APPENDIX H

Meadowbank Bird Surveys Report



MEADOWBANK COMPLEX

FINAL

2025 BREEDING BIRD SURVEYS AND PRISM PLOTS SUMMARY REPORT

15 DECEMBER 2025

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SECTION 1 • OVERVIEW

Environmental baseline studies were conducted in the Project area prior to Meadowbank Mine approvals and integrated into Project designs according to the Terrestrial Ecosystem Management Plan (TEMP). Wildlife Valued Ecosystem Components (VECs) for the Meadowbank Complex were identified in consultation with regulatory agencies and Baker Lake residents. Upland Breeding Birds was one of the key terrestrial VECs determined for the Meadowbank Mine; therefore, an extensive bird monitoring program, consisting of Program for Regional and International Shorebird Monitoring (PRISM) plots at the mine site and a reference area, and bird transects along the Meadowbank All-Weather Access Road (AWAR), was established to determine potential effects of the Meadowbank Mine. The breeding bird PRISM plot and bird transect monitoring programs were designed to evaluate potential Project-related changes in breeding bird species abundance, richness, and diversity over time.

In 2020, Agnico Eagle sent Environment and Climate Change Canada (ECCC) the comprehensive 2003-2015 analysis of all PRISM and breeding bird transect data. Results of the comprehensive analysis determined there were no significant effects of the Project or Mine-related infrastructure on bird abundance, diversity, or community composition, which supported that mitigation is effective. In 2022, Agnico Eagle Meadowbank Complex finalized a collaboration agreement with ECCC, with a focus on contributing to regional bird monitoring programs. The agreement includes a commitment to conduct 48 PRISM plots selected by Canadian Wildlife Service (CWS) over 10 years (2021 to 2031), and to complete Breeding Bird Survey (BBS) routes along the Meadowbank AWAR and the Whale Tail Haul Road (WTHR) opportunistically when qualified individuals are on site. At a minimum, BBS routes will be conducted every three (3) years during the operations, closure, and post-closure phases of the Project.

In 2022, two BBS routes, consisting of 50 stations each, were established along the AWAR and the WTHR. Also, four (4) of 48 designated PRISM plots were surveyed at Meadowbank site. In 2023, both BBS routes were surveyed, and 17 PRISM plots were completed at the Meadowbank site, while in 2024, both BBS routes were surveyed, and 13 PRISM plots were completed at the Meadowbank and Whale Tail sites. In 2025, both BBS routes were surveyed, and the remaining 14 PRISM plots (of 48) were completed at the Whale Tail site (**Table 1.1**).

Table 1.1: Summary of Breeding Bird Survey Routes (BBS) and PRISM Plots Completed between 2022 and 2025 at the Meadowbank and Whale Tail Sites.

Year	Breeding Bird Survey (BBS)		PRISM Plots	
	Meadowbank All-Weather Access Road (AWAR)	Whale Tail Haul Road (WTHR)	Meadowbank (MEA)	Whale Tail (AMA)
2022	Established	Established	4	
2023	Yes	Yes	17	
2024	Yes	Yes	7	6
2025	Yes	Yes		14
Total	**3 Years**	**3 Years**	**28**	**20**

The two most common species observed on both BBS and PRISM surveys over all survey years were Lapland Longspur (*Calcarius lapponicus*) and Horned Lark (*Eremophila alpestris)*. On the BBS surveys, in general, a higher number of bird diversity and abundance was observed along the AWAR route. Species at Risk observed during the BBS and PRISM surveys included Harris's Sparrow (*Zonotrichia querula*; Special Concern, COSEWIC and *SARA*, Sch 1); Lesser Yellowlegs (*Tringa flavipes*; Threatened, COSEWIC; Not listed by *SARA*), and Red-necked Phalarope (*Phalaropus lobatus*; Special Concern, COSEWIC and *SARA*, Sch 1).

One trend observed over the duration of the BBS and PRISM surveys is an increase in the number of Green-winged Teal (*Anas crecca*), with some breeding documented.

SECTION 2 • OBJECTIVES

The primary objectives of this report are to:

1) Provide a brief overview of the Meadowbank Complex and the rationale for breeding bird surveys;
2) Describe the methods used to conduct BBS and PRISM surveys;
3) Summarize results of the 2025 BBS and PRISM surveys;
4) Provide an overview of trends in diversity and abundance observed since surveys were initiated; and
5) Make recommendations for surveys in subsequent years.

