-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m -500m away from the winter road	M	-	Focal	3	11:36:28												
Focal-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m -500m away from the winter road	M	-	Focal	3	11:52:39					1								
Focal-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m -500m away from the winter road	M	-	Focal	3	11:52:45					1								
Focal-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m -500m away from the winter road	M	-	Focal	3	11:53:39	1												
Focal-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m -500m away from the winter road	M	-	Focal	3	12:00:51	1							Light truck x2	400-500m	0	NA	No reaction from the herd
Focal-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m -500m away from the winter road	M	-	Focal	3	12:03:28	1							Light truck x1	400-500m	0	NA	No reaction from the herd
Focal-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m -500m away from the winter road	M	-	Focal	3	12:08:43	1											
Group-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m -500m away from the winter road	F,M,C	-	Group	4	11:37:49	65												
Group-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m -500m away from the winter road	F,M,C	-	Group	4	11:44:57	65												
Group-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m-500m away from the winter road	F,M,C	-	Group	4	11:49:38	63							(Male-Male fight				2 caribou! (male-male) fighting, then last/ down next to each other. Focal caribou got up and other
Group-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m-500m away from the winter road	F,M,C	-	Group	4	11:50:16	63											fighting male both got up and switched bedded area with each other
Group-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m-500m away from the winter road	F,M,C	-	Group	4	11:52:56	63				2							
Group-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m-500m away from the winter road	F,M,C	-	Group	4	12:00:39	63											
Group-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m-500m away from the winter road	F,M,C	-	Group	4	12:00:51	63							Light Truck x2	400-500m	0	NA	No reaction from the herd
Group-25-3	25-Feb	-28	8	NE	551128	7065177	400-500		65		Portage	Between P-9 and P-8	Gahcho Kue	400m-500m away from the winter road	F,M,C	-	Group	4	12:08:43	63							Light Truck x1	400-500m	0	NA	No reaction from the herd
Group-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F,M,C	-	Group	4	12:58:22	25	360	125		25								
Group-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F,M,C	-	Group	4	12:58:27	27	310	83		40			Haul Truck x 1	750-800m	0	NA	No reaction, far from stressor.
Group-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F,M,C	-	Group	4	13:06:23	60	340	45		30								
Group-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F,M,C	-	Group	4	13:14:23	53	340	45		37								
Group-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F,M,C	-	Group	4	13:18:02	53	340	45		37			Haul Truck x2	750-800m	0	NA	No reactions
Group-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F,M,C	-	Group	4	13:20:27	53	340	45		37								2 (male-male) fighting each other
Group-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F,M,C	-	Group	4	13:22:46	29	360	70		25								
Group-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F,M,C	-	Group	4	13:30:28	13	360	70		25								
Group-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F,M,C	-	Group	4	13:38:21	25	360	45		40								
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	12:58:22													
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:00:31						1							
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:11:29													
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:12:46	1												
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:13:27				1									
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:14:18		1											
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:15:43				1									
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:16:23				1									
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:16:43						1							
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:16:54				1									
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:17:10		1											
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:17:52		1						Haul Truck x 2	750-800m	0	NA	No reaction
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:18:02		1											
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:18:42		1											
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:30:39		1											
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:30:43		1											
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:30:58						1							
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:31:22													
Focal-25-4	25-Feb	-28	10	NE	543561	7089173	750-800m away from the winter road		475		Portage	Between P-6 and P-5	Gahcho Kue	750-800m	F	-	Focal	4	13:31:34	1												
Group-25-5	25-Feb	-23	12	NE	589296	7047095	75-100m off the winter road		50		Portage	P-12/13	Gahcho Kue	75-100m	F,M,C	-	Group	5	15:38:32	40												
Group-25-5	25-Feb	-23	12	NE	589296	7047095	75-100m off the winter road		50		Portage	P-12/13	Gahcho Kue	75-100m	F,M,C	-	Group	5	15:46:10	46					5							
Group-25-5	25-Feb	-23	12	NE	589296	7047095	75-100m off the winter road		50		Portage	P-12/13	Gahcho Kue	75-100m	F,M,C	-	Group	5	15:56:16	41	4	2		7								
Group-25-5	25-Feb	-23	12	NE	589296	7047095	75-100m off the winter road		50		Portage	P-12/13	Gahcho Kue	75-100m	F,M,C	-	Group	5	16:03:41	2	36	5		8								
Group-25-5	25-Feb	-23	12	NE	589296	7047095	75-100m off the winter road		50		Portage	P-12/13	Gahcho Kue	75-100m	F,M,C	-	Group	5	16:11:21	2	40	1		2								
Focal-25-5	25-Feb	-23	12	NE	589296	7047095	75- 100m away from the winter road		50		Portage	P-12/13	Gahcho Kue	75-100m	M	-	Focal	5	15:38:32													
Focal-25-5	25-Feb	-23	12	NE	589296	7047095	75- 100m away from the winter road		50		Portage	P-12/13	Gahcho Kue	75-100m	M	-	Focal	5	15:42:28										

Survey # (ScanType-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:08:28													
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:10:10													
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:10:39	1												
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:10:46													
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:10:52			1										
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:10:59	1												
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:13:10				1				Light Truck x1	90m		25 seconds	Became alert, watched as stressors passed, resumed grazing.	
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:13:35				1									
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:15:21								Light Truck x1	90m		24 seconds	Became alert, watched stressor pass. Resumed grazing.	
Focal-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		1		Portage	N-11	Gahcho Kue	25-100m	M	-	Focal	1	10:15:46													
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	09:40:23	3	20	3			3							
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	09:46:38		20	3	2		3		Light Truck x1	85m		49 seconds		
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	09:48:29		25	4			5						More caribou have joined the group from over the ridge.	
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	09:53:19		26	2	4		5		Light Truck x1	90m		20 seconds		
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	09:56:23	1	38	3		2								
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	10:04:21	4	32	2			1						More caribou entered line of site.	
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road.		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	10:12:36	4	30	2										
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	10:13:10	4	30	3	3				Light Truck x1, H	90m		25 seconds	Became alert, watched stressors until they passed, resumed feeding. For stressors only two caribou 90m away reacted. Maternity of the herd 75-100m did not react to stressors.	
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	10:15:21	5	32	1	2	4			Light Truck x1	70m		20 seconds	80m away reacted. Majority of the herd 75-100m did not react to stressors. Resumed sinuous behaviour	
Group-26-1	26-Feb	-29	10	SW	588966	7038728	25-100m away from the winter road		59		Portage	N-11	Gahcho Kue	25-100m	F,M	-	Group	1	10:20:37	8	26	4										
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	11:30:12	125	102	12		8								
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	11:38:43	130	110	5										
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	11:46:31	145	112										Additional 12 caribou came into view.	
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	11:54:21	145	112											
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	11:56:32	145	125	10		9		Haul truck x1	900-600m		0 NA	No reaction to oversize haul truck	
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	12:00:23	160	112	5		8						Additional Caribou came into field of view (25)	
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	12:04:38	160	91	5		8								
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	12:05:43	160	91	5		8		Haul truck x1	600-450m		0 NA	No reaction	
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	12:07:23	160	100	6		8		Haul truck x1	600-450m		0 NA	No reaction. Additions (13) caribou came into field of view.	
Group-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F,M,C	-	Group	2	12:08:31	160	97	7		8								
Focal-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F	-	Focal	2	11:30:12	1												
Focal-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F	-	Focal	2	11:56:32	1						Haul truck x 1	900-600m		0 NA	No reaction to passing haul truck	
Focal-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F	-	Focal	2	12:02:51			1										
Focal-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F	-	Focal	2	12:03:40					1								
Focal-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F	-	Focal	2	12:04:09													
Focal-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F	-	Focal	2	12:04:25	1												
Focal-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F	-	Focal	2	12:05:43	1						Haul truck x1	600-450m		0 NA	No rection	
Focal-26-2	26-Feb	-28	10	NW	569640	7064134	500-600m away from the winter road.	NW	295		Portage	P-15	Gahcho Kue	500-600m	F	-	Focal	2	12:07:58											Walked out of site.	
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:20:03	19	1											
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:29:43	17	2											
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:31:18	17	2					Grador x1	900m		0 NA	No reaction to grador. Grador will actively plowing snow	
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:36:28	18	1	5		1						3 out sight of (4) caribou from across location		
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:44.58	18	1	5		1								
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:44.45	18	1	5		1		Grador x1	900m		0 NA	No reaction to active grador	
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:45.14	18	2	5		1								
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:46.32	12	2	1		1		Grader x1	900m		0 NA	No reaction to active grador	
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:48.49	12	2	1		1		Haul truck x1	800m		0 NA	No reaction to haul truck	
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:49.29	12	2	1		1		Haul truck x2	900m		0 NA	No reaction to haul trucks	
Group-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F,M,C	-	Group	3	12:52.18	14	2	1		1								
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		59		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:20:03		1											
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		59		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:23:18													
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		59		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:23:54	1												
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:24:34													
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:30:49	1												
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:31:18	1						Grador x1	900m		0 NA	No reaction to grador. Grador will actively plowing snow	
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:37:23		1											
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:38:21					1								
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:38:43	1												
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:38:54	1												
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:42:32	1												
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:42:52	1												
Focal-26-3	26-Feb	-27	10	SW	567946	7065080	800m away from the winter road.		20		Portage	(Missed)	Gahcho Kue	800m	F	-	Focal	3	12:44.49	1												
Group-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	F,M,C	-	Group	4	13:00:19	27	1			3		Grador x 1	900m		0 NA	No reaction.	
Group-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	F,M,C	-	Group	4	13:08:23	19	12			3								
Group-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	F,M,C	-	Group	4	13:16:49	27	5			3						4 more caribou came into field of view		
Group-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	F,M,C	-	Group	4	13:23:13	27	5	1		3		Haul truck x 1	85m	1, 2	0 (1= 20 seconds. (2) = 1min	1 out of sight after seeing haul truck, walked away.	
Group-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	F,M,C	-	Group	4	13:24:59	24	8			3						5 caribou remained headed but slept in the haul truck watching intently		
Group-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	F,M,C	-	Group	4	13:32:34	22	8	4		1								
Focal-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	Female Calve	-	Focal	4	13:00:19													
Focal-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	Female Calve	-	Focal	4	13:10:28													
Focal-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	Female Calve	-	Focal	4	13:18:49	1											Caribou did not move, remained bedded but was alert, head-up looking/following hault truck with its		
Focal-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	Female Calve	-	Focal	4	13:23:19			1				Haul Truck x1	30m		1 1 minute: 49 seconds	head as it drove by.	
Focal-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	Female Calve	-	Focal	4	13:24:59	1												
Focal-26-4	26-Feb	-27	10	SW	567366	7065225	50-300m away from the winter road.		98		Portage	P-12/13	Gahcho Kue	50-300m	Female Calve	-	Focal	4	13:33:34	1												
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:30:21					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:30:45			1										
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:30:57					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:31:28					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:42:43			1		1		Haul truck x1	800-900m		0 NA	No reaction	
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:42:16					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:42:35					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:42:49			1										
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:42:51			1										
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:43:56					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:44:20			1										
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:44:52					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:45:19			1										
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:45:51					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:46:36		1											
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:50:23			1										
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:49:27					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:50:00			1										
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:51:20					1								
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:51:40		1											
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	14:56:10		1											
Focal-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Sex unknown	Focal	5	15:00:51		1											
Group-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Group	5	14:30:21	49	2	36		7								
Group-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Group	5	14:38:19	40	20	16		7								
Group-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Group	5	14:40:43	40	20	14		9		Haul truck x 1	800-900m		0 NA	No reaction from herd	
Group-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Group	5	14:46:19	35	20	22		9								
Group-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Group	5	14:52:19	35	30	22		9						Two caribou (male-male) fighting using antlers.		
Group-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Group	5	14:54:54	47	37	5		1								
Group-26-5	26-Feb	-27	7	SW	5511110	7082172	800-600m away from the winter road.		90		Portage	P-9 to P-8	Gahcho Kue	800-600m	F,M,C	-	Group	5	15:02:27	46	37	17		8								
Group-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F,M,C	-	Group	6	15:22:18	2	20			3								
Group-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F,M,C	-	Group	6	15:30:28	3	17	1	3	4								
Group-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F,M,C	-	Group	6	15:34:55	3	17	1	3	4		Haul truck x1	100m		1 3minutes: 20 seconds	Alert etched haul trucks drive by each time then returned to normal behaviour 3/25	
Group-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F,M,C	-	Group	6	15:37:36	3	15	2							40 seconds	* haul 2/25		
Group-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F,M,C	-	Group	6	15:38:10	3	15	2							35 seconds	5 moved out of survey sight. Returned to normal behaviour after 35 seconds		
Group-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F,M,C	-	Group	6	15:46:49	1	20								14 walked over the ridge and out of view		
Group-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F,M,C	-	Group	6	15:54:53		8										
Focal-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F	-	Focal	6	15:22:18		1										
Focal-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F	-	Focal	6	15:23:59		1										
Focal-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F	-	Focal	6	15:24:19		1										
Focal-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F	-	Focal	6	15:26:42		1										
Focal-26-6	26-Feb	-27	8	SW	5491197	7087910	100m away from the winter road.		25		Portage	Start of P-6, end of P-7	Gahcho Kue	100m	F	-	Focal	6	15