SECTION 3 • METHODOLOGY

3.1 BREEDING BIRD SURVEYS (BBS)

Breeding Bird Survey (BBS) route stops were established in accordance with the North American BBS methods provided by CWS. These methods are coordinated by the United States Geological Survey's (USGS) Patuxent Wildlife Research Center in partnership with ECCC, CWS, and Comisión Nacional para el Conocimiento y Uso de la Biodiversidad (CONABIO, Mexico).

The BBS protocol consists of 50 survey stations set every 800 m for a total of 40 km along the Meadowbank AWAR (Route 62049) and 40 km along the Whale Tail Haul Road (Route 62091). The starting points and orientation of BBS routes along the AWAR and WTHR were chosen by ECCC personnel in early 2022 (see **Figures 3.1** and **3.2**). Stations were established by field personnel on 15 June 2022, and GPS coordinates and detailed descriptions of each station were recorded. The route and stations are a permanent survey to be conducted on a schedule provided by ECCC (i.e., at a minimum every three years during operations, closure, and post-closure, and opportunistically when PRISM surveys are conducted). The three years of BBS surveys (i.e., 2023 to 2025) were scheduled between 15 and 30 June, the prime bird breeding season.

Only one observer counted birds from each stationary point. Every bird seen or heard within 400 m was tallied during the designated three minutes at each stop. Birds documented beyond three minutes were not recorded. Birds seen between or before stops were not counted but were noted in the margin of the datasheet. The number of individuals in large flocks was estimated. Birds known to be non-breeding (late migrant, injured bird, or summer vagrant) were included but marked on the datasheet as a non-breeder. Species not already listed on the forms were added at the bottom. As well, the number of vehicles that passed by during each three-minute stop, excessive noise, and weather conditions were recorded.

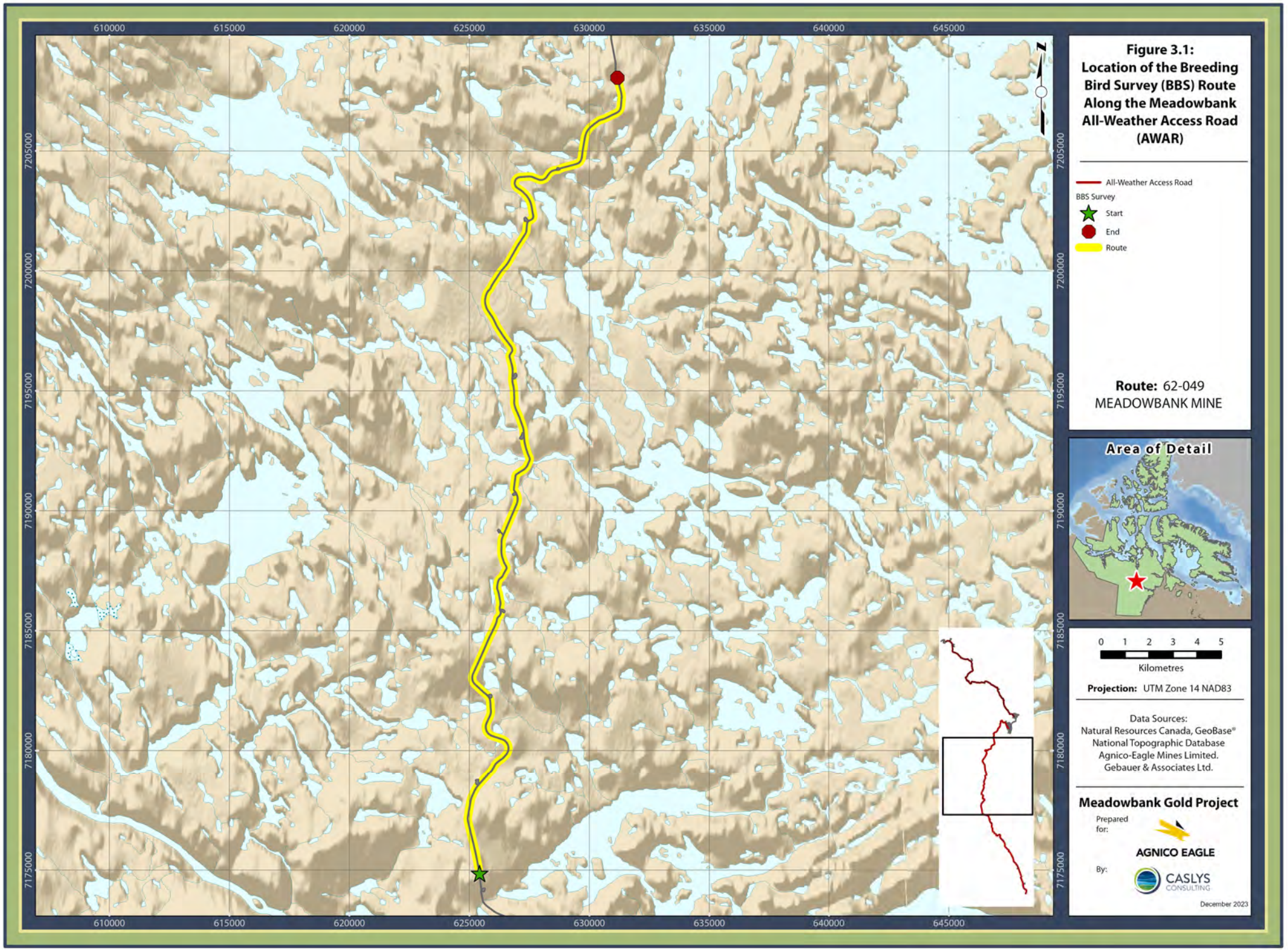
The BBS data were entered directly into the USGS system and copies of the datasheet were provided to the ECCC CWS BSS Coordinator by August 31, 2025. Valid stop descriptions of each stop along both routes were maintained and kept up to date in the USGS database. Agnico Eagle will notify the Canadian national BBS office if adjustments to stop locations are necessary due to safety issues.

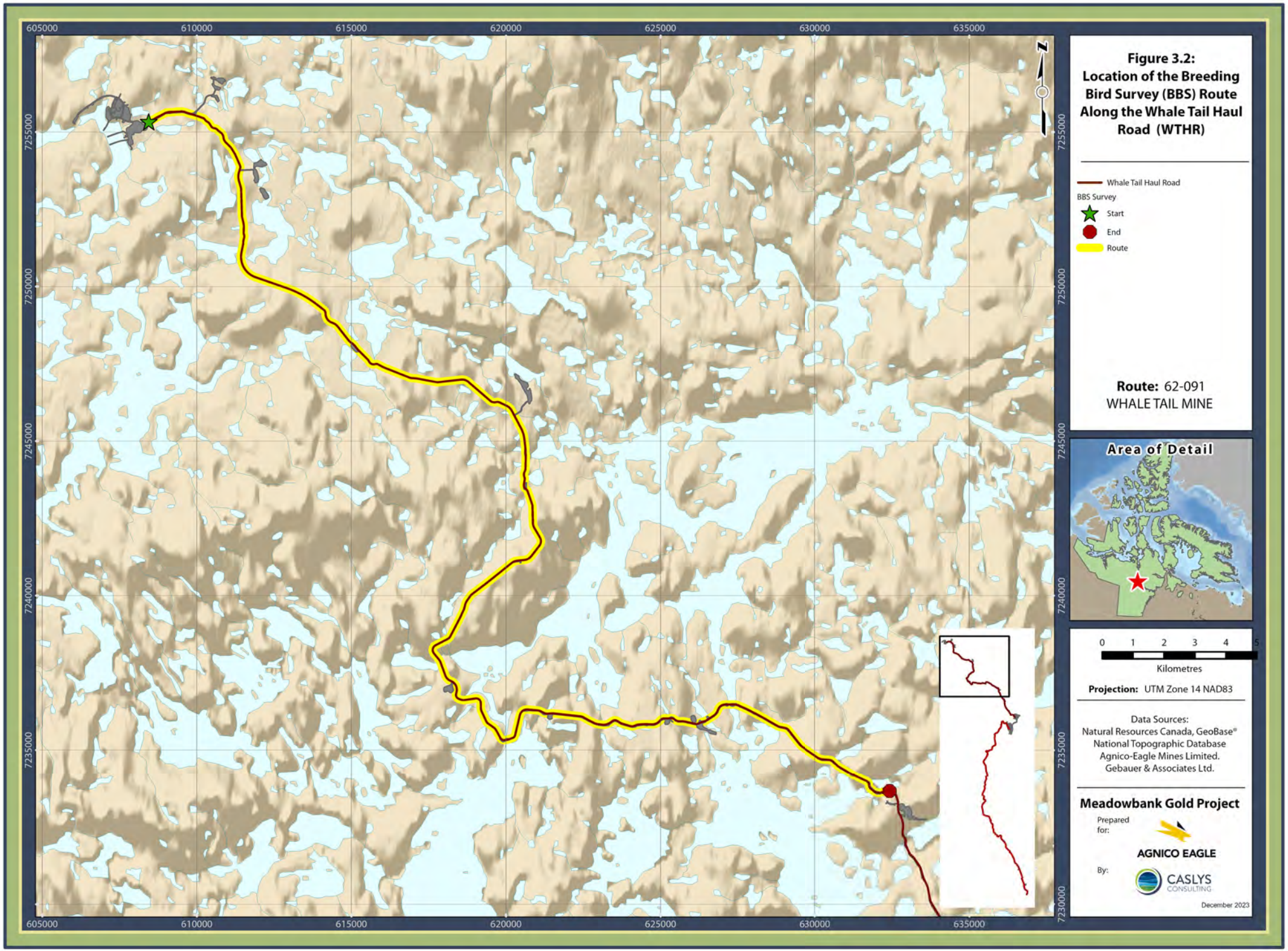
3.2 PRISM PLOTS

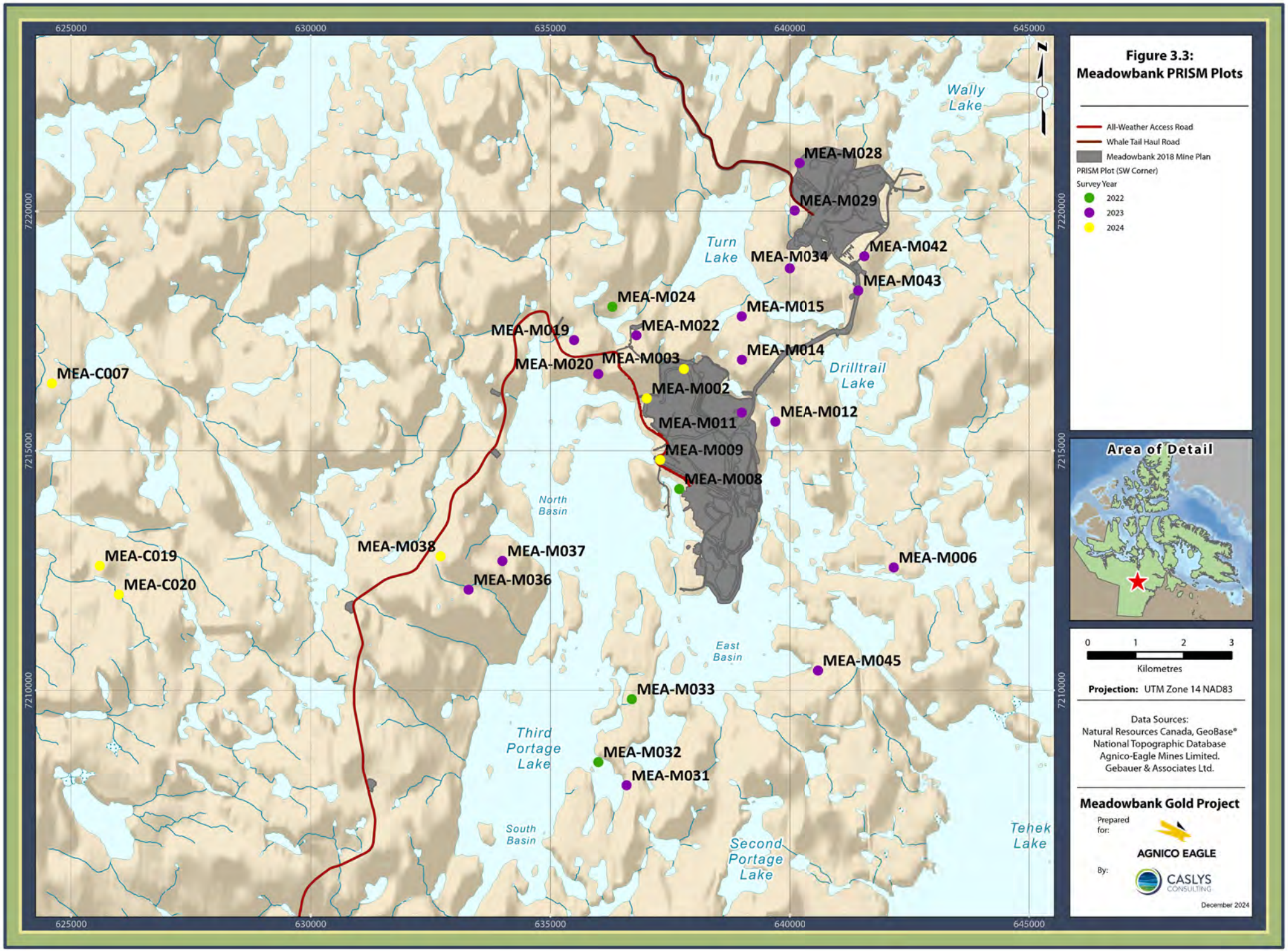
The PRISM plot surveys followed ECCC protocols (Bart et al. 2005) in compliance with the Meadowbank-ECCC Collaboration Agreement. A total of 48 plots were chosen by ECCC in early 2022, all of which were previously established at the Meadowbank, Whale Tail, and Control sites (see **Figures 3.3** and **3.4**). Four (4) plots were surveyed in 2022, 17 plots were surveyed in 2023, 13 plots were surveyed in 2024, and the remaining 14 plots were surveyed in 2025 (**Table 1.1**). Plots were chosen each year depending on access logistics (e.g., helicopter support), proximity to other PRISM plots, local weather conditions, and ECCC priority.