Survey # (ScanType-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Group-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m away from the winter road.		50		Portage	P-24	Gahcho Kue	550-600m	F,M,C	-	Group	3	09:47:33		35	3		12								
Group-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m away from the winter road.		50		Portage	P-24	Gahcho Kue	550-600m	F,M,C	-	Group	3	09:52:23		36			11						28 seconds		3 caribou closest to the road were alerted. The rest of the Herd 500-600m. no reaction
Group-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m away from the winter road.		50		Portage	P-24	Gahcho Kue	550-600m	F,M,C	-	Group	3	09:52:51					3								15 walked out of site.
Group-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m away from the winter road.		50		Portage	P-24	Gahcho Kue	550-600m	F,M,C	-	Group	3	09:56:41		25			10								
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m away from the winter road.		50		Portage	P-24	Gahcho Kue	550-600m	F,M,C	-	Group	3	10:03:27	3	22			16								
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:23:27					1								
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:30:32		1											
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:30:51					1								
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:31:28													
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:33:24					1								
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:34:21					1								No stressors present/observed
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:34:40													
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:40:54					1								
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:41:32													
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:48:30					1								
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:49:25		1											
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:50:23		1											
Focal-27-3	27-Feb	-32	12	NW	585368	7045853	550-600m		50		Portage	P-24	Gahcho Kue	550-600m	F	-	Focal	3	09:51:35		1											
Focal-27-4	27-Feb	-32	12	NW	585204	7046538	500m away from the winter road.		8		Portage	P-24	Gahcho Kue	500m	F,M,C	-	Focal	4	10:06:12	1												
Focal-27-4	27-Feb	-32	12	NW	585204	7046538	500m away from the winter road.		8		Portage	P-24	Gahcho Kue	500m	F,M,C	-	Focal	4	10:07:18					1				Haul truck x 1	500m		27 seconds	Remained bedded but alert and following haul truck with head movement
Focal-27-4	27-Feb	-32	12	NW	585204	7046538	500m away from the winter road.		8		Portage	P-24	Gahcho Kue	500m	F,M,C	-	Focal	4	10:07:45	1												
Focal-27-4	27-Feb	-32	12	NW	585204	7046538	500m away from the winter road.		8		Portage	P-24	Gahcho Kue	500m	F,M,C	-	Focal	4	10:08:23					1				Haul truck x 1	500m	1	2 minutes: 22 seconds	Remained bedded but alert and following haul truck with head movement.
Focal-27-4	27-Feb	-32	12	NW	585204	7046538	500m away from the winter road.		8		Portage	P-24	Gahcho Kue	500m	F,M,C	-	Focal	4	10:08:50					1				Haul truck x 2	500m	1		Remained bedded but alert and following haul truck with head movement
Focal-27-4	27-Feb	-32	12	NW	585204	7046538	500m away from the winter road.		8		Portage	P-24	Gahcho Kue	500m	F,M,C	-	Focal	4	10:09:39					1								
Focal-27-4	27-Feb	-32	12	NW	585204	7046538	500m away from the winter road.		8		Portage	P-24	Gahcho Kue	500m	F,M,C	-	Focal	4	10:10:40	1												
Focal-27-4	27-Feb	-32	12	NW	585204	7046538	500m away from the winter road.		8		Portage	P-24	Gahcho Kue	500m	F,M,C	-	Focal	4	10:14:21	1												Still bedded
Focal-27-4	27-Feb	-32	12	NW	585204	7046538	500m away from the winter road.		8		Portage	P-24	Gahcho Kue	500m	F,M,C	-	Focal	4	10:27:36	1												Remained bedded throughout the survey.
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:30:21	4	12	3										
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		19		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:33:51	3	16						Haul truck x2	300m		0 NA	No reaction from the herd
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:38:45	3	16											
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:40:19	3	16						Haul truck x1	300m		0 NA	No reaction from all.
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:41:30	8	13						Haul truck x1	300m		0 NA	No reaction from all.
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:43:28	8	13						Light truck x1	300m		0 NA	No reaction from all.
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:46:47	6	10	3									3 moved out of sight
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:47:24	4	12										5 moved out of sight
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		19		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:54:27	3	8										
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		19		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	10:54:50	3	8						Haul truck x 1	300m		0 NA	No reaction from the whole herd.
Group-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		19		Portage	P-23	Gahcho Kue	300m	F,M,C	-	Group	5	11:02:18	3	9										3
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		19		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:30:21													
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:32:42													
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:33:51													
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:35:24								Haul truck x2	300m		0 NA	No reaction
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:40:19	1							Haul truck x1	300m		0 NA	No reaction
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		19		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:41:30	1							Haul truck 1	300m		0 NA	No reaction
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:43:28	1							Light truck x1	300m		0 NA	No reaction
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:47:03					1							
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:49:30	1											
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		19		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:51:13	1											
Focal-27-5	27-Feb	-32	12	NW	584551	7047581	300m away from the winter road.		18		Portage	P-23	Gahcho Kue	300m	F	-	Focal	5	10:54:37	1											
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:15:26			15									under 3 intervals
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:19:36							15	Haul truck X 2	75m		3 2 minutes: 2 seconds	
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:19:45												
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:20:10						15						
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:21:33	1		12									7 (inside wader) outdoor) 6 bedded	
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:23:50	1					4	10	Haul truck x 1	75m		3 1 minute: 4 seconds	Trotting away approx 200m away form he haul truck
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:24:59					16								
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:27:18			15										
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:29:37					15								
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:31:20			15										
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:32:19					16								
Group-27-6	27-Feb	-32	18	NW	575040	7057337	50m away from the winter road		15		Portage	P-21	Gahcho Kue	50m	F,M,C	-	Group	6	11:35:20			15									all caribou moved out of site	
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:15:20			1										under
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:19:30								Haul truck x 1	75m		3 1 minute: 5 seconds	
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:19:50						1							
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:20:19					1								
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:20:36			1										
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:21:33						1		Haul truck X 1	75m		3 6 minutes: 2 seconds	
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:22:49			1										
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:23:58								Haul truck X1	75m		3 1	"
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:24:36			1										
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:27:28													
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:29:34					1								
Focal-27-6	27-Feb	-32	18	NW	575040	7057337	50m		15		Portage	P-21	Gahcho Kue	50m	F	-	Focal	6	11:31:15			1									End of survey: all caribou walked out of sight.	
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:15:32	50	22			10								
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:23:19	60	27			10								
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:31:15	70	22			20								
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:39:20	75	23			24								
																															Herd of +1400 caribou ran over a large ridge mining with the 122 caribou already counted. +1522, attempted to count, provided estimate. No wildlife stressors chasing the herd. Herd split into br group
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:40:46							1522	Haul Truck X4	50-500m	3	10minutes: 35 seconds	Four haul trucks in a convoy was the stressor for the Caribou
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:45:19						1522						
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:46:20						1522						
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:46:45						1522						
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:50:10				1522									Caribou returned to normal behaviour.
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	13:57:32	500	150	172		716								No haul trucks passed for the remainder of the survey.
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	14:00:38	500	92	180		750								
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	14:03:23	500	90	180		790								
Group-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		1522		Portage	P-8	Gahcho Kue	500m	F,M,C	-	Group	7	14:11:28	600				922								
Focal-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		122		Portage	P-8	Gahcho Kue	500m	F	-	Focal	7	13:15:32					1								
Focal-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		122		Portage	P-8	Gahcho Kue	500m	F	-	Focal	7	13:17:47													
Focal-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		122		Portage	P-8	Gahcho Kue	500m	F	-	Focal	7	13:20:19					1								
Focal-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		122		Portage	P-8	Gahcho Kue	500m	F	-	Focal	7	13:21:33													
Focal-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		122		Portage	P-8	Gahcho Kue	500m	F	-	Focal	7	13:27:19	1												
Focal-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		122		Portage	P-8	Gahcho Kue	500m	F	-	Focal	7	13:30:24													
Focal-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		122		Portage	P-8	Gahcho Kue	500m	F	-	Focal	7	13:32:18													
Focal-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		122		Portage	P-8	Gahcho Kue	500m	F	-	Focal	7	13:35:20					1								
Focal-27-7	27-Feb	-32	14	NW	590279	7066510	500m off of the winter road		122		Portage	P-8	Gahcho Kue	500m	F	-	Focal	7	13:37:18	1												
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	14:22:37	600	200	175		250		350	Haul Truck x 1	100m	3	5minutes: 13 seconds	Within 100m of haul truck
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	14:30:43	450	300	175		650								Moved down to a bit further away from the haul truck
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	14:24:56	300	200	500		275		300	Haul Truck x 2	100m	3		More haul trucks
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	14:27:59	300	200	500		275	300							Caribou within 200m of the road affected by the haul truck. Panic running
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	14:29:03	300	200	500	575				Haul Truck x1	100m	1		Caribou bedded on ridges 100-500m away did not react.
																															Trucker comments: most caribou they have seen witnessed on the winter road in 15 years (via radio)
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	14:30:24	300	200	500	575									
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	14:38:46	375	175	575		450								
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	14:46:38	400	250	325		690								Herd moving south towards Gahcho Kue to meet up with other part of the herd.
																															Ridge divided the two groups of caribou, from this current location, cannot see the other previous herd. Start: WPT: 741, 12V 0550573, 7085852. End: WPT: 740, 12V, 0549872, 7087787.
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	14:54:31	225	345	255		750								
Group-27-8	27-Feb	-32	20	NW	549889	7066710	50-500m		1575		Portage	P-8	Gahcho Kue	50-500m	F,M,C	-	Group	8	15:02:19	175	350	300		750								
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:10:21	1	25											
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:33:27	4	25	5					Light Truck x1	15-40m	0	NA	No reaction from the herd. Crew presence. no response.
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:36:41	4	28						Light Truck x1	15-40m	0	NA	No reaction from all of the herd
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:38:21		29			3								
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:44:30							32	Haul Truck x 1	15-40m	3	4 minutes: 29 seconds	Was running 40m and stopped
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:45:47							32	Haul Truck x 1	15-100m	3		Ran approx 10m and stopped
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:47:23					32			Haul Truck x 1	25-100m	3		Starring alert to haul trucks
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:48:18	7	20	5									Bull moose in vicinity, normal behaviour
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:49:21	2	15	15					Haul Truck x 1	25-100m	0	NA	On the main road closest caribou approx 20m. No reaction
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:50:30	2	15	15					Haul Truck x 1	15-40m	0	NA	No reaction, herd moved back to the original location
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:52:30	2	12	15		9			Light Truck x 1	15-40m	0	NA	No reaction.
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:53:27		11	15		15			Light Truck x 1	15-40m	3	2 minutes: 11 seconds	7 caribou 15m from road. ran 10m away
Group-28-1	28-Feb	-33	10	NW	590345	7037121	15-40m away from site, road out to the winter road, near explosive storage are kept.		32		Portage	Gk Mine site	Gahcho Kue	15-40m	F,M,C	-	Group	1	08:55:32	2	7	15		8								7 caribou resumed feeding.
Group-28-1	28-Feb

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Group-28-3	28-Feb	-33	12	NW	586601	7039520	20-150m off of the winter road		33		Portage	P-28	Gahoho Kue	20-150m	F,M,C	-	Group	3	10:22:34		20	3										10 caribou moved out of site.	
Group-28-3	28-Feb	-33	12	NW	586601	7039520	20-150m off of the winter road		33		Portage	P-28	Gahoho Kue	20-150m	F,M,C	-	Group	3	10:25:18				23				Haul Truck x 6	25-150m		3 minutes: 14 seconds	
Group-28-3	28-Feb	-33	12	NW	586601	7039520	20-150m off of the winter road		33		Portage	P-28	Gahoho Kue	20-150m	F,M,C	-	Group	3	10:28:32		13	10										
Group-28-3	28-Feb	-33	12	NW	586601	7039520	20-150m off of the winter road		33		Portage	P-28	Gahoho Kue	20-150m	F,M,C	-	Group	3	10:29:10		1	20			1							
Group-28-3	28-Feb	-33	12	NW	586601	7039520	20-150m off of the winter road		33		Portage	P-28	Gahoho Kue	20-150m	F,M,C	-	Group	3	10:37:31		22				1							
Focal-28-4	28-Feb	-33	12	NW	584169	7049313	150m away from the winter road		5		Portage	P-24	Gahoho Kue	150m	F	-	Focal	4	10:50:20		1											under
Focal-28-4	28-Feb	-33	12	NW	584169	7049313	150m away from the winter road		5		Portage	P-24	Gahoho Kue	150m	F	-	Focal	4	10:55:30						1							
Focal-28-4	28-Feb	-33	12	NW	584169	7049313	150m away from the winter road		5		Portage	P-24	Gahoho Kue	150m	F	-	Focal	4	10:58:17						1							
Focal-28-4	28-Feb	-33	12	NW	584169	7049313	150m away from the winter road		5		Portage	P-24	Gahoho Kue	150m	F	-	Focal	4	10:57:56						1							
Focal-28-4	28-Feb	-33	12	NW	584169	7049313	150m away from the winter road		5		Portage	P-24	Gahoho Kue	150m	F	-	Focal	4	10:59:26				1									
Focal-28-4	28-Feb	-33	12	NW	584169	7049313	150m away from the winter road		5		Portage	P-24	Gahoho Kue	150m	F	-	Focal	4	10:59:32						1							
Focal-28-4	28-Feb	-33	12	NW	584169	7049313	150m away from the winter road		5		Portage	P-24	Gahoho Kue	150m	F	-	Focal	4	11:05:32						1							
Group-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500-600m	F,M,C	-	Group	5	13:21:32	97	11											Caribou walked out of view.	
Group-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500-600m	F,M,C	-	Group	5	13:23:10	97	11						Haul Truck x 3	500m		0 NA		No reaction all to haul truck
Group-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500-600m	F,M,C	-	Group	5	13:28:37	99	9				1		Haul Truck x 1	900m		0 NA		No reaction all to haul truck
Group-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500-600m	F,M,C	-	Group	5	13:29:24	100	8				1							
Group-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500-600m	F,M,C	-	Group	5	13:37:47	103	5	2										
Group-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500-600m	F,M,C	-	Group	5	13:41:21	104	2	3					Haul Truck x2	900m		0 NA		No reaction to haul truck
Group-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500-600m	F,M,C	-	Group	5	13:45:45	105	1											
Group-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500-600m	F,M,C	-	Group	5	13:50:21	107	2						Light Truck x 1	900m		0 NA		No reaction to light truck
Group-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500-600m	F,M,C	-	Group	5	13:53:57	107	3	1										
Focal-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500m	M	-	Focal	5	13:21:34	1												
Focal-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500m	M	-	Focal	5	13:22:19	1							Haul Truck X 3	900m		0 NA		No reasone/reaction
Focal-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500m	M	-	Focal	5	13:28:37	1							Haul Truck x 1	900m		0 NA		No reasone/reaction
Focal-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500m	M	-	Focal	5	13:39:27	1											Still walked	
Focal-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500m	M	-	Focal	5	13:41:21	1							Haul Truck x 2	900m		0 NA		No reasone/reaction
Focal-28-5	28-Feb	-33	12	NW	570860	7064455	500-600m spread out on the lake and portage.		109		Portage/Lake	P-15	Gahoho Kue	500m	M	-	Focal	5	13:50:21	1							Light Truck x 1	900m		0 NA		No reasone/reaction
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	13:57:23	8	6	4										
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	14:05:42	3	10	4										
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	14:13:37	3	12	2		2								
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	14:15:32	3	4			10								
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	14:16:49	3	6											10 walked out of sight
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	14:21:07	2	3			2								
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	14:24:21	2	2	2	2	2			Haul Truck x 1	75m		1	1minute: 8 seconds	
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	14:25:50	3	2	2	1	1		1	Haul Truck x 1	190m		3		
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	14:26:19	3	2	3		1								Returned to normal behaviour
Group-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		19		Portage	P-14	Gahoho Kue	75m	F,M,C	-	Group	6	14:29:32		3			1								6 walked out of sight
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	13:57:23	1												
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	13:59:41	1												
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:01:28	1												
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:11:13					1								
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:11:47		1											
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:11:53					1								
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		19		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:12:18		1											
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:15:38					1								
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:15:57													
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:16:19	1												
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		19		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:18:21			1										
Focal-28-6	28-Feb	-33	12	NW	569377	7065077	75m from the winter road		18		Portage	P-14	Gahoho Kue	75m	F	-	Focal	6	14:19:43													
Group-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m away from the winter road		64		Portage	P-14	Gahoho Kue	150-250m	F,M,C	-	Group	7	14:40:10	2	12	27										
Group-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m away from the winter road		64		Portage	P-14	Gahoho Kue	150-250m	F,M,C	-	Group	7	14:40:30	2	12	27					Haul Truck x 1	150m		0 NA		No reaction from the entire herd.
Group-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m away from the winter road		64		Portage	P-14	Gahoho Kue	150-250m	F,M,C	-	Group	7	14:48:48	14	4	1		23								23 caribou walked over a ridge into view
Group-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m away from the winter road		64		Portage	P-14	Gahoho Kue	150-250m	F,M,C	-	Group	7	14:49:21	20	27	5		30			Light Trucks x2	150m		0 NA		No reaction from the entire herd
Group-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m away from the winter road		64		Portage	P-14	Gahoho Kue	150-250m	F,M,C	-	Group	7	14:56:23	27	30	7										
Group-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m away from the winter road		64		Portage	P-14	Gahoho Kue	150-250m	F,M,C	-	Group	7	15:04:59	32	30	4										
Group-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m away from the winter road		64		Portage	P-14	Gahoho Kue	150-250m	F,M,C	-	Group	7	15:09:28	43	15	3					Haul Truck x 4	150m		0 NA		No reaction from the entire herd
Group-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m away from the winter road		64		Portage	P-14	Gahoho Kue	150-250m	F,M,C	-	Group	7	15:12:18	23	31			10								
Focal-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m		64		Portage	P-14	Gahoho Kue	150-250m	M	-	Focal	7	14:42:20		1											
Focal-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m		64		Portage	P-14	Gahoho Kue	150-250m	M	-	Focal	7	14:49:21			1					Light Trucks x 2	150m		0 NA		No reaction to stressor
Focal-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m		64		Portage	P-14	Gahoho Kue	150-250m	M	-	Focal	7	14:59:47					1								
Focal-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m		64		Portage	P-14	Gahoho Kue	150-250m	M	-	Focal	7	14:59:59													
Focal-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m		64		Portage	P-14	Gahoho Kue	150-250m	M	-	Focal	7	15:05:38					1								
Focal-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m		64		Portage	P-14	Gahoho Kue	150-250m	M	-	Focal	7	15:06:54													
Focal-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m		66		Portage	P-14	Gahoho Kue	150-250m	M	-	Focal	7	15:07:19		1											
Focal-28-7	28-Feb	-33	12	NW	569078	7064428	150-250m		64		Portage	P-14	Gahoho Kue	150-250m	M	-	Focal	7	15:08:23													
Group-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F,M,C	-	Group	8	15:16:23	10	24	8										
Group-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F,M,C	-	Group	8	15:23:54	10	27	4										
Group-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F,M,C	-	Group	8	15:31:41	10	27			9								
Group-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F,M,C	-	Group	8	15:39:21	12	27											
Group-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F,M,C	-	Group	8	15:41:32	12	30						Haul Truck x2	125m		0 NA		No reaction.
Focal-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F	-	Focal	8	15:47:12	4	36											
Focal-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F	-	Focal	8	15:15:23					1								
Focal-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F	-	Focal	8	15:16:19	1												
Focal-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F	-	Focal	8	15:20:13					1								
Focal-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F	-	Focal	8	15:23:20			1										
Focal-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F	-	Focal	8	15:23:47	1												
Focal-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F	-	Focal	8	15:30:51					1								
Focal-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F	-	Focal	8	15:35:36	1												
Focal-28-8	28-Feb	-33	12	NW	567745	7064894	125m away from the winter road		42		Portage	P-12/13	Gahoho Kue	125m	F	-	Focal	8	15:38:18	1												
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		35		Portage	N-11	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:19:28	14	21											5 caribou directly on the winter road, eating/licking salt from the winter road, blocking the entrance to the winter road in/out to gahoho kue
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		35		Portage	N-12	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:18:31	18	17			9								4 Caribou on winter road licking salt
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		35		Portage	N-13	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:26:17	10	20			4								4 Caribou on winter road licking salt. 1 walked off road approx 5m
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		35		Portage	N-14	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:34:20	10	23			2								Returned to the winter road licking salt
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		35		Portage	N-15	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:37:18	18	15			2	10	Light Truck x 1	25m		4	4 minutes and 5 seconds	Light truck comes in from the winter road. intentionally scarred caribou off the winter road.
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		35		Portage	N-16	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:40:46	13	13			10		Light Truck x 1	50m		3		
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		35		Portage	N-17	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:41:23	18	13		12			Light Truck x1	50m		3		Alert watching both vehicles pass
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		35		Portage	N-18	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:42:17	13	30											Returned to normal behaviour, no stressors present.
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		56		Portage	N-19	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:46:21	8	36		7	9			Haul Truck x 2	L 50m		1	1 minute - 10 seconds	7 caribou alert watching all trucks
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		35		Portage	N-20	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:47:51	8	36											
Group-1-1	1-Mar	-34	12	NW	589910	7038897	25-100m		56		Portage	N-21	Gahoho Kue	25-100m	F,M,C	-	Group	1	09:50:18	10	30			5								
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		56		Portage	N-23	Gahoho Kue	25-100m	F	-	Focal	1	09:16:39													Lickins salt on winter road dimissed by mine trucks/Haul trucks
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		56		Portage	N-23	Gahoho Kue	25-100m	F	-	Focal	1	09:19:21			1										Can see on the bus where the salt has scarred me
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		56		Portage	N-24	Gahoho Kue	25-100m	F	-	Focal	1	09:16:31					1								Small hill before winter road on way out is where the salt is fallins
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		56		Portage	N-25	Gahoho Kue	25-100m	F	-	Focal	1	09:17:42		1											
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		56		Portage	N-26	Gahoho Kue	25-100m	F	-	Focal	1	09:17:52		1											
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		56		Portage	N-27	Gahoho Kue	25-100m	F	-	Focal	1	09:19:32					1								
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-28	Gahoho Kue	25-100m	F	-	Focal	1	09:21:15		1											
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-29	Gahoho Kue	25-100m	F	-	Focal	1	09:25:09					1								
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		56		Portage	N-30	Gahoho Kue	25-100m	F	-	Focal	1	09:27:29		1											
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-31	Gahoho Kue	25-100m	F	-	Focal	1	09:28:43					1								
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-32	Gahoho Kue	25-100m	F	-	Focal	1	09:29:32			1										
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-33	Gahoho Kue	25-100m	F	-	Focal	1	09:30:19					1								
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-34	Gahoho Kue	25-100m	F	-	Focal	1	09:34:20					1								Walked off the winter road
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-35	Gahoho Kue	25-100m	F	-	Focal	1	09:37:16					1		Light Truck x 1	25m		0	6 minutes: 3 seconds	Ran 50m
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-36	Gahoho Kue	25-100m	F	-	Focal	1	09:40:43				1			Light Truck x 1	75m		0		
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-37	Gahoho Kue	25-100m	F	-	Focal	1	09:41:23				1			Light Truck x 1	75m		0		
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		56		Portage	N-38	Gahoho Kue	25-100m	F	-	Focal	1	09:42:31					1								
Focal-1-1	1-Mar	-33	12	NW	589910	7038897	25-100m		35		Portage	N-39	Gahoho Kue	25-100m	F	-	Focal	1	09:43:21													Returned to normal behaviour.
Group-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	F,M,C	-	Group	2	10:14:23	73	27	3		40								
Group-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	F,M,C	-	Group	2	10:23:10	100	11			11								
Group-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	F,M,C	-	Group	2	10:30:39	100	37			8								
Group-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	F,M,C	-	Group	2	10:32:57	90	42	5		8			Haul Truck x1	900-600m		0	NA	No reaction from the hand
Group-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	F,M,C	-	Group	2	10:39:21	85	47	5		8								
Group-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	F,M,C	-	Group	2	10:39:19	85	47	5		8			Haul Truck x 1	900-600m		0	NA	No reaction from the hand
Group-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	F,M,C	-	Group	2	10:42:12	113	29	5		8								20 more caribou moved into view
Group-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	F,M,C	-	Group	2	10:46:34	138	28	17		8								23 more caribou moved into view
Focal-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	Unknown sex d	-	Focal	2	10:13:27					1								
Focal-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	Unknown sex d	-	Focal	2	10:15:43	1				1								
Focal-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	Unknown sex d	-	Focal	2	10:26:29			1										
Focal-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	Unknown sex d	-	Focal	2	10:27:39	1												
Focal-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	Unknown sex d	-	Focal	2	10:27:47		1											
Focal-1-2	1-Mar	-33	12	NW	581857	7048831	500-600m away from the winter road		168		Portage	P-22	Gahoho Kue	500-600m	Unknown sex d	-	Focal	2	10:28:57			1								