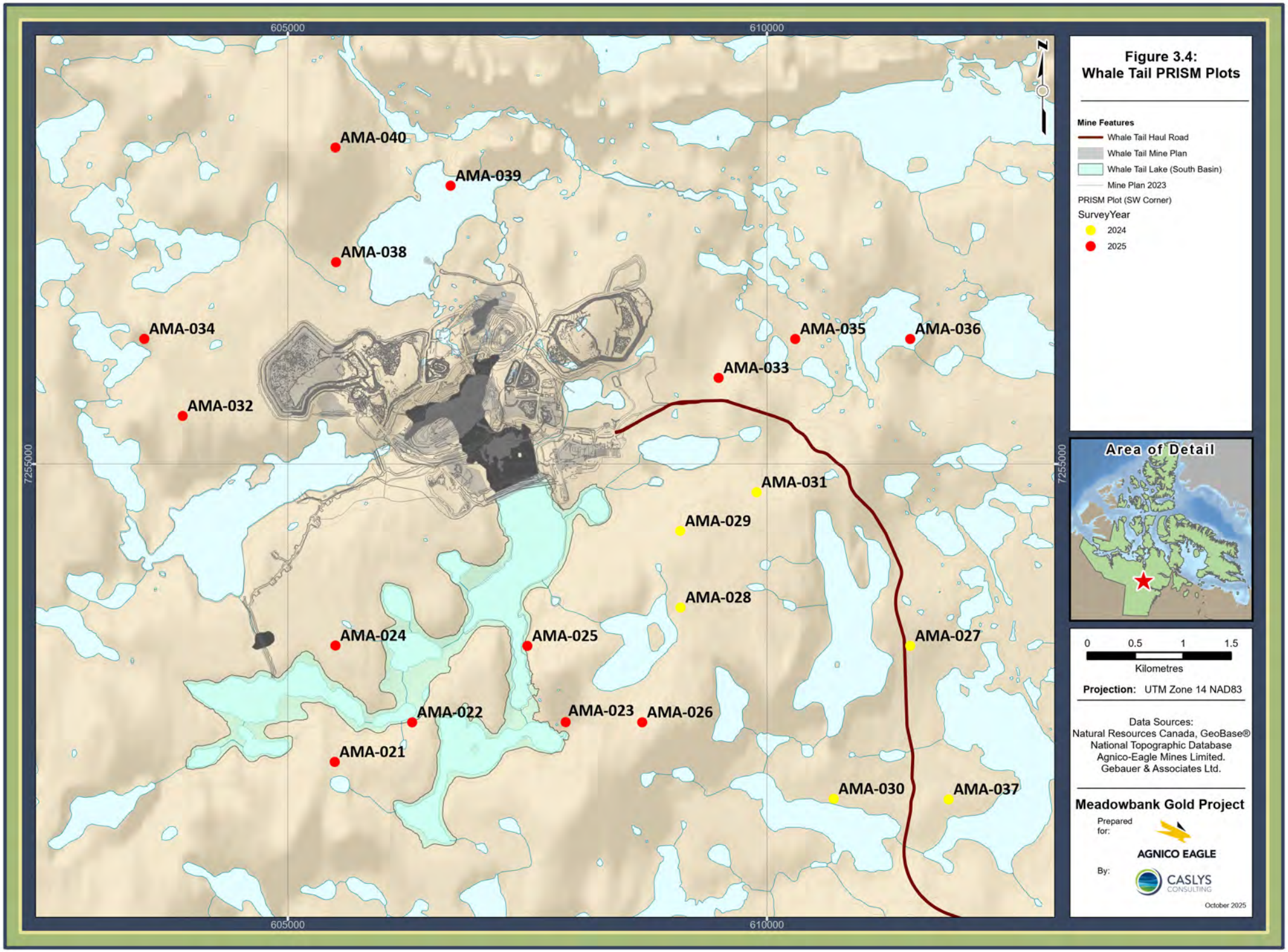
The 300x400m plots were surveyed by a team of two field qualified personnel that transected the site every 25 m (team members were spaced 25 m apart and used geolocation to orient along transect lines). The purpose of the surveys was to document all birds (i.e., absolute abundance) on the plots and to contribute to the ECCC Arctic database on bird diversity and abundance.