Survey # (ScanType-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Group-3-1	2-Mar	-25	20	NW	588876	7039143	25-150m away from the winter road		50		Portage	N-11	Gahcho Kue	25-150m	F,M,C	-	Group	1	08:05:21	25	8	8		3								4 Caribou ticking salf off road
																															Haul truck creeped forward <15m of caribou on road. 4 caribou ran off road. Young male caribou returned to the road and walked twords the haul truck alert starting at haul truck. Blocking the haul road. Haul truck stopped and the caribou walked up within 20m of the haul truck, decided to turn and run off the winter road with other caribou
Group-2-1	2-Mar	-25	20	NW	588876	7039143	25-150m away from the winter road		50		Portage	N-11	Gahcho Kue	25-150m	F,M,C	-	Group	1	08:13:22	25	16	6			4	Light Truck x2 H	25m	3	3 minutes 19 seconds		
Group-2-1	2-Mar	-25	20	NW	588876	7039143	25-150m away from the winter road		50		Portage	N-11	Gahcho Kue	25-150m	F,M,C	-	Group	1	08:14:30	30	8	6		3	4	same stressor as	25m	3			
Group-2-1	2-Mar	-25	20	NW	588876	7039143	25-150m away from the winter road		50		Portage	N-11	Gahcho Kue	25-150m	F,M,C	-	Group	1	08:14:51	30	8	6	3	1		same stressor as	50m	2			
Group-2-1	2-Mar	-25	20	NW	588876	7039143	25-150m away from the winter road		50		Portage	N-11	Gahcho Kue	25-150m	F,M,C	-	Group	1	08:15:30	30	8	8	2			same stressor as	50m	2			
Group-2-1	2-Mar	-25	20	NW	588876	7039143	25-150m away from the winter road		50		Portage	N-11	Gahcho Kue	25-150m	F,M,C	-	Group	1	08:16:33	30	8	7		1		same stressor as	75m	2			
Group-2-1	2-Mar	-25	20	NW	588876	7039143	25-150m away from the winter road		50		Portage	N-11	Gahcho Kue	25-150m	F,M,C	-	Group	1	08:21:43	37	10	3									
Group-2-1	2-Mar	-25	20	NW	588876	7039143	25-150m away from the winter road		50		Portage	N-11	Gahcho Kue	25-150m	F,M,C	-	Group	1	08:29:32	34	13	3									
Group-2-1	2-Mar	-25	20	NW	588876	7039143	25-150m away from the winter road		50		Portage	N-11	Gahcho Kue	25-150m	F,M,C	-	Group	1	08:37:19	34	11	2									
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:05:21					1							
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:07:47												
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:09:31					1							
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:10:47		1										
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:13:22						1	Light Truck x2 H	20m	3	3 minutes: 11 seconds		
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:14:31		1										
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:14:41					1							
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:15:30						1						
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:16:33												
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:19:21			1									
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:21:34			1									
Focal-2-1	2-Mar	-25	20	NW	588876	7039143	20m away from stressor on the winter road		50		Portage	N-11	Gahcho Kue	20m	M	-	Focal	1	08:32:07		1										
Group-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F,M,C	-	Group	2	08:42:22	20	12	3									
Group-2-2	2-Mar	-60	20	NW	588839	7039769	75m away from the winter road		98		Portage	P-28	Gahcho Kue	75m	F,M,C	-	Group	2	08:48:34	15	16	2				Haul Truck x 2	75m	3	NA		Herd did not react to Hault Truck passing by
Group-2-2	2-Mar	-60	20	NW	588839	7039769	75m away from the winter road		98		Portage	P-28	Gahcho Kue	75m	F,M,C	-	Group	2	08:50:47	13	20	1									
Group-2-2	2-Mar	-60	20	NW	588839	7039769	75m away from the winter road		98		Portage	P-28	Gahcho Kue	75m	F,M,C	-	Group	2	08:54:21	14	42										
Group-2-2	2-Mar	-60	20	NW	588839	7039769	75m away from the winter road		98		Portage	P-28	Gahcho Kue	75m	F,M,C	-	Group	2	08:58:42	4	19	2									
Group-2-2	2-Mar	-60	20	NW	588839	7039769	75m away from the winter road		98		Portage	P-28	Gahcho Kue	75m	F,M,C	-	Group	2	09:06:53	14	38	3									
Group-2-2	2-Mar	-60	20	NW	588839	7039769	75m away from the winter road		98		Portage	P-28	Gahcho Kue	75m	F,M,C	-	Group	2	09:14:33	7	43	6									
Focal-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F	-	Focal	2	08:45:29					1						Looking around at other caribou	
Focal-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F	-	Focal	2	08:45:45		1									Using hooves to reach browse.	
Focal-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F	-	Focal	2	08:46:20			1									
Focal-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F	-	Focal	2	08:47:18		1										
Focal-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F	-	Focal	2	08:48:34		1					Haul Truck x 2	75m	0	NA		Continued to forage for browse. No reaction
Focal-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F	-	Focal	2	08:52:23		1	1									
Focal-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F	-	Focal	2	08:52:34		1										
Focal-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F	-	Focal	2	09:00:51		1			1						Still feeding on browse.	
Group-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F,M,C	-	Group	2	09:03:17					1							
Focal-2-2	2-Mar	-60	20	NW	588839	7039769	75m		98		Portage	P-28	Gahcho Kue	75m	F	-	Focal	2	09:07:54		1										
Group-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F,M	-	Group	3	09:20:13		8			1							
Group-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F,M	-	Group	3	09:28:47		4	1								Two walked over ridge out of sight	
Group-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F,M	-	Group	3	09:36:07		7									2 more walked over ridge into view	
Group-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F,M	-	Group	3	09:44:24		2	5		10						10 more walked over ridge.	
Group-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F,M	-	Group	3	09:52:28	1	15	1		17							
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:21:32												
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:24:47												
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:25:13		1										
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:28:37			1									
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:28:54		1										
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:29:42			1									
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:30:31		1										
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:31:19		1	1									
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:33:21		1										
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:40:33		1	1									
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:42:18		1										
Focal-2-3	2-Mar	-60	20	NW	584889	7047239	150m away from the winter road		17		Portage	P-24	Gahcho Kue	150m	F	-	Focal	3	09:44:21												
Group-2-4	2-Mar	-60	20	NW	574730	7057262	300m away from the winter road		3		Lake	P-22	Gahcho Kue	300m	F,M	-	Group	4	10:10:13					3							
Group-2-4	2-Mar	-60	20	NW	574730	7057262	300m away from the winter road		3		Lake	P-23	Gahcho Kue	300m	F,M	-	Group	4	10:18:40					3							
Group-2-4	2-Mar	-60	20	NW	574730	7057262	300m away from the winter road		3		Lake	P-24	Gahcho Kue	300m	F,M	-	Group	4	10:20:34					3						Walked out of sight	
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	10:43:21	5	61	9									
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	10:44:44	5	36			46		Haul Truck x 1	50m	1	2 minutes: 23 seconds		Watched haul truck pass 40/75
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	10:46:13	5	47	13								Re-turned to normal	
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	10:49:38	5	16	7	47			Haul Truck x 5	50m	1	7 minutes: 19 seconds		Watched haul truck pass 47/75
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	10:54:49	5	31	3	61								12 male caribou came into view
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	10:56:57	5	72	8								Re-turned to normal	
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	10:59:31	5	80	1									
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	11:02:43	2	83			8						6 more caribou walked into view	
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	11:07:19	3	86			6							
Group-2-5	2-Mar	-60	20	NW	569840	7066838	50m away from the winter road		91		Portage	P-14	Gahcho Kue	50m	F,M,C	-	Group	5	11:15:47	3	88			8							
Group-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F,M,C	-	Group	6	11:23:43	40	3	3									
Group-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F,M,C	-	Group	6	11:31:57	42	3	1									
Group-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F,M,C	-	Group	6	11:39:42	32	12	2									
Group-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F,M,C	-	Group	6	11:47:21	23	20	8									
Group-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F,M,C	-	Group	6	11:55:15	19	21	6									
Focal-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F	-	Focal	6	11:25:32	1											
Focal-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F	-	Focal	6	11:27:41		1										
Focal-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F	-	Focal	6	11:32:21					1							
Focal-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F	-	Focal	6	11:39:19		1										
Focal-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F	-	Focal	6	11:42:13		1										
Focal-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F	-	Focal	6	11:42:49		1										
Focal-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F	-	Focal	6	11:44:17					1							
Focal-2-6	2-Mar	-60	20	NW	567091	7066614	150m away from the winter road		48		Portage	P-12/13	Gahcho Kue	150m	F	-	Focal	6	11:47:21												
Group-2-7	2-Mar	-60	20	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F,M,C	-	Group	7	10:59:53	1575	800	150		25							
Group-2-7	2-Mar	-60	20	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F,M,C	-	Group	7	13:08:34	1575	750	150		25							
Group-2-7	2-Mar	-60	20	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F,M,C	-	Group	7	13:11:10	1400		250		900	500	Unknown	Unknown	3	3 minutes: 3 seconds	No haul trucks or light trucks passed. No observation of snowlizers	
Group-2-7	2-Mar	-60	20	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F,M,C	-	Group	7	13:14:21	1600	400	450		50						Back to normal behaviour	
Group-2-7	2-Mar	-60	20	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F,M,C	-	Group	7	13:19:40	1600	350	350		50							
Group-2-7	2-Mar	-60	20	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F,M,C	-	Group	7	13:22:51	1900	150	50		400		Haul Truck x 6	50m	2	2 minutes: 7 seconds		Approx 400 caribou walked 50-75m further away from the winter road.
Group-2-7	2-Mar	-60	20	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F,M,C	-	Group	7	13:24:18	1900	350	100									Returned to normal behaviour
Group-2-7	2-Mar	-60	20	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F,M,C	-	Group	7	13:32:31	1900	350	50									
Group-2-7	2-Mar	-60	20	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F,M,C	-	Group	7	13:40:21	1900	350	50									
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:05:23		1										
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:11:32					1		unknown	unknown	3	3 minutes: 11 seconds	Possible haul truck not in view?	
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:11:48							Haul Trucks x6	50-150m	3		Plan away from stressors approx 50m	
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:13:34					1							
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:14:43			1								Returned to normal behaviour	
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:18:28		1										
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:20:17					1							
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:25:11		1										
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:26:43		1										
Focal-2-7	2-Mar	-60	15	NW	550058	7086245	50-150m away from the winter road		2500		Portage	P-7	Gahcho Kue	50-150m	F	-	Focal	7	13:27:16												
Group-2-8	2-Mar	-60	12	NW	542322	7091520	25-1200m away from the winter road		2250		Portage	P-5	Gahcho Kue	25-1200m	F,M,C	-	Group	8	14:05:39	2000	175	50		25							
Group-2-8	2-Mar	-60	12	NW	542322	7091520	25-1200m away from the winter road		2250		Portage	P-5	Gahcho Kue		F,M,C	-	Group	8	14:13:21	2000	150	75		25							
Focal-2-8	2-Mar	-60	12	NW	542322	7091520	25-1200m away from the winter road		2250		Portage	P-5	Gahcho Kue		F	-	Focal	8	14:21:52	2200	100	50									
																															2000 alert, lifting heads from bedded position to watch haul trucks pass by. Some got up and walked
Group-2-8	2-Mar	-60	12	NW	542322	7091520	25-1200m away from the winter road		2250		Portage	P-5	Gahcho Kue		F,M,C	-	Group	8	14:27:41							Haul Truck x 2	25m	1-2	3 minutes: 22 seconds	away from stressor about 10-25m.
Group-2-8	2-Mar	-60	12	NW	542322	7091520	25-1200m away from the winter road		2250		Portage	P-5	Gahcho Kue		F,M,C	-	Group	8	14:30:23	2000	150	100								Returned to normal behaviour	
Group-2-8	2-Mar	-60	12	NW	542322	7091520	25-1200m away from the winter road		2250		Portage	P-5	Gahcho Kue		F,M,C	-	Group	8	14:37:21	2000	200	50		100							
Group-2-8	2-Mar	-60	12	NW	542322	7091520	25-1200m away from the winter road		2250		Portage	P-5	Gahcho Kue		F,M,C	-	Group	8	14:45:37			50	2200			Light Truck X1	25m	3	Minutes: 7 seconds	Herd was alert. aware. watching. following heads turning as truck passed the herd.	
Group-2-8	2-Mar	-60	12	NW	542322	7091520	25-1200m away from the winter road		2250		Portage	P-5	Gahcho Kue		F,M,C	-	Group	8	14:48:04	2200	100	50								Returned to normal behaviour	
Focal-2-8	2-Mar	-60	12	NW	542322	7091520	50m from the winter road		2250		Portage	P-5	Gahcho Kue	50m	Female Calve	-	Focal	8	14:18:34												
Focal-2-8	2-Mar	-60	12	NW	542322	7091520	50m from the winter road		2250		Portage	P-5	Gahcho Kue	50m	Female Calve	-	Focal	8	14:22:33					1							
Focal-2-8	2-Mar	-60	12	NW	542322	7091520	50m from the winter road		2250		Portage	P-5	Gahcho Kue	50m	Female Calve	-	Focal	8	14:24:47					1							
Focal-2-8	2-Mar	-60	12	NW	542322	7091520	50m from the winter road		2250		Portage	P-5	Gahcho Kue	50m	Female Calve	-	Focal	8	14:27:41							Haul Truck x 2	25m	3	4 minutes: 20 seconds	Lifted head and watched Haul truck pass the herd	
Focal-2-8	2-Mar	-60	12	NW	542322	7091520	50m from the winter road		2250		Portage	P-5	Gahcho Kue	50m	Female Calve	-	Focal	8	14:31:21		1									Re-turned to calve. head down no longer alert	
Focal-2-8	2-Mar	-60	12	NW	542322	7091520	50m from the winter road		2250		Portage	P-5	Gahcho Kue	50m	Female Calve	-	Focal	8	14:37:12			1								Returned to normal behaviour	
Focal-2-8	2-Mar	-60	12	NW	542322	7091520	50m from the winter road		2250		Portage	P-5	Gahcho Kue	50m	Female Calve	-	Focal	8	14:42:08	1											
Group-2-9	2-Mar	-60	12	NW	541445	7091648	25-1250m away from the winter road		3750		Portage	P-5	Gahcho Kue	25-1250m	F,M,C	-	Group	9	14:58:20	775	1250	400		325							
																															Minimal response even once at 25m, watched convoy drove past the herd. Resumed behaviour once
Group-2-9	2-Mar	-60	12	NW	541445	7091648	25-1250m away from the winter road		3750		Portage	P-5	Gahcho Kue	25-1250m	F,M,C	-	Group	9	15:02:31	775	1250	400		325		Haul Truck x 3	L 25-1250m		5 minutes: 16 seconds	stressors had passed	
Group-2-9	2-Mar	-60	12	NW	541445	7091648	25-1250m away from the winter road		3750		Portage	P-5	Gahcho Kue	25-1250m	F,M,C	-	Group	9	15:06:07	810	1250	350		340							
Group-2-9	2-Mar	-60	12	NW	541445	7091648	25-1250m away from the winter road		3750		Portage	P-5	Gahcho Kue	25-1250m	F,M,C	-	Group	9	15:14:08	830	1500	220		280							
Group-2-9	2-Mar	-60	12	NW	541445	7091648	25-1250m away from the winter road		3750		Portage	P-5	Gahcho Kue	25-1250m	F,M,C	-	Group	9	15:22:58	950	1500	200		150							
Group-2-9	2-Mar	-60	12	NW	541445	7091648	25-1250m away from the winter road		3750		Portage	P-5	Gahcho Kue	25-1250m	F,M,C	-	Group	9	15:30:21	1000	1500	250		90		Haul truck x 2	26-1250m	1	13 minutes: 26 seconds	Minimal response - looked at trucks as they passed	
Group-2-9	2-Mar	-60	12	NW

Survey # (ScanType-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Group-3-3	3-Mar	-20	8	NW	588748	7039735	5-250m away from the winter road.		52		Portage	P-28	Gahcho Kue	5-250m	F,M,C	-	Group	3	08:50:34		45	2										Returned to normal behaviour	
Group-3-3	3-Mar	-20	8	NW	588748	7039735	5-250m away from the winter road.		52		Portage	P-28	Gahcho Kue	5-250m	F,M,C	-	Group	3	08:53:23		43	2											
Group-3-3	3-Mar	-20	8	NW	588748	7039735	5-250m away from the winter road.		52		Portage	P-28	Gahcho Kue	5-250m	F,M,C	-	Group	3	09:01:34		48			4								5 more caribou walked into view	
Group-3-3	3-Mar	-20	8	NW	588748	7039735	5-250m away from the winter road.		52		Portage	P-28	Gahcho Kue	5-250m	F,M,C	-	Group	3	09:09:47	10	38	5		3								
Group-3-3	3-Mar	-20	8	NW	588748	7039735	5-250m away from the winter road.		52		Portage	P-28	Gahcho Kue	5-250m	F,M,C	-	Group	3	09:17:33	10	39	2		1								Under 1 interval
Group-3-4	3-Mar	-20	8	NW	581437	7048756	150-800m away from the winter road		158		Portage	P-22	Gahcho Kue	150-800m	F,M,C	-	Group	4	09:25:39		109	33		25								
Group-3-4	3-Mar	-20	8	NW	581437	7048756	150-800m away from the winter road		158		Portage	P-22	Gahcho Kue	150-800m	F,M,C	-	Group	4	09:33:28		77	26		49								
Group-3-4	3-Mar	-20	8	NW	581437	7048756	150-800m away from the winter road		158		Portage	P-22	Gahcho Kue	150-800m	F,M,C	-	Group	4	09:41:49	25	82	30		6								
Group-3-4	3-Mar	-20	8	NW	581437	7048756	150-800m away from the winter road		158		Portage	P-22	Gahcho Kue	150-800m	F,M,C	-	Group	4	09:49:57	39	105	25		3								
Group-3-4	3-Mar	-20	8	NW	581437	7048756	150-800m away from the winter road		158		Portage	P-22	Gahcho Kue	150-800m	F,M,C	-	Group	4	09:57:16	37	104	15		3								
Group-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:25:56													
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:27:34													
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:28:21													
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:30:43													
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:32:49													
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:33:10			1										
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:34:21													
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:37:42		1											
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:45:07													
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:46:18													
Focal-3-4	3-Mar	-20	8	NW	581437	7048756	150m		158		Portage	P-22	Gahcho Kue	150m	M	-	Focal	4	09:46:57													
Group-3-5	3-Mar	-20	8	NW	570221	7063647	75-150m away from the winter road.		47		Lake	P-15	Gahcho Kue	75-150m	F,M,C	-	Group	5	10:20:13	3	20	2		12								
Group-3-5	3-Mar	-20	8	NW	570221	7063647	75-150m away from the winter road.		47		Lake	P-15	Gahcho Kue	75-150m	F,M,C	-	Group	5	10:28:34	3	25	2		9								
Group-3-5	3-Mar	-20	8	NW	570221	7063647	75-150m away from the winter road.		47		Lake	P-15	Gahcho Kue	75-150m	F,M,C	-	Group	5	10:31:19					12		25	Unknown	Unknown	3	11 minutes: 14 seconds	25 ran down ridge, no vehicles or predators observed. Trotted to a stop.	
Group-3-5	3-Mar	-20	8	NW	570221	7063647	75-150m away from the winter road.		47		Lake	P-15	Gahcho Kue	75-150m	F,M,C	-	Group	5	10:33:28					12								
Group-3-5	3-Mar	-20	8	NW	570221	7063647	75-150m away from the winter road.		47		Lake	P-15	Gahcho Kue	75-150m	F,M,C	-	Group	5	10:36:12			25	12	6								
Group-3-5	3-Mar	-20	8	NW	570221	7063647	75-150m away from the winter road.		47		Lake	P-15	Gahcho Kue	75-150m	F,M,C	-	Group	5	10:42:33	3	30	8		6								
Group-3-5	3-Mar	-20	8	NW	570221	7063647	75-150m away from the winter road.		47		Lake	P-15	Gahcho Kue	75-150m	F,M,C	-	Group	5	10:44:49	3	37			7								
Group-3-5	3-Mar	-20	8	NW	570221	7063647	75-150m away from the winter road.		47		Lake	P-15	Gahcho Kue	75-150m	F,M,C	-	Group	5	10:52:37	7	36			6							Walleye out of P-14 lake into P-15 lake	
Group-3-5	3-Mar	-20	8	NW	570221	7063647	100m away from the water		47		Lake	P-15	Gahcho Kue	100m	F	-	Focal	5	10:26:37					1			Unknown	Unknown	3	12 minutes: 28 seconds	Watching part of the herd that ran/trotted. No stressor observed.	
Focal-3-5	3-Mar	-20	8	NW	570221	7063647	100m away from the water		47		Lake	P-15	Gahcho Kue	100m	F	-	Focal	5	10:31:19					1								
Focal-3-5	3-Mar	-20	8	NW	570221	7063647	100m away from the water		47		Lake	P-15	Gahcho Kue	100m	F	-	Focal	5	10:35:29					1								
Focal-3-5	3-Mar	-20	8	NW	570221	7063647	100m away from the water		47		Lake	P-15	Gahcho Kue	100m	F	-	Focal	5	10:43:47													
Focal-3-5	3-Mar	-20	8	NW	570221	7063647	100m away from the water		47		Lake	P-15	Gahcho Kue	100m	F	-	Focal	5	10:50:31					1								
Group-3-6	3-Mar	-20	8	NW	569224	7064596	25-75m away from the winter road		28		Portage	P-14	Gahcho Kue	25-75m	F,M,C	-	Group	6	11:05:23	3	18	3										under 3 interval
Group-3-6	3-Mar	-20	8	NW	569224	7064596	25-75m away from the winter road		28		Portage	P-14	Gahcho Kue	25-75m	F,M,C	-	Group	6	11:13:19	4	23	2										
Group-3-6	3-Mar	-20	8	NW	569224	7064596	25-75m away from the winter road		28		Portage	P-14	Gahcho Kue	25-75m	F,M,C	-	Group	6	11:21:37			9										
Group-3-6	3-Mar	-20	8	NW	569224	7064596	25-75m away from the winter road		28		Portage	P-14	Gahcho Kue	25-75m	F,M,C	-	Group	6	14:42:47			2		26								
																													All caribou walked out of		
Group-3-6	3-Mar	-20	8	NW	569924	7064596	25-75m away from the winter road		26		Portage	P-14	Gahcho Kue	26-75m	F,M,C		Group	6	11:26:32					26						view		
Group-3-7	3-Mar	-20	8	NW	567527	7065013	300m away from the winter road		37		Portage	P-12/13	Gahcho Kue	300m	F,M,C	-	Group	7	11:30:42	4	6	5		3								
Group-3-7	3-Mar	-20	8	NW	567527	7065013	300m away from the winter road		37		Portage	P-12/13	Gahcho Kue	300m	F,M,C	-	Group	7	11:36:18	4	10	5		3			Haul truck x1	300m	3	NA	No reaction from the herd	
Group-3-7	3-Mar	-20	8	NW	567527	7065013	300m away from the winter road		37		Portage	P-12/13	Gahcho Kue	300m	F,M,C	-	Group	7	11:38:24	20	12	5		10							10 more caribou in the distance in Rat-tik zone	
Group-3-7	3-Mar	-20	8	NW	567527	7065013	300m away from the winter road		37		Portage	P-12/13	Gahcho Kue	300m	F,M,C	-	Group	7	11:46:32	22	15			7								
Group-3-7	3-Mar	-20	8	NW	567527	7065013	300m away from the winter road		37		Portage	P-12/13	Gahcho Kue	300m	F,M,C	-	Group	7	11:54:47	18	17			2								
Group-3-7	3-Mar	-20	8	NW	567527	7065013	300m away from the winter road		37		Portage	P-12/13	Gahcho Kue	300m	F,M,C	-	Group	7	11:56:43	18	17			2			Haul truck x 2	350m	3	NA	No reaction from the herd	
Group-3-7	3-Mar	-20	8	NW	567527	7065013	300m away from the winter road		37		Portage	P-12/13	Gahcho Kue	300m	F,M,C	-	Group	7	12:04:12	12	22			3								
Group-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m away from the water road.		364		Lake	Red Lake	Gahcho Kue	150-500m	F,M,C	-	Group	8	12:20:43	125	175	7		14								
Group-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m away from the water road.		364		Lake	Red Lake	Gahcho Kue	150-500m	F,M,C	-	Group	8	12:23:39	125	175	7		14			Haul truck x 1	150m	3	NA	No reaction from the entire herd	
Group-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m away from the water road.		364		Lake	Red Lake	Gahcho Kue	150-500m	F,M,C	-	Group	8	12:28:28	125	175	10		15							43 walked over a ridge into view	
Group-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m away from the water road.		364		Lake	Red Lake	Gahcho Kue	150-500m	F,M,C	-	Group	8	12:36:19	125	176	9		193								
Group-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m away from the water road.		364		Lake	Red Lake	Gahcho Kue	150-500m	F,M,C	-	Group	8	12:44:57	75	150	14		135								
Group-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m away from the water road.		364		Lake	Red Lake	Gahcho Kue	150-500m	F,M,C	-	Group	8	12:52:20	40	175	4		140								
Focal-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m		364		Lake	Red Lake	Gahcho Kue	150m	M	-	Focal	8	12:21:39													
Focal-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m		364		Lake	Red Lake	Gahcho Kue	150m	M	-	Focal	8	12:26:43			1		1							Walked approx 100m, stopped, alarm/looking around.	
Focal-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m		364		Lake	Red Lake	Gahcho Kue	150m	M	-	Focal	8	12:27:33													
Focal-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m		364		Lake	Red Lake	Gahcho Kue	150m	M	-	Focal	8	12:29:34			1		1							Walked approx 25m	
Focal-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m		364		Lake	Red Lake	Gahcho Kue	150m	M	-	Focal	8	12:31:07					1								
Focal-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m		364		Lake	Red Lake	Gahcho Kue	150m	M	-	Focal	8	12:32:18			1									Walked approx 50m	
Focal-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m		364		Lake	Red Lake	Gahcho Kue	150m	M	-	Focal	8	12:34:21					1								
Focal-3-8	3-Mar	-20	8	NW	551740	7070958	150-500m		364		Lake	Red Lake	Gahcho Kue	150m	M	-	Focal	8	12:43:10			1									Walked 150m, started feeding.	
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:05:45		1			1								
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:10:20													
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:11:19		1			1								
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:13:57								Haul truck x 2	25m	2	2 minutes: 33 seconds	Walked 50m away from oriental position	
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:14:21					1								
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:18:34													
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:18:58		1										Backtracked to several behaviours	
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:25:40					1								
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:25:46					1								
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:27:10													
Focal-3-9	3-Mar	-20	8	NW	553346	7079999	50m away from the winter road		382		Portage	P-9	Gahcho Kue	50m	M	-	Focal	9	13:29:07													
Group-3-9	3-Mar	-20	8	NW	553346	7079999	50-125m away from the winter road.		382		Portage	P-9	Gahcho Kue	50-125m	F,M,C	-	Group	9	13:05:19	180	40	7		9								
Group-3-9	3-Mar	-20	8	NW	553346	7079999	50-125m away from the winter road.		382		Portage	P-9	Gahcho Kue	50-125m	F,M,C	-	Group	9	13:13:53	180	40	7		9							Alert watching the haul trucks x 2. Caribou 50m away walked away approx 25m (50) (182 continued to	
Group-3-9	3-Mar	-20	8	NW	553346	7079999	50-125m away from the winter road.		382		Portage	P-9	Gahcho Kue	50-125m	F,M,C	-	Group	9	13:14:40			233					Haul Truck x2	50m	1,2	3 minutes: 24 seconds	the herd/fed on shrubs/don't considered to reactions at 175m away	
Group-3-9	3-Mar	-20	8	NW	553346	7079999	50-125m away from the winter road.		382		Portage	P-9	Gahcho Kue	50-125m	F,M,C	-	Group	9	13:14:57			182		90								
Group-3-9	3-Mar	-20	8	NW	553346	7079999	50-125m away from the winter road.		382		Portage	P-9	Gahcho Kue	50-125m	F,M,C	-	Group	9	13:17:14	180	92			2								
Group-3-9	3-Mar	-20	8	NW	553346	7079999	50-125m away from the winter road.		382		Portage	P-9	Gahcho Kue	50-125m	F,M,C	-	Group	9	13:21:34	180	92			2								
Group-3-9	3-Mar	-20	8	NW	553346	7079999	50-125m away from the winter road.		382		Portage	P-9	Gahcho Kue	50-125m	F,M,C	-	Group	9	13:29:18	175	92	5		192							150 walking behind herd, estimate	
Group-3-9	3-Mar	-20	8	NW	553346	7079999	50-125m away from the winter road.		382		Portage	P-9	Gahcho Kue	50-125m	F,M,C	-	Group	9	13:37:42	180	88	70		92								
Group-3-10	3-Mar	-20	8	NW	543440	7087193	900-1000m away from the winter road.		551		Lake	P-5	Gahcho Kue	900-1000m	F,M,C	-	Group	10	13:58:10					11								
Group-3-10	3-Mar	-20	8	NW	543440	7087193	900-1000m away from the winter road.		551		Lake	P-5	Gahcho Kue	900-1000m	F,M,C	-	Group	10	14:01:18					381			Light truck x 1	900-1000m	0	NA	No reaction. Herd to far away from shooter	
Group-3-10	3-Mar	-20	8	NW	543440	7087193	900-1000m away from the winter road.		551		Lake	P-5	Gahcho Kue	900-1000m	F,M,C	-	Group	10	14:06:34					401							40 walked out from behind ridge.	
Group-3-10	3-Mar	-20	8	NW	543440	7087193	900-1000m away from the winter road.		551		Lake	P-5	Gahcho Kue	900-1000m	F,M,C	-	Group	10	14:14:21					581							150 more walked into view	
Group-3-10	3-Mar	-20	8	NW	543440	7087193	900-1000m away from the winter road.		551		Lake	P-5	Gahcho Kue	900-1000m	F,M,C	-	Group	10	14:22:41					551							Moving south into P-6	
Group-3-10	3-Mar	-20	8	NW	543440	7087193	900-1000m away from the winter road.		551		Lake	P-5	Gahcho Kue	900-1000m	F,M,C	-	Group	10	14:30:18					591								
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	14:30:38	800	1250	500		100								
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	14:43:19	800	1250	500		190								
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	14:51:19	800	1000	100		750			Light Truck x 1	50-1200m	2	7 minutes: 2 seconds	Herd 50m away from the winter road, walked away approx 20-100m. 100m-1200m unbothered	
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	14:52:47	800	1000	100		750							Approximately 750 bothered by shooter	
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	14:56:19	800	1000		850	1								
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	14:58:21	800	1500	200		190								
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	14:59:34	900	1500	200		90								
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	15:07:07	850	1350	100		90								
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	15:15:41	1000	1250	300		90								
Group-3-11	3-Mar	-20	8	NW	541445	7081648	50-1200m away from the winter road.		2650		Portage	P-5	Gahcho Kue	50-1200m	F,M,C	-	Group	11	15:23:19	1000	1250	300		100								
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:00:19			1										
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:02:34					1								
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:04:05		1											
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:04:53		1											
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:05:19			1										
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:07:47		1											
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:10:36			1										
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:10:54					1								
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:12:12													
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:17:39		1											
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:17:40													
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:21:31					1								
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:23:21													
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:34:19		1											
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:34:40			1										
Focal-3-11	3-Mar	-20	8	NW	541445	7081648	150m away from the winter road.		2650		Portage	P-5	Gahcho Kue	150m	F,calve	-	Focal	11	15:34:50		1											
Group-7-1	7-Mar	-18	30	S	575177	7065329	150		2		Lake	-	Gahcho Kue	150m	F,calve	-	Group	1	09:59:00	2												under 2 intervals
Group-7-1	7-Mar	-18	30	S	575177	7065329	150		2		Lake	-	Gahcho Kue	150m	F,calve	-	Group	1	10:07:00	2												
Group-7-1	7-Mar	-18	30	S	575177	7065329	150		2		Lake	-	Gahcho Kue	150m	F,calve	-	Group	1	10:15:00					2			2 trucks	150	2			
Group-7-1	7-Mar	-18	30	S	575177	7065329	150		2		Lake	-	Gahcho Kue	150m	F,calve	-	Group	1	10:18:00					2			1 truck	190	2			
Group-7-1	7-Mar	-18	30	S	575177	7065329	150		2		Lake	-	Gahcho Kue	150m	F,calve	-	Group	1	10:24:00					2							End of survey: caribou left sight.	
Focal-7-1	7-Mar	-18	30	S	575177	7065329	150		2		Lake	-	Gahcho Kue	150m	F,calve	-	Group	1	09:59:00	1												
Focal-7-1	7-Mar	-18	30	S	575177	7065329	150		2		Lake	-	Gahcho Kue	150m	F,calve	-	Focal	1	10:15:00					1								
Focal-7-1	7-Mar	-18	30	S	575177	7065329	150		2		Lake	-	Gahcho Kue	150m	F,calve	-	Focal	1	10:18:00					1								
Focal-7-1	7-Mar	-18	30	S	575177	7065329	150		2		Lake	-	Gahcho Kue	150m	F,calve	-	Focal	1	10:24:00					1							End of survey: caribou left sight.	
Group-7-2	7-Mar	-20	36	E	550185	7063610	201 to road		41		Lake	-	Gahcho Kue	200	F,M,C	-	Group	2	11:39:00	7	31		3									under 2 intervals
Focal-7-2	7-Mar	-20	36	E	550185	7063610	201 to road		41		Lake	-	Gahcho Kue	200	F,M,C	-	Group	2	11:48:00	23	12	2	1	3								
Focal-7-2	7-Mar	-20	36	E	550185	7063610	201 to road		41		Lake	-	Gahcho Kue	200	F,M,C	-	Group	2	11:51:00							41	2 trucks	200	2	7 minutes		
Focal-7-2	7-Mar	-20	36	E	550185	7063610	201 to road		41		Lake	-	Gahcho Kue	200	F,M,C	-	Group	2	11:58:00			41									End of survey: caribou left sight.	
Focal-7-2