PRISM survey raw data will be provided to ECCC CWS technical expert and the CWS Environmental Assessment Officer every year by March 31. Raw data will include bird and plot habitat data entered in the CWS provided spreadsheet, and a digital scan of all field data sheets. Photos of PRISM plot corners were also taken each year.


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640000
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N
Figure 3.1:
Location of the Breeding Bird Survey (BBS) Route Along the Meadowbank All-Weather Access Road (AWAR)
All-Weather Access Road
BBS Survey
Start
End
Route
Route: 62-049
MEADOWBANK MINE
Area of Detail
0 1 2 3 4 5
Kilometres
Projection: UTM Zone 14 NAD83
Data Sources:
Natural Resources Canada, GeoBase® National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.
Meadowbank Gold Project
Prepared for:
AGNICO EAGLE
By:
CASLYS CONSULTING
December 2023


605000
610000
615000
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635000
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7240000
7235000
7230000
N
Figure 3.2:
Location of the Breeding Bird Survey (BBS) Route Along the Whale Tail Haul Road (WTHR)
Whale Tail Haul Road
BBS Survey
Start
End
Route
Route: 62-091
WHALE TAIL MINE
Area of Detail
0 1 2 3 4 5
Kilometres
Projection: UTM Zone 14 NAD83
Data Sources:
Natural Resources Canada, GeoBase®
National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.
Meadowbank Gold Project
Prepared for:
AGNICO EAGLE
By:
CASLYS CONSULTING
December 2023


625000
630000
635000
640000
645000
7220000
7215000
7210000
Wally Lake
Turn Lake
Drilltrail Lake
North Basin
East Basin
South Basin
Third Portage Lake
Second Portage Lake
Tehek Lake
MEA-M028
MEA-M029
MEA-M042
MEA-M034
MEA-M043
MEA-M024
MEA-M015
MEA-M022
MEA-M019
MEA-M014
MEA-M020
MEA-M003
MEA-C007
MEA-M002
MEA-M012
MEA-M011
MEA-M009
MEA-M008
MEA-M038
MEA-M037
MEA-M006
MEA-C019
MEA-C020
MEA-M036
MEA-M045
MEA-M033
MEA-M032
MEA-M031
Figure 3.3:
Meadowbank PRISM Plots
All-Weather Access Road
Whale Tail Haul Road
Meadowbank 2018 Mine Plan
PRISM Plot (SW Corner)
Survey Year
2022
2023
2024
Area of Detail
0
1
2
3
Kilometres
Projection: UTM Zone 14 NAD83
Data Sources:
Natural Resources Canada, GeoBase®
National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.
Meadowbank Gold Project
Prepared for:
AGNICO EAGLE
By:
CASLYS CONSULTING
December 2024


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AMA-038
AMA-034
AMA-035
AMA-036
AMA-033
AMA-032
AMA-031
AMA-029
AMA-028
AMA-024
AMA-025
AMA-027
AMA-022
AMA-023
AMA-026
AMA-021
AMA-030
AMA-037
N
Figure 3.4:
Whale Tail PRISM Plots
Mine Features
Whale Tail Haul Road
Whale Tail Mine Plan
Whale Tail Lake (South Basin)
Mine Plan 2023
PRISM Plot (SW Corner)
SurveyYear
2024
2025
Area of Detail
0
0.5
1
1.5
Kilometres
Projection: UTM Zone 14 NAD83
Data Sources:
Natural Resources Canada, GeoBase®
National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.
Meadowbank Gold Project
Prepared for:
AGNICO EAGLE
By:
CASLYS CONSULTING
October 2025