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal-09-02	9-Mar	-25	20-30	W	553148	7077324	500m		60-100		Lake	-	Gahcho Kue	500m	F M	-	Focal	2	12:57:00				1				1 light vehicle				
Focal-09-02	9-Mar	-30	20-30	W	553148	7077324	500m		60-100		Lake	-	Gahcho Kue	500m	F M	-	Focal	2	12:58:00	1											
Focal-09-02	9-Mar	-29	20-30	W	553148	7077324	500m		60-100		Lake	-	Gahcho Kue	500m	F M	-	Focal	2	12:59:00	1			1								
Focal-09-02	9-Mar	-29	20-30	W	553148	7077324	500m		60-100		Lake	-	Gahcho Kue	500m	F M	-	Focal	2	13:16:00												
Focal-09-02	9-Mar	-29	20-30	W	553148	7077324	500m		60-100		Lake	-	Gahcho Kue	500m	F M	-	Focal	2	13:17:00		1										
Focal-09-02	9-Mar	-29	20-30	W	553148	7077324	500m		60-100		Lake	-	Gahcho Kue	500m	F M	-	Focal	2	13:19:00	1											
Focal-09-02	9-Mar	-29	20-30	W	553148	7077324	500m		60-100		Lake	-	Gahcho Kue	500m	F M	-	Focal	2	13:29:00				1				3 trucks		2	2 minutes	
Focal-09-02	9-Mar	-29	20-30	W	553148	7077324	500m		60-100		Lake	-	Gahcho Kue	500m	F M	-	Focal	2	13:33:00	1											
Focal-09-02	9-Mar	-29	20-30	W	553148	7077324	500m		60-100		Lake	-	Gahcho Kue	500m	F M	-	Focal	2	13:36:00	1											
Group-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Group	3	15:35:00		5			7							
Group-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Group	3	15:42:00		1	7		2	2						
Group-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Group	3	15:50:00					11							
Group-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Group	3	15:58:00					12							
Group-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Group	3	16:08:00					10							
Focal-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Focal	3	16:34:00		1										
Focal-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Focal	3	16:39:00							1					
Focal-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Focal	3	16:41:00			1									
Focal-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Focal	3	16:43:00							1					
Focal-09-03	9-Mar	-	-	-	552633	7085898	350m		12		-	-	Gahcho Kue	350m	F C	-	Focal	3	16:50:00												
Group-09-04	9-Mar	-24	20-30	N	569101	7066165	800m		18		Lake	-	Gahcho Kue	800m	F M C	-	Group	4	16:35:00				18							No floral scan for this spino	
Group-09-04	9-Mar	-24	20-30	N	569101	7066165	800m		18		Lake	-	Gahcho Kue	800m	F M C	-	Group	4	16:43:00		2			17							
Group-09-04	9-Mar	-24	20-30	N	569101	7066165	800m		18		Lake	-	Gahcho Kue	800m	F M C	-	Group	4	16:51:00		17			2							
Group-09-04	9-Mar	-24	20-30	N	569101	7066165	800m		18		Lake	-	Gahcho Kue	800m	F M C	-	Group	4	16:59:00		18										
Group-09-04	9-Mar	-24	20-30	N	569101	7066165	800m		18		Lake	-	Gahcho Kue	800m	F M C	-	Group	4	17:07:00		16			1							
Group-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Portage	-	Gahcho Kue	100m	F M	-	Group	5	17:10:00	10	22									One wasnino an orange collar	
Group-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Portage	-	Gahcho Kue	100m	F M	-	Group	5	17:18:00	10	20			2							
Group-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Portage	-	Gahcho Kue	100m	F M	-	Group	5	17:25:00	10	12			3	2		1 light truck	150m	0		
Group-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Portage	-	Gahcho Kue	100m	F M	-	Group	5	17:32:00	8	20			1	2						
Group-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Portage	-	Gahcho Kue	100m	F M	-	Group	5	17:39:00	8	22			2			2 light trucks, 1 lo	100m	0		
Group-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Portage	-	Gahcho Kue	100m	F M	-	Group	5	17:41:00	8	21			3							
Focal-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Land-Portage	-	Gahcho Kue	100m	F M	-	Focal	5	17:11:00												
Focal-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Land-Portage	-	Gahcho Kue	100m	F M	-	Focal	5	17:25:00		1						1 light truck	150m	0		
Focal-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Land-Portage	-	Gahcho Kue	100m	F M	-	Focal	5	17:33:00		1										
Focal-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Land-Portage	-	Gahcho Kue	100m	F M	-	Focal	5	17:39:00		1						2 light trucks, 1 lo	150m	0		
Focal-09-05	9-Mar	-23	30	S	569903	7065360	100m		52		Land-Portage	-	Gahcho Kue	100m	F M	-	Focal	5	17:43:00		1										
Group-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Group	1	08:44:00	1	18				3						
Group-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Group	1	08:53:00	1	19				2	1					
Group-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Group	1	09:00:00	1	8				12					Group splitting off, some rumino	
Group-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Group	1	09:02:00	1	7		1	3	12		1 truck	200m	1	19 seconds	ends in face
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	09:02:00	1	7		1	3	8						
Group-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Group	1	09:08:00	1	7				7						
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	09:10:00	1	8	1	1	3	1		1 truck	200m	0		No direct reaction
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	09:18:00	1	7		1	3	1	1					
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	08:46:00				1								
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	08:47:00							1					
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	08:47:00											20 seconds later	
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	08:48:00												
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	08:50:00		1										
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	08:51:00												
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	08:52:00		1										
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	09:02:00		1						1 truck	200m	0		
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	09:10:00		1						1 truck	200m	0		
Focal-10-01	10-Mar	-33	20	-	584606	7045738	200m		200-300		Portage	-	Gahcho Kue	200m	F C	-	Focal	1	09:16:00												
Group-10-02	10-Mar	-30	-	-	579906	7054751	1000m		200		Lake	-	Gahcho Kue	200m	F M C	-	Group	2	09:36:00	30	2			6	2						
Group-10-02	10-Mar	-30	-	-	579906	7054751	1000m		200		Lake	-	Gahcho Kue	1000m	F M C	-	Group	2	09:42:00	29			1	5							
Group-10-02	10-Mar	-30	-	-	579906	7054751	1000m		200		Lake	-	Gahcho Kue	1000m	F M C	-	Group	2	09:44:00	24				7			2 trucks	950m	0		Few individuals raised heads to look
Group-10-02	10-Mar	-30	-	-	579906	7054751	1000m		200		Lake	-	Gahcho Kue	1000m	F M C	-	Group	2	09:50:00	28				3							
Group-10-02	10-Mar	-30	-	-	579906	7054751	1000m		200		Lake	-	Gahcho Kue	1000m	F M C	-	Group	2	09:58:00	27							1 truck	150m	1	1 minute	
Focal-10-02	10-Mar	-30	-	-	579906	7054751	1000m		200		Lake	-	Gahcho Kue	200m	F M C	-	Focal	2	09:40:00		1										
Focal-10-02	10-Mar	-30	-	-	579906	7054751	1000m		200		Lake	-	Gahcho Kue	1000m	F M C	-	Focal	2	09:44:00		1						2 trucks	950m	0		
Focal-10-02	10-Mar	-29	-	-	579906	7054751	1000m		200		Lake	-	Gahcho Kue	200m	F M C	-	Focal	2	09:55:00	1											
Focal-10-02	10-Mar	-30	-	-	579906	7054751	1000m		200		Lake	-	Gahcho Kue	200m	F M C	-	Focal	2	10:00:00	1											
Group-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Group	3	11:22:00	30											
Group-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Group	3	11:24:00	15			15				3 trucks	1500	1	1 minute	
Group-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Group	3	11:32:00	29				6							
Group-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Group	3	11:41:00	27				2							
Group-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Group	3	11:49:00	3											
Group-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Group	3	11:57:00	30										hard partially obscured by snow, observation difficult	
Focal-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Focal	3	11:26:00												
Focal-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Focal	3	11:39:00												
Focal-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Focal	3	11:57:00	1											
Focal-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Focal	3	11:58:00	1											
Focal-10-03	10-Mar	-30	-	-	552014	7062192	1500m		30-50		Lake	-	Gahcho Kue	1500m	F M C	-	Focal	3	11:58:00	1											
Group-10-4	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Group	4	12:24:00		48	2	1									
Group-10-4	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Group	4	12:29:00					35	20		2 trucks	10m	2	30 seconds	some alert, most walked, some walked behind hill
Focal-10-4	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Group	4	12:33:00		28						1 truck	10m	0		
Focal-10-4	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Group	4	12:36:00		8			17			1 truck	10m	1	1 minute	More walking over hill
Group-10-4	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Group	4	12:37:00		15			1							redirected truck to halter cowtenus noted remained aloof of herd
Focal-10-04	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Focal	4	12:45:00		40										
Focal-10-04	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Focal	4	12:24:00		1										
Group-10-04	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Group	4	12:29:00								2 trucks	10m	2	1 minute	
Focal-10-04	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Focal	4	12:30:00		1										
Focal-10-04	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Focal	4	12:33:00								1 truck	10m	0		
Focal-10-04	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Focal	4	12:36:00						1		1 truck	10m	2	5 seconds	
Focal-10-04	10-Mar	-30	-	-	553425	7075476	15m		50		Portage	-	Gahcho Kue	15m	F M	-	Focal	4	12:40:00											Moved out of sight while still feeding	
Group-11-01	11-Mar	-23	-	-	589004	7036561	1m		8		Land	-	Gahcho Kue	1m	F M	-	Group	1	08:51:30		4										
Group-11-01	11-Mar	-23	-	-	589004	7036561	1m		8		Land	-	Gahcho Kue	1m	F M	-	Group	1	08:52:42		4										
Group-11-01	11-Mar	-23	-	-	589004	7036561	1m		8		Land	-	Gahcho Kue	1m	F M	-	Group	1	09:08:09		2			2							
Group-11-01	11-Mar	-23	-	-	589004	7036561	1m		8		Land	-	Gahcho Kue	1m	F M	-	Group	1	09:16:09		1										
Group-11-01	11-Mar	-23	-	-	589004	7036561	1m		8		Land	-	Gahcho Kue	1m	F M	-	Group	1	09:24:53		4										
Focal-11-01	11-Mar	-23	-	-	589004	7036561	1m		4		Mine	-	Gahcho Kue	1m	F M	-	Focal	1	08:51:30		1										
Focal-11-01	11-Mar	-23	-	-	589004	7036561	1m		4		Mine	-	Gahcho Kue	1m	F M	-	Focal	1	09:08:30					1							
Focal-11-01	11-Mar	-23	-	-	589004	7036561	1m		4		Mine	-	Gahcho Kue	1m	F M	-	Focal	1	09:08:56		1										
Focal-11-01	11-Mar	-23	-	-	589004	7036561	1m		4		Mine	-	Gahcho Kue	1m	F M	-	Focal	1	09:21:40					1							
Focal-11-01	11-Mar	-23	-	-	589004	7036561	1m		4		Mine	-	Gahcho Kue	1m	F M	-	Focal	1	09:21:55		1										
Focal-11-01	11-Mar	-23	-	-	589004	7036561	1m		4		Mine	-	Gahcho Kue	1m	F M	-	Focal	1	09:25:50		1										
Group-11-02	11-Mar	-23	7	-	589499	7039453	10-100m		60		both	-	Gahcho Kue	10-100m	F M	-	Group	2	09:36:04	12	1										
Group-11-02	11-Mar	-23	7	-	589499	7039453	10-100m		60		both	-	Gahcho Kue	10-100m	F M	-	Group	2	09:42:17	9	1	1	1								
Group-11-02	11-Mar	-23	7	-	589499	7039453	10-100m		60		both	-	Gahcho Kue	10-100m	F M	-	Group	2	09:43:59	4	2		6				2 trucks	10m	1	49 seconds	
Group-11-02	11-Mar	-23	7	-	589499	7039453	10-100m		60		both	-	Gahcho Kue	10-100m	F M	-	Group	2	09:46:06	4		2		8			grador	8m	1	1 minute, 4 seconds	Plowino their side
Group-11-02	11-Mar	-23	7	-	589499	7039453	10-100m		60		both	-	Gahcho Kue	10-100m	F M	-	Group	2	09:48:52	7	6	1									
Group-11-02	11-Mar	-23	7	-	589499	7039453	10-100m		60		both	-	Gahcho Kue	10-100m	F M	-	Group	2	09:50:42	7	5						grador	10m	0		
Group-11-02	11-Mar	-23	7	-	589499	7039453	10-100m		60		both	-	Gahcho Kue	10-100m	F M	-	Group	2	09:59:00	8	4										
Group-11-02	11-Mar	-23	7	-	589499	7039453	10-100m		60		both	-	Gahcho Kue	10-100m	F M	-	Group	2	10:05:07	8	3										
Focal-11-02	11-Mar	-23	7	-	589499	7039453	10m		60		both	-	Gahcho Kue	10m	F M	-	Focal	2	09:37:10												
Focal-11-02	11-Mar	-23	7	-	589499	7039453	10m		60		both	-	Gahcho Kue	10m	F M	-	Focal	2	09:40:07											still lieving down	
Focal-11-02	11-Mar	-23	7	-	589499	7039453	10m		60		both	-	Gahcho Kue	10m	F M	-	Focal	2	09:43:59					1			2 trucks	10m	0		
Focal-11-02	11-Mar	-23	7	-	589499	7039453	10m		60		both	-	Gahcho Kue	10m	F M	-	Focal	2	09:46:06					1			grador	8m	1	30 seconds	looked at arador when passino, still lieino down.
Focal-11-02	11-Mar	-23	7	-	589499	7039453	10m		60		both	-	Gahcho Kue	10m	F M	-	Focal	2	09:50:42					1							
Focal-11-02	11-Mar	-23	7	-	589499	7039453	10m		60		both	-	Gahcho Kue	10m	F M	-	Focal	2	10:01:02	1							grador	10m	0		
Focal-11-02	11-Mar	-23	7	-	589499	7039453	10m		60		both	-	Gahcho Kue	10m	F M	-	Focal	2	10:07:00	1											
Group-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Group	3	10:47:00	14	12	1									
Group-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Group	3	10:54:20	14	12	4	7	3			2 trucks	250m	1	49 seconds	
Group-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Group	3	10:55:00	20	5	1		2							
Group-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Group	3	10:58:47	19	7	1									
Group-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Group	3	10:59:50	20	8		1				2 trucks	250m	1		standino
Group-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Group	3	11:08:23	20	4	1									
Group-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Group	3	11:16:09	25	2			16			Grader	250m	1	58 seconds	none pd up, looked at grader.
Group-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Group	3	11:23:44	25				2							
Group-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Group	3	11:31:13	25				2							
Focal-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Focal	3	10:47:20	1											
Focal-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Focal	3	10:54:20					1			2 trucks	150m	1	49 seconds	
Focal-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Focal	3	10:56:11	1											
Focal-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Focal	3	10:59:50	1							2 trucks	150m	0		trucks aoino slow
Focal-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Focal	3	11:22:48	1							grader	140m	0		not slowino
Focal-11-03	11-Mar	-26	15	-	582810	7040087	250m		300		Land	-	Gahcho Kue	300m	F M C	-	Focal	3	11:31:15	1											
Group-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Group	4	13:35:10						13					under 3 intervals	
Group-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Group	4	13:38:30						13		observer truck	150m	1		walked up to herd in sight
Group-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Group	4	13:43:00			2			11						
Group-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Group	4	13:51:00			4									
Group-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Group	4	13:58:29						13					group has completely left LOS	
Focal-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Focal	4	13:36:00						1						
Focal-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Focal	4	13:48:30			1									
Focal-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Focal	4	13:49:57												
Focal-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Focal	4	13:52:40												
Focal-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Focal	4	13:52:59						1						
Focal-11-04	11-Mar	-17	-	-	553397	7075948	100m		80		Lake	-	Gahcho Kue	100m	F M C	-	Focal	4	13:54:27						1					Left LOS	
Group-11-05	11-Mar	-26	10	-	543237	7093110	200m		22		Lake	-	Gahcho Kue	200m	F M	-	Group	5	14:54:30				4		18						
Group-11-05	11-Mar	-26	10	-	543237	7093110	200m		22		Lake	-	Gahcho Kue	200m	F M	-	Group	5	15:03:03				22								
Group-11-05	11-Mar	-26	10	-	543237	7093110	200m		22		Lake	-	Gahcho Kue	200m	F M	-	Group	5	15:04:24				7		15		1 light truck	150m	2	1 minute, 30 seconds	moving slowly, recovered soon after
Group-11-05	11-Mar	-26	10	-	543237	7093110	200m		22		Lake	-	Gahcho Kue	200m	F M	-	Group	5	15:05:08				17	5							
Group-11-05	11-Mar	-26	10	-	543237	7093110	200m		22		Lake	-	Gahc