SECTION 4 • BREEDING BIRD SURVEY (BBS) RESULTS

4.1 2025 RESULTS

The Meadowbank AWAR (62049) and WTHR (62091) routes were completed in 2025 (see **Table 4.1** for survey timing, **Figures 3.1** and **3.2** for general BBS locations).

Table 4.1: Breeding Bird Survey (BBS) 2025 Fieldwork Dates for Meadowbank All-Weather Access Road (AWAR) and Whale Tail Haul Road (WTHR) Routes.

Date & Time	Weather	Observers	Fieldwork Type
Meadowbank All-Weather Access Road (BBS Route 62049)			
June 15, 2025 03:30 to 08:12	Start: 1ºC, cloudy, 20-29 km/hr wind End: 4ºC, partly cloudy, 20-29 km/hr wind	Lars Qaqqaq Dylan White	BBS route station survey
Whale Tail Haul Road (BBS Route 62091)[1]			
Stations 1 to 40 June 16, 2025 03:30 to 06:45	Start: 2ºC, cloudy, 13-19 km/hr wind End: 3ºC, cloudy, 13-19 km/hr wind	Lars Qaqqaq Dylan White	BBS route station survey
Stations 41 to 50 June 18, 2025 06:45 to 07:57	Start: 3ºC, clear, 13-19 km/hr wind End: 3ºC, clear, 13-19 km/hr wind	Lars Qaqqaq Dylan White	BBS route station survey

[1] Note that the BBS was conducted over two days because of deteriorating weather conditions on June 16. As per protocols, the BBS was continued the next day at the same time as the survey was suspended the previous day.

A total of 21 bird species were recorded on the Meadowbank AWAR route in 2025. The five most common bird species were Lapland Longspur (79; cumulative number), Horned Lark (76), Canada Goose (*Branta canadensis*; 54), White-crowned Sparrow (*Zonotrichia leucophrys*; 27), and Savannah Sparrow (*Passerculus sandwichensis*; 23). Mammal species recorded incidentally included Arctic Hare (*Lepus arcticus*), Arctic Fox (*Vulpes lagopus*), Caribou (*Rangifer tarandus*), and Muskox (*Ovibos moschatus*). **Table 4.2** summarizes BBS results for the Meadowbank AWAR route.

A total number of 18 bird species were recorded on the WTHR route in 2025. The five most common bird species were Canada Goose (96; cumulative number), Lapland Longspur (63), Rock Ptarmigan (*Lagopus muta*; 31), Horned Lark (24), and White-crowned Sparrow (22). Mammal species recorded incidentally included Arctic Hare, Arctic Fox, Caribou, Ermine (*Mustela richardsonii*), and Muskox. **Table 4.2** summarizes BBS results for the WTHR route.

In general, higher bird diversity and abundance was observed on the Meadowbank AWAR route than on the WTHR route (**Table 4.2**); however, some species, including American Pipit (*Anthus rubescens*), Least Sandpiper (*Calidris minutilla*), Rock Ptarmigan, and Red-throated Loon (*Gavia stellata*), were more commonly observed along the WTHR route.

Table 4.2: Breeding Bird Survey (BBS) 2023 to 2025 Results for Meadowbank All-Weather Access Road (AWAR) and Whale Tail Haul Road (WTHR) Routes. Numbers are cumulative across all 50 survey points.