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal-12-01	12-Mar	-28	15	E	570705	7664071	250m		100		Portage	-	Gahdho Kue	250m	F,M,C	-	Focal	1	11:12:48					1								
Focal-12-01	12-Mar	-30	15	E	570705	7664071	250m		100		Portage	-	Gahdho Kue	250m	F,M,C	-	Focal	1	11:12:57					1								
Focal-12-01	12-Mar	-28	15	E	570705	7664071	250m		100		Portage	-	Gahdho Kue	250m	F,M,C	-	Focal	1	11:14:17					1								
Focal-12-01	12-Mar	-28	15	E	570705	7664071	250m		100		Portage	-	Gahdho Kue	250m	F,M,C	-	Focal	1	11:15:30													
Focal-12-01	12-Mar	-28	15	E	570705	7664071	250m		100		Portage	-	Gahdho Kue	250m	F,M,C	-	Focal	1	11:22:25					1								
Focal-12-01	12-Mar	-28	15	E	570705	7664071	250m		100		Portage	-	Gahdho Kue	250m	F,M,C	-	Focal	1	11:18:36					1							Moved behind hill	
Group-12-02	12-Mar	-25	15	E	570705	7664071	250m to portage		15		Portage	-	Gahdho Kue	250m	F,M,C	-	Group	2	11:02:30	27			3	2								under
Group-12-02	12-Mar	-25	15	E	570705	7664071	250m to portage		15		Portage	-	Gahdho Kue	250m	F,M,C	-	Group	2	11:10:40	20				6								
Group-12-02	12-Mar	-25	15	E	570705	7664071	250m to portage		15		Portage	-	Gahdho Kue	250m	F,M,C	-	Group	2	11:18:40					12							Herd moving	
Group-12-02	12-Mar	-25	15	E	570705	7664071	800m to portage		15		Portage	-	Gahdho Kue	250m	F,M,C	-	Group	2	11:23:26								Grader	80mm			all others have already disappeared by now	
Group-12-02	12-Mar	-25	15	E	570705	7664071	250m to portage		15		Portage	-	Gahdho Kue	250m	F,M,C	-	Group	2	11:26:10												Last caribou leave 20 seconds	
Group-12-03	12-Mar	-23	12	SE	567727	7665413	800m		15		Lake	-	Gahdho Kue	800m	F,M,C	-	Group	3	11:53:19	13			2									
Group-12-03	12-Mar	-23	12	SE	567727	7665413	800m		15		Lake	-	Gahdho Kue	800m	F,M,C	-	Group	3	12:02:00	6			11				2 trucks	900m		5 minutes - 26 seconds	hard stood up and watched trucks	
Group-12-03	12-Mar	-23	12	SE	567727	7665413	800m		15		Lake	-	Gahdho Kue	800m	F,M,C	-	Group	3	12:08:26	12			1									
Group-12-03	12-Mar	-23	12	SE	567727	7665413	800m		15		Lake	-	Gahdho Kue	800m	F,M,C	-	Group	3	12:09:20	6			12				4 trucks	900m	1		stood up, swam to switch	
Group-12-03	12-Mar	-23	12	SE	567727	7665413	800m		15		Lake	-	Gahdho Kue	800m	F,M,C	-	Group	3	12:10:23				2	13							walking away from swaying trucks	
Group-12-03	12-Mar	-23	12	SE	567727	7665413	800m		15		Lake	-	Gahdho Kue	800m	F,M,C	-	Group	3	12:15:20				13	7								
Group-12-03	12-Mar	-23	12	SE	567727	7665413	800m		15		Lake	-	Gahdho Kue	800m	F,M,C	-	Group	3	12:21:40				3								all but 1 hour left area already	
Focal-12-02	12-Mar	-25	15	E	567727	7665413	250m		15		Lake	-	Gahdho Kue	250m	F,M,C	-	Focal	2	11:53:30	1			1									
Focal-12-02	12-Mar	-25	15	E	567727	7665413	250m		15		Lake	-	Gahdho Kue	250m	F,M,C	-	Focal	2	11:53:40	1												
Focal-12-02	12-Mar	-25	15	E	567727	7665413	250m		15		Lake	-	Gahdho Kue	250m	F,M,C	-	Focal	2	12:01:00	1							2 trucks	900m		5 minutes 48 seconds	stood up and alert	
Focal-12-02	12-Mar	-25	15	E	567727	7665413	250m		15		Lake	-	Gahdho Kue	250m	F,M,C	-	Focal	2	12:05:12	1												
Focal-12-02	12-Mar	-25	15	E	567727	7665413	250m		15		Lake	-	Gahdho Kue	250m	F,M,C	-	Focal	2	12:08:20	1							4 trucks	900m				
Focal-12-02	12-Mar	-25	15	E	567727	7665413	250m		15		Lake	-	Gahdho Kue	250m	F,M,C	-	Focal	2	12:10:20				1									
Focal-12-02	12-Mar	-25	15	E	567727	7665413	250m		15		Lake	-	Gahdho Kue	250m	F,M,C	-	Focal	2	12:11:30				1	1						2 minutes 30 seconds	walking away with herd	
Focal-12-02	12-Mar	-25	15	E	567727	7665413	250m		15		Lake	-	Gahdho Kue	250m	F,M,C	-	Focal	2	12:14:00				1									
Focal-12-02	12-Mar	-25	15	E	567727	7665413	250m		15		Lake	-	Gahdho Kue	250m	F,M,C	-	Focal	2	12:21:00				1	1			3 trucks		0		still alerted from disturbance	
Group-12-04	12-Mar	-24	-	-	569739	7666323	300m		64		Shore	-	Gahdho Kue	300m	F,M,C	-	Group	4	13:12:14	11				3							Entire herd left LOS	under 1 interval
Group-12-04	12-Mar	-24	-	-	569739	7666323	300m		64		Shore	-	Gahdho Kue	300m	F,M,C	-	Group	4	13:12:55					10								
Focal-12-03	12-Mar	-23	-	-			300m		64		Shore	-	Gahdho Kue	300m	F,M,C	-	Focal	4	13:14:20	1											under	
Focal-12-01	12-Mar	-23	-	-			300m		64		Shore	-	Gahdho Kue	300m	F,M,C	-	Focal	4	13:15:46													
Focal-12-03	12-Mar	-23	-	-			300m		64		Shore	-	Gahdho Kue	300m	F,M,C	-	Focal	4	13:18:08					1							Left LOS	
Group-12-05	12-Mar	-21	18	SE	551237	7663798	150m		60		Land	-	Gahdho Kue	150m	F,M,C	-	Group	5	15:14:00	45											Gradually filing out single file	under 2 intervals
Group-12-05	12-Mar	-21	18	SE	551237	7663798	150m		60		Land	-	Gahdho Kue	150m	F,M,C	-	Group	5	15:14:30	12			1	1								
Group-12-05	12-Mar	-21	18	SE	551237	7663798	150m		60		Land	-	Gahdho Kue	150m	F,M,C	-	Group	5	15:22:15	4				5								
Group-12-05	12-Mar	-21	18	SE	551237	7663798	150m		60		Land	-	Gahdho Kue	150m	F,M,C	-	Group	5	15:28:04					3			Plow truck	200m	3	5 seconds		
Group-12-05	12-Mar	-21	18	SE	551237	7663798	150m		60		Land	-	Gahdho Kue	150m	F,M,C	-	Group	5	15:29:10				1	2								
Focal-12-04	12-Mar	-21	18	SE	551237	7663798	150m		60		Land	-	Gahdho Kue	150m	F,M,C	-	Focal	5	15:05:36													
Focal-12-04	12-Mar	-21	18	SE	551237	7663798	150m		60		Land	-	Gahdho Kue	150m	F,M,C	-	Focal	5	15:13:50													
Focal-12-04	12-Mar	-21	18	SE	551237	7663798	150m		60		Land	-	Gahdho Kue	150m	F,M,C	-	Focal	5	15:20:30													
Focal-12-04	12-Mar	-21	18	SE	551237	7663798	150m		60		Land	-	Gahdho Kue	150m	F,M,C	-	Focal	5	15:24:30					1							Lost sight	
Group-12-06	12-Mar	-22	10	-	556454	7664488	600m		50		Lake	-	Gahdho Kue	600m	F,M,C	-	Group	6	16:04:20	10	2	22										
Group-12-06	12-Mar	-22	10	-	556454	7664488	600m		50		Lake	-	Gahdho Kue	600m	F,M,C	-	Group	6	16:12:10	17		22		9			1 light truck	950m	0			
Group-12-06	12-Mar	-22	10	-	556454	7664488	600m		50		Lake	-	Gahdho Kue	600m	F,M,C	-	Group	6	16:20:00	26		16		2							comment see datasheet	
Group-12-06	12-Mar	-22	10	-	556454	7664488	600m		50		Lake	-	Gahdho Kue	600m	F,M,C	-	Group	6	16:26:13	25	1	17		1								
Group-12-06	12-Mar	-22	10	-	556454	7664488	600m		50		Lake	-	Gahdho Kue	600m	F,M,C	-	Group	6	16:36:40	21	11	9		1								
Group-12-05	12-Mar	-22	10	-	556454	7664488	600m		50		Lake	-	Gahdho Kue	600m	F,M,C	-	Group	5	16:04:40			1										
Group-12-05	12-Mar	-22	10	-	556454	7664488	600m		50		Lake	-	Gahdho Kue	600m	F,M,C	-	Group	5	16:07:59	1												
Group-12-05	12-Mar	-22	10	-	556454	7664488	600m		50		Lake	-	Gahdho Kue	600m	F,M,C	-	Group	5	16:37:40													
Group-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Group	1	09:02:47													under 2 intervals
Group-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Group	1	09:08:14	17	4		5	7			Grader	7m	3	1 minute, 40 seconds		
Group-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Group	1	09:13:14	14			11									
Group-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Group	1	09:18:10			8		13	1						Gradually walking over horizon	
Group-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Group	1	09:19:50						17	6	1 light truck	2m	3		disappeared over hill	
Group-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Group	1	09:22:50						3	10					last sight of remainder	
Focal-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Focal	1	09:04:00	1												under
Focal-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Focal	1	09:04:20	1												
Focal-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Focal	1	09:04:35	1												
Focal-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Focal	1	09:07:20					1								
Focal-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Focal	1	09:08:00						1							
Focal-13-01	13-Mar	-30	30	SE	569915	7703905	5m		70		Land	-	Gahdho Kue	5m	F,M	-	Focal	1	09:08:35								1 grader	10m	3		disappeared over horizon	
Group-13-02	13-Mar	-29	30	SE	582337	7048853	300m		120		Land	-	Gahdho Kue	300m	F,M	-	Group	2	09:50:10	12		3	2									
Group-13-02	13-Mar	-29	30	SE	582337	7048853	300m		120		Land	-	Gahdho Kue	300m	F,M	-	Group	2	09:51:50	13		4	2				1 truck	280m	0			
Group-13-02	13-Mar	-29	30	SE	582337	7048853	300m		120		Land	-	Gahdho Kue	300m	F,M	-	Group	2	09:59:00	7	1	6										
Group-13-02	13-Mar	-29	30	SE	582337	7048853	300m		120		Land	-	Gahdho Kue	300m	F,M	-	Group	2	10:07:00	14		8	1								many small groups	
Group-13-02	13-Mar	-29	30	SE	582337	7048853	300m		120		Land	-	Gahdho Kue	300m	F,M	-	Group	2	10:12:00					13			2 trucks	200m	3	15 seconds	caribou coming in and out of view	
Group-13-02	13-Mar	-29	30	SE	582337	7048853	300m		120		Land	-	Gahdho Kue	300m	F,M	-	Group	2	10:12:30				12								Caribou returning to previous location	
Group-13-02	13-Mar	-29	30	SE	582337	7048853	300m		120		Land	-	Gahdho Kue	300m	F,M	-	Group	2	10:13:00					13								
Group-13-02	13-Mar	-29	30	SE	582337	7048853	300m		120		Land	-	Gahdho Kue	300m	F,M	-	Group	2	10:21:10					30							Large train of caribou, walking more or less continuously	
Group-13-02	13-Mar	-30	30	SE	582337	7048853	250m		120		Land	-	Gahdho Kue	250m	F,M	-	Focal	2	09:51:20								1 truck	250m	0			under
Focal-13-02	13-Mar	-30	30	SE	582337	7048853	250m		120		Land	-	Gahdho Kue	250m	F,M	-	Focal	2	10:01:00													
Focal-13-02	13-Mar	-30	30	SE	582337	7048853	250m		120		Land	-	Gahdho Kue	250m	F,M	-	Focal	2	10:02:30												Left LOS	
Group-13-03	13-Mar	-28	30	S	553304	7076248	500m		17		Land	-	Gahdho Kue	500m	F,M	-	Group	3	11:50:00					17								under
Group-13-03	13-Mar	-28	30	S	553304	7076248	500m		17		Land	-	Gahdho Kue	500m	F,M	-	Group	3	12:02:20				2	15			2 trucks	1 light tr	400m	10 seconds	only some responded	
Group-13-03	13-Mar	-28	30	S	553304	7076248	500m		17		Land	-	Gahdho Kue	500m	F,M	-	Group	3	12:05:30					16								
Group-13-03	13-Mar	-28	30	S	553304	7076248	500m		17		Land	-	Gahdho Kue	500m	F,M	-	Group	3	12:13:00					17								
Group-13-03	13-Mar	-28	30	S	553304	7076248	500m		17		Land	-	Gahdho Kue	500m	F,M	-	Group	3	12:16:17					17							Lost sight	
Focal-13-03	13-Mar	-28	30	S	553304	7076248	500m		17		Land	-	Gahdho Kue	500m	F,M	-	Focal	3	11:51:00					1								
Focal-13-03	13-Mar	-28	30	S	553304	7076248	500m		17		Land	-	Gahdho Kue	500m	F,M	-	Focal	3	12:01:23					1			3 trucks	1 light tr	350m	0		
Focal-13-03	13-Mar	-28	30	S	553304	7076248	500m		17		Land	-	Gahdho Kue	500m	F,M	-	Focal	3	12:16:17					1							Lost sight	
Group-13-04	13-Mar	-28	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Group	4	15:18:25	16		1		1								under 3 intervals
Group-13-04	13-Mar	-24	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Group	4	15:21:30	8		3					1 light truck	100m		10 seconds		
Group-13-04	13-Mar	-24	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Group	4	15:24:50	8	2	6										
Group-13-04	13-Mar	-24	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Group	4	15:29:45	9		6					1 light truck	150m	1	20 seconds		
Group-13-04	13-Mar	-24	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Group	4	15:30:20	6		3										
Group-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Group	4	15:38:40	10		4										
Group-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Group	4	15:46:20	9		2										
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:18:36					1								
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:23:10					1								
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:24:20													
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:24:50	1							1 light truck		0			
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:29:45								1 light truck		1	1 minute		
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:32:00	1												
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:38:20													
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:38:40	1			1									
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:40:40				1									
Focal-13-04	13-Mar	-25	30	S	567081	7065019	125m		30-40		Land	-	Gahdho Kue	125m	F,M	-	Focal	4	15:46:40	1												
Group-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Group	1	09:14:45	23	1											
Group-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Group	1	09:18:30	22	1						2 trucks	1000m	0			
Group-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Group	1	09:22:00	21	1	1	1				Plow	1000m	0			
Group-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Group	1	09:30:35	21		1		1								
Group-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Group	1	09:38:11	22												
Group-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Group	1	09:46:30	24												
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:15:30			1										
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:16:00					1								
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:17:18			1										
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:18:12								2 trucks	1000m	0			
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:19:30					1							comment on datasheet	
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:19:50													
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:19:56					1							pushed off current grazing spot by another	
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:20:30													
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:22:00								Plow	900m	1	10 seconds		
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:22:10	1												
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:36:29	1											contrived another caribou looking to take its swaying spot	
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:37:01	1												
Focal-14-01	14-Mar	-31	20	S	584702	7046039	800-1000-m		800		Land	-	Gahdho Kue	800-1000m	F,M,C	-	Focal	1	09:43:30					1							walked over crest of hill	
Group-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Group	2	10:40:00	7	1	4										
Group-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Group	2	10:47:50	10		5										
Group-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Group	2	10:56:00	15	2	3										
Group-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Group	2	10:59:40	13		3					1 truck	200m	1	30 seconds		
Group-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Group	2	11:00:30	15		2										
Group-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Group	2	11:08:00	14	2											
Focal-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Focal	2	10:39:40	1												
Focal-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Focal	2	10:40:20													
Focal-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Focal	2	10:48:10	1												
Focal-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Focal	2	10:52:40	1							1 Truck	250m	0			
Focal-14-02	14-Mar	-29	25	S	567957	7064303	200m		25		Land	-	Gahdho Kue	200m	M	-	Focal	2	11:07:50	1												
Focal-14-03	14-Mar	-24	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Focal	3	11:33:44			10										under 3 intervals
Group-14-03	14-Mar	-25	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Group	3	11:34:00					12			2 trucks	25m	3	5 minutes		
Group-14-03	14-Mar	-25	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Group	3	11:37:50				8									
Group-14-03	14-Mar	-25	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Group	3	11:44:22	8		4		4			1 truck	800m	0			
Group-14-03	14-Mar	-24	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Group	3	11:52:13	8	3			1								
Group-14-03	14-Mar	-25	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Group	3	11:58:40	8	1			1			1 truck	800m	0			
Group-14-03	14-Mar	-25	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Group	3	11:59:20	8	4			1			1 truck	800m	0			
Focal-14-03	14-Mar	-24	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Focal	3	11:33:10													
Focal-14-03	14-Mar	-25	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Focal	3	11:34:00					1			2 trucks	25m	3	60 seconds		
Focal-14-03	14-Mar	-25	24	SE	552562	7062103	100m		12		Lake	-	Gahdho Kue	100m	F,M	-	Focal	3	11:35:00													
Focal-14-03	14-Mar	-25	24	SE	552562	7062103

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal-14-06	14-Mar	-19	18		571409	7062325	100m		21		Lake	-	Gahcho Kue		F	-	Focal	6	16:03:20					1			2 trucks	100m		2	2 minutes	
Focal-14-08	14-Mar	-19	18		571409	7062325	100m		21		Lake	-	Gahcho Kue		F	-	Focal	6	16:08:10					1								
Focal-14-09	14-Mar	-19	18		571409	7062325	100m		21		Lake	-	Gahcho Kue		F	-	Focal	6	16:12:00				1				1 truck	100m		1	1 minute 20 seconds	
Focal-14-08	14-Mar	-19	18		571409	7062325	100m		21		Lake	-	Gahcho Kue		F	-	Focal	6	16:13:20													
Focal-14-09	14-Mar	-19	18		571409	7062325	100m		21		Lake	-	Gahcho Kue		F	-	Focal	6	16:19:15			1					1 light truck	300m		0	NA	
Focal-14-08	14-Mar	-19	18		571409	7062325	100m		21		Lake	-	Gahcho Kue		F	-	Focal	6	16:21:40		1											
Group-14-07	14-Mar	-20	-		576496	7059575	400m		100		Land	-	Gahcho Kue		F	-	Group	7	16:42:50		16	1		2								
Group-14-07	14-Mar	-20	-		576496	7059575	400m		100		Land	-	Gahcho Kue		F	-	Group	7	16:50:20		19										Majority of the herd now observed by hill side	
Group-14-07	14-Mar	-20	-		576496	7059575	400m		100		Land	-	Gahcho Kue		F	-	Group	7	16:54:48		19						2 trucks	450m		0		
Group-14-07	14-Mar	-20	-		576496	7059575	400m		100		Land	-	Gahcho Kue		F	-	Group	7	17:02:20		18											
Group-14-07	14-Mar	-20	-		576496	7059575	400m		100		Land	-	Gahcho Kue		F	-	Group	7	17:10:02		18											
Focal-14-07	14-Mar	-20	-		576496	7059575	400m		100		Land	-	Gahcho Kue		F	-	Group	7	16:42:40													under
Focal-14-07	14-Mar	-20	-		576496	7059575	400m		100		Land	-	Gahcho Kue		F	-	Group	7	16:53:10												Moved behind the hill.	
Group-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Group	1	11:38:00	8	16	5										
Group-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Group	1	11:49:00	14	32										Move toward the herd	
Group-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Group	1	11:54:00	21	13					PTx1	400		0	na	Herd did not react	
Group-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Group	1	12:02:50	25	23			1								
Group-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Group	1	12:06:10	25	18			1		PTx1	400		0	na		
Group-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Group	1	12:08:00							Unknown			0	na	Unknown stressor, but some walkina and some trottina. Most never returned to bedded	
Group-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Group	1	12:10:00	5	12		18	1							Some moved behind hill. 40 additional CRBU seen after survey	
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:38:00												Female	
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:43:45					1								
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:44:00		1											
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:47:25		1		1									
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:47:50		1											
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:51:00		1											
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:52:00		1											
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:53:00		1											
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:53:10		1											
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:54:00		1					PTx1	400		0	na		
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:57:40		1											
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:58:30		1											
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	11:59:55		1											
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	12:00:30													
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	12:01:00	1												
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	12:01:10	1				1								
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	12:01:45	1												
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	12:06:10	1						PTx1	400		0	na		
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	12:08:00	1						Unknown	-		1		Raised head and looked	
Focal-16-1	16-Mar	-21	10	W	588940	7039558	400	S	76	38	Portage	P-28	Gahcho Kue Winter Road Spur	400 m N	F M	-	Focal	1	12:08:10	1											Back to bushes	
Group-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Group	2	12:25:00	9	2											
Group-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Group	2	12:33:00	9	2					HTx3	100		0	na	some looked over	
Group-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Group	2	12:40:00	9	2					PTx1	100		0	na		
Group-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Group	2	12:41:00	9	2											
Group-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Group	2	12:49:00	9	2										1 more was bedded. not previously seen.	
Group-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Group	2	12:57:00	10	2											
Focal-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Focal	2	12:29:00	1												
Focal-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Focal	2	12:33:00	1						HTx3	100		0	na	staring at stressor from bedded	
Focal-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Focal	2	12:40:00	1						PTx1	100		0	na		
Focal-16-2	16-Mar	-21	10	W	588881	7039160	100	E	45	11	Portage	P-28	Gahcho Kue Winter Road Spur	100 m E	F M	-	Focal	2	12:57:00	1												
Group-16-3	16-Mar	-18	10	W	567883	7064314	800	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	800 m NE	F M	-	Group	3	13:52:00	7	5											
Group-16-3	16-Mar	-18	10	W	567883	7064314	800	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	800 m NE	F M	-	Group	3	13:57:00	7	5					PTx1	800		0	na		
Group-16-3	16-Mar	-18	10	W	567883	7064314	800	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	800 m NE	F M	-	Group	3	14:00:00	7	5											
Group-16-3	16-Mar	-18	10	W	567883	7064314	800	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	800 m NE	F M	-	Group	3	14:03:10	7	5					PTx1	800		0	na		
Group-16-3	16-Mar	-18	10	W	567883	7064314	800	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	800 m NE	F M	-	Group	3	14:10:00	7	5											
Group-16-3	16-Mar	-18	10	W	567883	7064314	800	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	800 m NE	F M	-	Group	3	14:17:00	5	5					HTx2	800		0	na		
Group-16-3	16-Mar	-18	10	W	567883	7064314	800	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	800 m NE	F M	-	Group	3	14:18:00	5	5											
Group-16-3	16-Mar	-18	10	W	567883	7064314	800	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	800 m NE	F M	-	Group	3	14:26:00	2	11											
Focal-16-3	16-Mar	-18	10	W	567883	7064314	800	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	800 m NE	F M	-	Focal	3	13:52:00	1											female	
Group-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Group	3	13:57:00							PTx1	150		0	na		
Group-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Group	3	14:03:10							PTx1	150		0	na		
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:03:20	1											looked up from bedded	
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:10:40													
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:12:40					1								
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:13:25													
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:13:35					1								
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:14:00					1							lost behind hill	
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:15:45			1									back in view	
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:18:00													
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:18:25													
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:17:00							HTx2	200		0	na		
Focal-16-3	16-Mar	-18	10	W	567883	7064314	150	NE	54	13	Portage	P-12/13	Gahcho Kue Winter Road Spur	150 m NE	F M	-	Focal	3	14:17:30			1									Maybe Feeding ?	
Group-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Group	4	15:18:00	5	5											
Group-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Group	4	15:26:00	5	5											
Group-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Group	4	15:27:00	5						HTx3	300		0	na	some looking at trucks	
Group-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Group	4	15:29:15					6		HTx4	300		2	11:45	all walked away	
Group-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Group	4	15:34:00	1		5									stressor ended at 15:34	
Group-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Group	4	15:41:30	1		2									bshwt with another small group of 3	
Group-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Group	4	15:42:00	7		2										
Group-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Group	4	15:50:00	10											more walked in and bedded down	
Group-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:18:00	1												
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:27:00	1						HTx3	300		0	na		
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:29:15	1						HTx4	300		2	10:50	moved on the second truck	
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:30:15			1		1								
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:30:30			1										
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:30:50					1								
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:32:10			1										
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:32:25			1										
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:32:35			1										
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:33:50			1										
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:36:40			1										
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:37:00			1										
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:37:40			1										
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:38:00			1										
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:38:30	1												
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:40:00	1												
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:40:30	1												
Focal-16-4	16-Mar	-18	10	W	553122	7079358	300	W	54	9	Portage	P-9	Gahcho Kue Winter Road Spur	300 m W	F M C	-	Focal	4	15:41:00	1											back to normal	
Group-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Group	1	09:57:00	4	6		1									
Group-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Group	1	10:05:08	4	4	2										
Group-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Group	1	10:13:00	5	4	1			1							
Group-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Group	1	10:21:00	5	5	1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Group	1	10:29:00	8	4										5 swans (mixed) heard	
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	09:57:00			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	09:58:55			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	09:59:00			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	09:59:10			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	09:59:20			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	09:59:50			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:00:10			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:01:10			1									walkina away from herd	
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:01:20			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:01:25			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:01:45			1									swimmina to hot shelter at brk	
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:02:10			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:03:15			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:03:30			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:03:40			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:03:58			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:04:20			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:04:40			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:05:00			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:05:50			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558	200	W	11	11	Portage	P-27	Gahcho Kue Winter Road Spur	200 m W	F M	-	Focal	1	10:06:10			1										
Focal-17-1	17-Mar	-18	5	NW	588407	7039558

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal-17-3	17-Mar	-14	5	NW	568388	7064350	300	E	42	10	Portage	P-12/13	Gahcho Kue Winter Road Spur	300 m E	F,M	-	Focal	3	12:21:10		1											
Focal-17-3	17-Mar	-14	5	NW	568388	7064350	300	E	42	10	Portage	P-12/13	Gahcho Kue Winter Road Spur	300 m E	F,M	-	Focal	3	12:21:30		1											
Focal-17-3	17-Mar	-14	5	NW	568388	7064350	300	E	42	10	Portage	P-12/13	Gahcho Kue Winter Road Spur	300 m E	F,M	-	Focal	3	12:21:39		1											
Focal-17-3	17-Mar	-14	5	NW	568388	7064350	300	E	42	10	Portage	P-12/13	Gahcho Kue Winter Road Spur	300 m E	F,M	-	Focal	3	12:24:40								PTx1	200		1	00:05		
Focal-17-3	17-Mar	-14	5	NW	568388	7064350	300	E	42	10	Portage	P-12/13	Gahcho Kue Winter Road Spur	300 m E	F,M	-	Focal	3	12:24:50		1											
Focal-17-3	17-Mar	-14	5	NW	568388	7064350	300	E	42	10	Portage	P-12/13	Gahcho Kue Winter Road Spur	300 m E	F,M	-	Focal	3	12:28:00		1											
Group-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Group	4	13:37:00	28		9		4								Some of the herd walked onto the portage to graze after scan.
Group-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Group	4	13:45:00	3		6		7			HTx2	300	2	na	Did not return to bedded. Smaller group left after other walked away.	
Group-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Group	4	13:53:00		14			30								
Group-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Group	4	13:53:30		14			30			HTx2	300	0	na	All moved up the hill to graze. Did not seem disturbed by haul trucks. All walking/grazing.	
Group-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Group	4	13:58:00		14			30			HTx2	300	0	na		
Group-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Group	4	14:01:00					30								
Group-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Group	4	14:09:00		23			10							All moving between walking and grazing.	
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:37:00													
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:39:00	1												
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:45:00	1							HTx2	300				
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:49:00			1							0	na		
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:49:10					1								
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:51:50			1										
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:52:00					1								
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:53:00					1								
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:54:30					1								
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:54:45			1										
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:55:00		1			1			HTx2	300				
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:55:40					1								
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	13:58:00					1			HTx2	300				
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	14:00:00			1		1								
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	14:00:20					1								
Focal-17-4	17-Mar	-14	5	NW	553005	7081820	300	W	80	38	Lake	L-12	Gahcho Kue Winter Road Spur	300 m W	F,M,C	-	Focal	4	14:01:00					1								
Focal-17-5	17-Mar	-14	5	NW	579110	7068012	200	W	43	40	Portage	P-21	Gahcho Kue Winter Road Spur	200 m W	F,M	-	Group	5	16:58:00		40											under 1 interval
Focal-17-5	17-Mar	-14	5	NW	579110	7068012	200	W	43	40	Portage	P-21	Gahcho Kue Winter Road Spur	200 m W	F,M	-	Group	5	17:17:00		15			20							All started walking shortly after scan time.	
Group-17-5	17-Mar	-14	5	NW	579110	7068012	200	W	43	40	Portage	P-21	Gahcho Kue Winter Road Spur	200 m W	F,M	-	Group	5	17:08:00												Herd moved behind hill	
Focal-17-5	17-Mar	-14	5	NW	579110	7068012	200	W	43	40	Portage	P-21	Gahcho Kue Winter Road Spur	200 m W	F,M	-	Focal	5	17:12:00												Female	under
Focal-17-5	17-Mar	-14	5	NW	579110	7068012	200	W	43	40	Portage	P-21	Gahcho Kue Winter Road Spur	200 m W	F,M	-	Focal	5	17:04:20					1								
Focal-17-5	17-Mar	-14	5	NW	579110	7068012	200	W	43	40	Portage	P-21	Gahcho Kue Winter Road Spur	200 m W	F,M	-	Focal	5	17:08:00												Lost sight behind hill	
Group-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Group	1	10:12:00		5											
Group-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Group	1	10:20:00		5											
Group-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Group	1	10:28:00	1	4										1 walkins at 10:32	
Group-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Group	1	10:35:40	1	3			1			HTx2	200	0			
Group-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Group	1	10:36:00		5			1								
Group-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Group	1	10:44:00	3	3										1 more joined the group	
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:12:00													
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:17:45			1										
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:18:00		1											
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:18:10													
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:18:40													
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:33:10					1								
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:33:20													
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:35:40								HTx2	200	0	na		
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:38:00													
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:38:30		1											
Focal-18-1	18-Mar	-21	14	NE	588534	7040317	200	NE	20	5	Portage	P-28	Gahcho Kue Winter Road Spur	200 m NE	F,M	-	Focal	1	10:44:00													
Group-19-2	18-Mar	-21	14	NE	584601	7045714	800	W	800	26	Portage	P-24	Gahcho Kue Winter Road Spur	800 m W	F,M,C	-	Group	2	11:03:00	12	9	3										
Group-19-2	18-Mar	-21	14	NE	584601	7045714	800	W	800	26	Portage	P-24	Gahcho Kue Winter Road Spur	800 m W	F,M,C	-	Group	2	11:11:00	18	6										Herd in motion/ removed itself. Everyone on one knee	
Group-19-2	18-Mar	-21	14	NE	584601	7045714	800	W	800	26	Portage	P-24	Gahcho Kue Winter Road Spur	800 m W	F,M,C	-	Group	2	11:19:00	18	8	1										
Group-19-2	18-Mar	-21	14	NE	584601	7045714	800	W	800	26	Portage	P-24	Gahcho Kue Winter Road Spur	800 m W	F,M,C	-	Group	2	11:21:40	18	9	1					HTx2	500	0	na		
Group-19-2	18-Mar	-21	14	NE	584601	7045714	800	W	800	26	Portage	P-24	Gahcho Kue Winter Road Spur	800 m W	F,M,C	-	Group	2	11:27:00	17	7			1								
Group-19-2	18-Mar	-21	14	NE	584601	7045714	800	W	800	26	Portage	P-24	Gahcho Kue Winter Road Spur	800 m W	F,M,C	-	Group	2	11:36:00	15	7			1								
Focal-19-2	18-Mar	-21	14	NE	584601	7045714	800	W	800	26	Portage	P-24	Gahcho Kue Winter Road Spur	800 m W	F,M,C	-	Focal	2	11:03:00	1												
Focal-19-2	18-Mar	-21	14	NE	584601	7045714	800	W	800	26	Portage	P-24	Gahcho Kue Winter Road Spur	800 m W	F,M,C	-	Focal	2	11:21:40	1							HTx2	500	0	na		
Focal-19-2	18-Mar	-21	14	NE	584601	7045714	800	W	800	26	Portage	P-24	Gahcho Kue Winter Road Spur	800 m W	F,M,C	-	Focal	2	11:36:00	1												
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Group	3	11:46:00	7	5											
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Group	3	11:54:00	13	4											
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Group	3	12:02:00	10	2											
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Group	3	12:06:25	10	2										*Some of the larger herd ran briefly (<30)	
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Group	3	12:10:00	7	2			1							Some others walked in and disturbed the bedded group.	
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Group	3	12:17:30	9	3						HTx1	450	0	na		
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Group	3	12:18:00	8	3											
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Group	3	11:52:00												Calf	
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	11:57:15					1								
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	11:57:30	1												
Group-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	11:57:45			1										
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	11:59:45													
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:00:00			1										
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:00:15					1								
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:00:25			1										
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:01:35			1										
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:02:20			1										
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:02:45			1										
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:03:00					1								
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:03:30					1								
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:03:35													
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:04:00													
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:04:15	1												
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:06:25	1							HTx1	400	0	na		
Focal-19-3	18-Mar	-18	14	NE	584697	7047831	400	W	330	14	Portage	P-23	Gahcho Kue Winter Road Spur	400 m W	F,M,C	-	Focal	3	12:12:00		1											
Focal-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Group	4	12:22:00	15												
Group-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Group	4	12:30:00	13												
Group-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Group	4	12:37:15	15							Grader	700	0	na		
Group-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Group	4	12:39:00	11												
Group-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Group	4	12:41:15	15							HTx1	700	0	na		
Group-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Group	4	12:46:00	15												
Focal-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Focal	4	12:54:00	1												
Focal-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Focal	4	12:22:00	1												
Focal-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Focal	4	12:37:15	1							Grader	700	0	na		
Focal-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Focal	4	12:41:15	1							HTx1	700	0	na		
Focal-19-4	18-Mar	-20	14	NE	582291	7046878	700	W	45	15	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	700 m W	F,M	-	Focal	4	12:54:00	1												
Group-19-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Group	5	13:25:00	2	5	1		1								under 1 interval
Group-18-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Group	5	13:27:30			7		7			HTx2	200	2	na	A couple walking but most staring. All started walking away when second truck went by.	
Group-18-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Group	5	13:33:00					9							All walked behind hill.	
Focal-18-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	5	13:25:00													under
Focal-18-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	5	13:27:50			1					HTx2	200	2	00:40		
Focal-18-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	5	13:28:30					1								
Focal-18-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	5	13:28:45													
Focal-18-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	5	13:29:05			1										
Focal-18-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	5	13:29:15													
Focal-18-5	18-Mar	-19	14	NE	574239	7060434	200	S	9	9	Portage	P-21	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	5	13:30:10					1							Walked out of sight	
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	13:48:00	2				13								
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	13:57:00	11	6										One walked behind the trees after scan	
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	14:01:20	11		5					Fox	100	1	01:00	The feeding ones stopped and stared at the fox	
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	14:03:20	11												
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	14:04:00	11	5											
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	14:05:10	11	4						PTx1	1000	0	na		
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	14:10:00	11	4			1			PTx1	1000	0	na		
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	14:12:00	13	3											
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	14:17:15	14	2						Grader	1000	0	na		
Group-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Group	6	14:20:00	14	2											
Focal-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Focal	6	13:54:00													
Focal-18-6	18-Mar	-18	14	NE	570055	7064157	1000	SW	54	16	Portage	P-15	Gahcho Kue Winter Road Spur	1000 m SW	F,M	-	Focal	6	14:01:20			1		1			Fox	100	1	01:00

Survey # (Scan/Type-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R						
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:28:30			1									
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:28:45					1							
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:29:50	1											
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:33:40												
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:33:50	1											
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:34:50			1									
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:36:00	1											
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:37:00			1									
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:38:15	1											
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:39:40												
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:39:50			1									
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:40:00			1					PTx1	500	0	na	Looked at truck briefly.
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:40:50					1							
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:41:10			1									
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:42:10					1			HTx2	500	0	na	Looked at trucks- but continued walking the same path towards them
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:43:00			1									
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:43:30					1							
Focal-19-1	19-Mar	-15	5	S	584785	7046146	500	NW	2000	20	Portage	P-24	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:44:15												Walked out of sight
Group-19-2	19-Mar	-14	5	S	576137	7060610	200	S	68	8	Portage	P-19	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Group	2	13:14:00	8							HTx2	150	3	na	
Group-19-2	19-Mar	-14	5	S	576137	7060610	200	S	68	8	Portage	P-19	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Group	2	13:17:30							8	HTx2	150	3	na	All ran over hill out of view
Focal-19-2	19-Mar	-14	5	S	576137	7060610	200	S	68	8	Portage	P-19	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	2	13:14:00	1											under
Focal-19-2	19-Mar	-14	5	S	576137	7060610	200	S	68	8	Portage	P-19	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	2	13:16:30				1								
Focal-19-2	19-Mar	-14	5	S	576137	7060610	200	S	68	8	Portage	P-19	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	2	13:16:55												
Focal-19-2	19-Mar	-14	5	S	576137	7060610	200	S	68	8	Portage	P-19	Gahcho Kue Winter Road Spur	200 m S	F,M	-	Focal	2	13:17:30							1	HTx2	150	3	na	Ran over hill.
Group-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Group	3	13:38:00	4		4									
Group-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Group	3	13:46:00	4		4									
Group-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Group	3	13:54:00	4		5									One previously not seen stood up.
Group-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Group	3	13:59:35	8		1					HTx1	600	0	na	
Group-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Group	3	14:02:00	8											
Group-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Group	3	14:06:25			8					Plaw	600	0	na	Were already standing. May have heard slow screaming before it was seen.
Group-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Group	3	14:08:50			8					HTx1	600	0	na	
Group-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Group	3	14:09:00												
Focal-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Focal	3	13:59:30	1							HTx2	600	0	na	
Focal-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Focal	3	14:05:00			1									
Focal-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Focal	3	14:06:20			1					Plaw	600	0	na	
Focal-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Focal	3	14:08:50			1					HTx1	600	0	na	
Focal-19-3	19-Mar	-14	5	S	569928	7064751	600	N	13	9	Lake	Back Lake	Gahcho Kue Winter Road Spur	600 m N	F,M	-	Focal	3	14:10:00												
Group-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Group	1	11:30:00	8											Most of the herd is bedded. About 5% feeding
Group-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Group	1	11:38:00	8											Some, about and then bedded when between scans
Group-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Group	1	11:42:30	8							PTx1	500	0	na	
Group-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Group	1	11:46:00	8											
Group-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Group	1	11:54:00	8											
Group-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Group	1	11:54:15	8							HTx1	500	0	na	Entire herd not very active.
Group-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Group	1	12:02:00	8											
Focal-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	11:30:00	1											
Focal-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	11:42:30	1							PTx1	500	0	na	
Focal-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	11:54:15	1							PTx1	500	0	na	
Focal-21-1	21-Mar	-5	20	S	584730	7046129	500	NW	134	8	Portage	P-23	Gahcho Kue Winter Road Spur	500 m NW	F,M,C	-	Focal	1	12:02:00												
Group-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Group	2	12:08:00	12		7									More of the herd over the hill. Some emerge and others move out of sight
Group-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Group	2	12:14:00	12		7									Most of the herd is bedded.
Group-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Group	2	12:22:00	12		7									One walked west over the hill.
Group-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Group	2	12:29:10	13		6					HTx1	600	0	na	Some feeding had previously walked over the hill
Focal-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Group	2	12:30:00	13		6									
Focal-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Group	2	12:32:10	13		15					Rawn	50	1	01:15	Flew directly over the group.
Focal-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Group	2	12:33:30	13		2									
Focal-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Group	2	12:36:08	17		3									
Focal-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Focal	2	12:16:00	1											
Focal-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Focal	2	12:10:30	1											
Focal-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Focal	2	12:29:10	1							HTx1	600	0	na	
Focal-21-2	21-Mar	-4	20	S	584782	7047058	600	W	320	19	Portage	P-23	Gahcho Kue Winter Road Spur	600 m W	F,M,C	-	Focal	2	12:36:08	1											
Group-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Group	3	12:53:00					8							Walking across Murdoch Lake
Group-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Group	3	13:01:00					8							
Group-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Group	3	13:02:00						8				01:40	All started trotting when second truck went by.
Group-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Group	3	13:03:40					8							
Group-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Group	3	13:09:00					8							
Group-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Group	3	13:15:25					8			PTx1	400	1	00:55	Stamo at road
Group-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Group	3	13:16:20					8							
Group-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Group	3	13:17:00					8							
Group-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Group	3	13:17:20					8							Group disappeared behind hill. Appeared on other side but quickly went behind another hill.
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	12:43:00												Male
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	12:55:10	1				1							
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	12:55:25												
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:01:20			1									
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:01:30					1							
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:02:00					1			HTx2	400	3	01:40	
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:02:05					1							
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:02:10					1							
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:02:20					1							
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:02:30					1	1						
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:03:40					1							Back to previous behaviour.
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:07:30					1							
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:07:35					1							
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:08:25			1									
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:08:30					1							
Focal-21-3	21-Mar	-5	20	S	582285	7048787	400	W	21	8	Lake	Murdoch Lake	Gahcho Kue Winter Road Spur	400 m W	F,M,C	2 calves	Focal	3	13:13:00					1							Walked behind island
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Group	4	13:37:00	4	4										
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Group	4	13:45:00	4	4										Walking over towards another bedded group.
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Group	4	13:46:00	4	4			3			PTx1	800	0	na	
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Group	4	13:53:00	3	3										1 which were walkers went behind island
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Group	4	13:55:25	5	2						HTx1	800	0	na	A portion of the herd closer to the road stood up.
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Group	4	14:01:00	3											
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Group	4	14:01:40	3		1					PTx2	800	0	na	
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Group	4	14:03:00	10											
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	13:40:00												
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	13:45:50			1									Pushed off erratic spot by other caribou
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	13:46:50								PTx1	800	0	na	
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	13:47:30	1											
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	13:55:20	1							HTx1	800	0	na	
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	13:57:45	1		1									
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	14:00:00					1							
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	14:00:30	1		1									
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	14:01:40	1		1					PTx2	800	0	na	
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	14:02:00	1											
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	14:05:10			1									
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	14:05:20	1											
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	14:05:30												
Focal-21-4	21-Mar	-5	20	S	575057	7056885	800	NW	44	13	Portage	P-21	Gahcho Kue Winter Road Spur	800 m NW	F,M	-	Focal	4	14:09:00												
Group-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Group	5	14:40:00	12											
Group-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Group	5	14:48:00	12											
Group-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Group	5	14:56:00	11											1 walked over hill previously.
Group-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Group	5	14:56:20	11							HTx1	800	0	na	
Group-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Group	5	15:03:10	13							PTx1	800	0	na	
Group-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Group	5	15:04:00	13											
Group-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Group	5	15:06:30	13							PTx1	800	0	na	
Group-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Group	5	15:12:50	12											
Focal-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Focal	5	14:40:00	1											
Focal-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Focal	5	14:56:20	1							PTx1	800	0	na	
Focal-21-5	21-Mar	-5	20	S	569921	7064711	800	E	12	12	Lake	Back Lake	Gahcho Kue Winter Road Spur	800 m E	F,M	-	Focal	5	15:03:15	1							PTx1	800	0	na	
Focal-21-5	21-Mar	-5	20	S	569

Survey # (ScanType-Day-Group#)	Date	Temp C	Wind Speed (km/hr)	Wind Direction	Observer location		Distance to Herd	Bearing to Herd	Herd Size	Group Size	Lake or Portage?	Location Description	Survey Area	Nearest road/structure	Herd Composition (F/M/J)	Herd Composition (F/M/J)	Scan Type (Group or Focal)	Group #	Time	# of individuals doing Behaviour*							Stressor*	Distance to Stressor (m)	Response (0-3)*	Time to Return to Previous Behaviour (before stressor) (minutes:seconds)	Comments (including if only some or all responded to stressor)	Surveys Under Time
					Easting	Northing														B	F	S	A	W	T	R					
Focal-22-2	22-Mar	-16	25	N	566023	7064305	200	E	8	8	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m E	F,M		Focal	2	12:36:15					1							
Focal-22-2	22-Mar	-16	25	N	566023	7064305	200	E	8	8	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m E	F,M		Focal	2	12:37:00		1										
Focal-22-2	22-Mar	-16	25	N	566023	7064305	200	E	8	8	Portage	P-12/13	Gahcho Kue Winter Road Spur	200 m E	F,M		Focal	2	12:40:00		1										
Group-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Group	3	16:37:00	14	8	3					PTx1	200	0	na		
Group-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Group	3	16:40:00	12	7	4									4 standing are two pairs locking antlers
Group-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Group	3	16:47:30	12	7	4					PTx1	200	0	na		
Group-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Group	3	16:53:00	11	8	5									
Group-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Group	3	16:54:30	12	8	3					PTx1	200	0	na	2 locking antlers
Group-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Group	3	16:57:30	8	13	1					PTx1	200	0	na	Not reacting to truck. Lots of chainsing between bedded and feeding for group.
Group-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Group	3	17:01:00	10	13										
Group-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Group	3	17:05:40	13	10						PTx1	200	0	na	
Group-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Group	3	17:09:00	14	9						PTx1	200	0	na	
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:43:00					1							
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:46:40			1									
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:47:00					1							
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:47:10			1									
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:47:20					1							
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:47:30					1			PTx1	200	0	na	1 rocking antlers with another nearby
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:48:00			1									
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:52:30					1							
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:53:30			1									
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:54:30			1					PTx1	200	0	na	
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:54:45		1										
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	16:57:30		1						PTx1	200	0	na	
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	17:05:40		1						PTx1	200	0	na	
Focal-22-3	22-Mar	-16	25	N	560826	7073727	200	W	245	23	Portage	Lake A1 on mine site.	Mine Site	200 m W of N11 Road	F,M		Focal	3	17:09:00		1										
Group-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Group	1	16:06:00			54									All ran off the shore onto the lake prior to survey.
Group-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Group	1	16:14:00	28		24		2							
Group-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Group	1	16:17:20	37		17					Loader	200	0	na	
Group-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Group	1	16:22:00	52		2		2							
Group-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Group	1	16:30:00	50		2									
Group-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Group	1	16:38:00	49	5										
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:06:00					1							
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:08:20					1							
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:08:40			1									
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:09:00					1							
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:09:25	1											
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:13:10			1									
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:13:15					1							
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:13:30	1											
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:17:20	1							Loader	200	0	na	
Focal-23-1	23-Mar	-19	42	N	591586	7076749	200	N	54	54	Lake	Lake A8 on mine site	Mine Site	200 m N	F,M		Focal	1	16:38:00	1											
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:22:20	19	16										
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:28:10	8	23						PTx1	150	0	na	Most did not react. A couple looked over
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:30:00	8	21										
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:31:45							29	Snow Plow	150	3		01:45 Entire herd ran onto the ice
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:33:00		29	8									Most of the herd has settled
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:33:05		21	8					PTx1	150	0	na	
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:38:00	2	29	8									
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:43:45	2	24	3					PTx1	150	0	na	
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:46:00	4	30										
Group-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Group	2	17:54:00		26										More joined the group.
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:25:00		1										Female
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:28:10			1		1			PTx1	150	1	00:10	
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:28:20		1										
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:31:40			1				1	Snow Plow	150	3	01:30	
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:32:00			1									
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:33:15		1										
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:33:55		1			1			PTx1	150	1	00:05	
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:34:00		1										
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:38:20		1			1							
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:39:05		1										
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:43:40		1						PTx1	150	0	na	
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:51:35			1									
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:51:50		1										
Focal-23-2	23-Mar	-18	42	N	559823	7073233	150	W	55	29	Portage	Lake A1 shore on mine site	Mine Site	150 m W	F,M		Focal	2	17:54:00		1										
Group-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Group	1	11:28:00	2		7									Herd beaan moving a few minutes after scan
Group-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Group	1	11:36:00	2		5									4 unaffected bull. 5 minutes back towards tamar band. 1 xmas band not seen until wind reviewed
Group-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Group	1	11:44:00			4									Herd started running briefly after scan, and then stopped.
Group-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Group	1	11:52:00			5									
Group-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Group	1	12:00:00					5							4 that went behind hill walked back out towards herd
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:28:00	1											
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:31:20							1					
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:31:30			1									
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:31:50							1					
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:32:00			1									
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:32:15			1		1							
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:34:20					1							
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:35:15			1									
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:40:00			1									
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:40:30			1		1							
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:41:45					1							
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:43:35			1									
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:44:30			1									
Focal-24-1	24-Mar	-24	32	N	550245	7065591	200	W	53	5	Lake	Reid Lake	Gahcho Kue Winter Road Spur	200 m W of road	F,M		Focal	1	11:48:00					1							
Group-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Group	2	15:34:00	13	13										80% of herd bedded
Group-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Group	2	15:42:00	17	9										
Group-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Group	2	15:43:10	11	9	7					Rock Truck	150	0	na	Majority did no react. 2 stood up.
Group-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Group	2	15:50:00	18	10										
Group-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Group	2	15:58:00	19	10										
Group-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Group	2	16:01:20	19	10						Rock Truck	150	0	na	A couple looked over
Group-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Group	2	16:05:00	11	12	5									One feeding pushed 3 bedded ones to standing
Focal-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Focal	2	15:39:00		1										More
Focal-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Focal	2	15:43:10		1						Rock Truck	150	0	na	Briefly stared and went back to feeding
Focal-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	150 m S of N11 Road	F,M		Focal	2	15:46:00		1										
Focal-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Focal	2	15:46:35		1										
Focal-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Focal	2	15:53:30		1										
Focal-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Focal	2	15:53:45		1										
Focal-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Focal	2	16:01:20		1						Rock Truck	150	0	na	No reaction
Focal-24-2	24-Mar	-22	32	N	559822	7073308	100	S	187	28	Portage	Shore of Lake A1	Mine Site	100 m S of N11 Road	F,M		Focal	2	16:06:00		1										

APPENDIX B: 2021 ANNUAL REPORT ECCC RESPONSE TO BARN SWALLOW

Environmental Protection Operations Directorate
Prairie & Northern Region
5019 52nd Street, 4th Floor
P.O. Box 2310
Yellowknife, NT X1A 2P7

ECCC File: 5100 000 0013/007
MVLWB File: MV2005L2-0015 / MV2021D0009

October 14, 2022

via William.Liu@debeersgroup.com

William Liu
Regulatory Specialist
De Beers Group
Suite 300 – 1601 Airport Road NE
Airport Corporate Center
Calgary, AB T2E 6Z8

Dear William Liu:

RE: MV2005L2-0015 / MV2021D0009 – De Beers Canada Inc. – Gahcho Kué Project – 2021 Annual Wildlife Report Proponent Responses

Environment and Climate Change Canada (ECCC) has reviewed the information submitted to the Government of the Northwest Territories regarding the above-mentioned 2021 Annual Wildlife Report and the subsequent responses to ECCC's comments submitted by De Beers Canada Inc.

ECCC is providing technical, science-based information and knowledge based on our mandate pursuant to the *Canadian Environmental Protection Act*, the pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act*, and the *Species at Risk Act*. These comments are intended to inform the assessment of this project's potential effects in the receiving environment and on valued ecosystem components. Any comments received from ECCC in this context does not relieve the proponent of its obligations to respect all applicable federal legislation.

The following comments are provided:

1. **Species of Concern – Barn Swallow**

   Reference(s)

   - Section 2 – Species of Concern, Gahcho Kué Mine, 2021 Annual Report
   - Email Response: 2021 Gahcho Kue Annual Wildlife Report

Comment

In the Proponents response, it is stated that “flight observations of barn swallows did not trigger immediate protection measures and ECCC notification, as no signs of nest activity was present.”

ECCC would like to emphasize that barn swallows were previously observed at stations WMP-6 and CP1-1 on two separate visits, and were definitely nesting at the mine site somewhere. Those swallows may have been foraging when first detected, but efforts to follow them and locate the nest to implement protective measures should always be the course of action, unless the nest has already been found. These swallows nest on man-made structures (buildings, culverts, bridges, etc.) and there are no other structures for hundreds of kilometers from that mine site. They also have high nest site fidelity, which means they will return to nest there every year (i.e. ongoing management issue). In addition, CWS was notified by Gahcho Kue staff in 2022 that a nest of barn swallows was found in one building and monitored to ensure measures were effective.

ECCC Recommendation(s)

In addition to the Proponent’s response, that they will add barn swallows to Section 2 and Table 2-1 in the 2022 Annual Wildlife Report, ECCC recommends that:

- Surveillance monitoring be initiated upon detection of barn swallow on-site to locate the nest(s);
- Measures be put in place immediately to avoid disturbance and the damage and destruction of the residence, once the nest(s) are located;
- Monitoring of nest(s) continues to ensure the effectiveness of protection measures;
- Monitoring be summarized in the Annual Wildlife Report; and
- ECCC be notified at cwsnorth-scfnord@ec.gc.ca for:
    a. All interactions and incidents involving the potential disturbance of individuals or nests, and any mortality events of these species; and
    b. Any updates to wildlife management and monitoring plans, or their equivalence, in relation to these species.

ECCC acknowledges all other responses provided by the Proponent and considers the corresponding comments resolved.

If you need more information, please contact Stephinie Mallon at Stephinie.Mallon@ec.gc.ca.

Sincerely,

[original signed by]

Stephinie Mallon
Environmental Assessment Officer

cc: Jody Small, Acting Head, Environmental Assessment North (NT and NU)