Common Name	Scientific Name	AWAR				WTHR			
		2023	2024	2025	Cumulative #	2023	2024	2025	Cumulative #
BIRDS									
American Golden Plover	*Pluvialis dominica*	1	1	1	**3**				**0**
American Pipit	*Anthus rubescens*	1		1	**2**	3	4	4	**11**
American Robin	*Turdus migratorius*		1		**1**		1		**1**
Bald Eagle	*Haliaeetus leucocephalus*	1			**1**	1			**1**
Canada Goose	*Branta canadensis*	141	31	54	**226**	51	33	96	**180**
Common Loon	*Gavia immer*	5	1	2	**8**	1		1	**2**
Common Merganser	*Mergus merganser*		2		**2**				**0**
Common Raven	*Corvus corax*	6	5		**11**	2	2		**4**
Greater Scaup	*Aythya marila*	6	4		**10**				**0**
Greater White-fronted Goose	*Anser albifrons*			2	**2**				**0**
Green-winged Teal	*Anas crecca*			1	**1**		1	3	**4**
Harris's Sparrow *Special Concern (COSEWIC)* *Special Concern (SARA, Sch 1)*	*Zonotrichia querula*		1		**1**		1		**1**
Herring Gull	*Larus argentatus*	20	10	16	**46**	4	5	5	**14**
Horned Lark	*Eremophila alpestris*	113	71	76	**260**	81	59	24	**164**
Lapland Longspur	*Calcarius lapponicus*	203	171	79	**453**	142	156	63	**361**
Least Sandpiper	*Calidris minutilla*		3		**3**	3	5	7	**15**
Lesser Yellowlegs *Threatened (COSEWIC)* *Not Listed (SARA)*	*Tringa flavipes*				**0**		1		**1**

Table 4.2: Continued.

Common Name	Scientific Name	AWAR				WTHR			
		2023	2024	2025	Cumulative #	2023	2024	2025	Cumulative #
BIRDS									
Long-tailed Duck	*Clangula hyemalis*	12	9		**21**	5	2	10	**17**
Northern Pintail	*Anas acuta*		8	10	**18**		2	2	**4**
Parasitic Jaeger	*Stercorarius parasiticus*		1	1	**2**				**0**
Peregrine Falcon	*Falco peregrinus*	1	1		**2**				**0**
Redpoll sp.	*Acanthis* sp.	31	39	16	**86**	18	28	18	**64**
Red-breasted Merganser	*Mergus serrator*			2	**2**	2	1		**3**
Red-necked Phalarope *Special Concern (COSEWIC)* *Special Concern (SARA, Sch 1)*	*Phalaropus lobatus*	1			**1**				**0**
Red-throated Loon	*Gavia stellata*				**0**	2	2	2	**6**
Rock Ptarmigan	*Lagopus muta*	2	11	8	**21**	17	39	31	**87**
Rough-legged Hawk	*Buteo lagopus*	1			**1**				**0**
Sandhill Crane	*Grus canadensis*	34		5	**39**		4		**4**
Savannah Sparrow	*Passerculus sandwichensis*	52	32	23	**107**	32	13	7	**52**
Semipalmated Plover	*Charadrius semipalmatus*	1		2	**3**		4	1	**5**
Semipalmated Sandpiper	*Calidris pusilla*	12	24	13	**49**	13	12	8	**33**
Snow Goose	*Anser caerulescens*	4	2		**6**	1	10		**11**
Tundra Swan	*Cygnus columbianus*			2	**2**		1		**1**
White-crowned Sparrow	*Zonotrichia leucophrys*	33	45	27	**105**	14	33	22	**69**
Willow Ptarmigan	*Lagopus lagopus*	12	35	18	**65**	1	2	1	**4**
Wilson's Snipe	*Gallinago delicata*	2			**2**				**0**
Total # of Species		**24**	**23**	**21**	**34**	**19**	**25**	**18**	**27**

Table 4.2: Continued.

Common Name	Scientific Name	AWAR				WTHR			
		2023	2024	2025	Cumulative #	2023	2024	2025	Cumulative #
MAMMALS[1]									
Arctic Hare	*Lepus arcticus*	3	5	4	12	2		3	5
Arctic Fox	*Vulpes lagopus*	3	1	1	5	1		1	2
Arctic Ground Squirrel	*Spermophilus parryii*		2		2				0
Barren-land Caribou	*Rangifer tarandus*	3	18	12	33	78	9	3	90
Ermine	*Mustela richardsonii*				0			1	1
Muskox	*Ovibos moschatus*	2	1	1	4	42	36	45	123
Total # of Species		**4**	**5**	**4**	**5**	**4**	**2**	**5**	**5**

[1] Double-counting of Caribou and Muskox occurred.

BBS data were entered and submitted into the USGS system in July 2025, and copies of the datasheet were provided by email to ECCC CWS BSS Coordinator by 31 August 2025. Valid stop descriptions of each stop along both routes were also maintained in the USGS database and no adjustments to stop locations were needed for the 2025 surveys along both AWAR and WTHR.

4.2 SUMMARY OF 2023 TO 2025 RESULTS

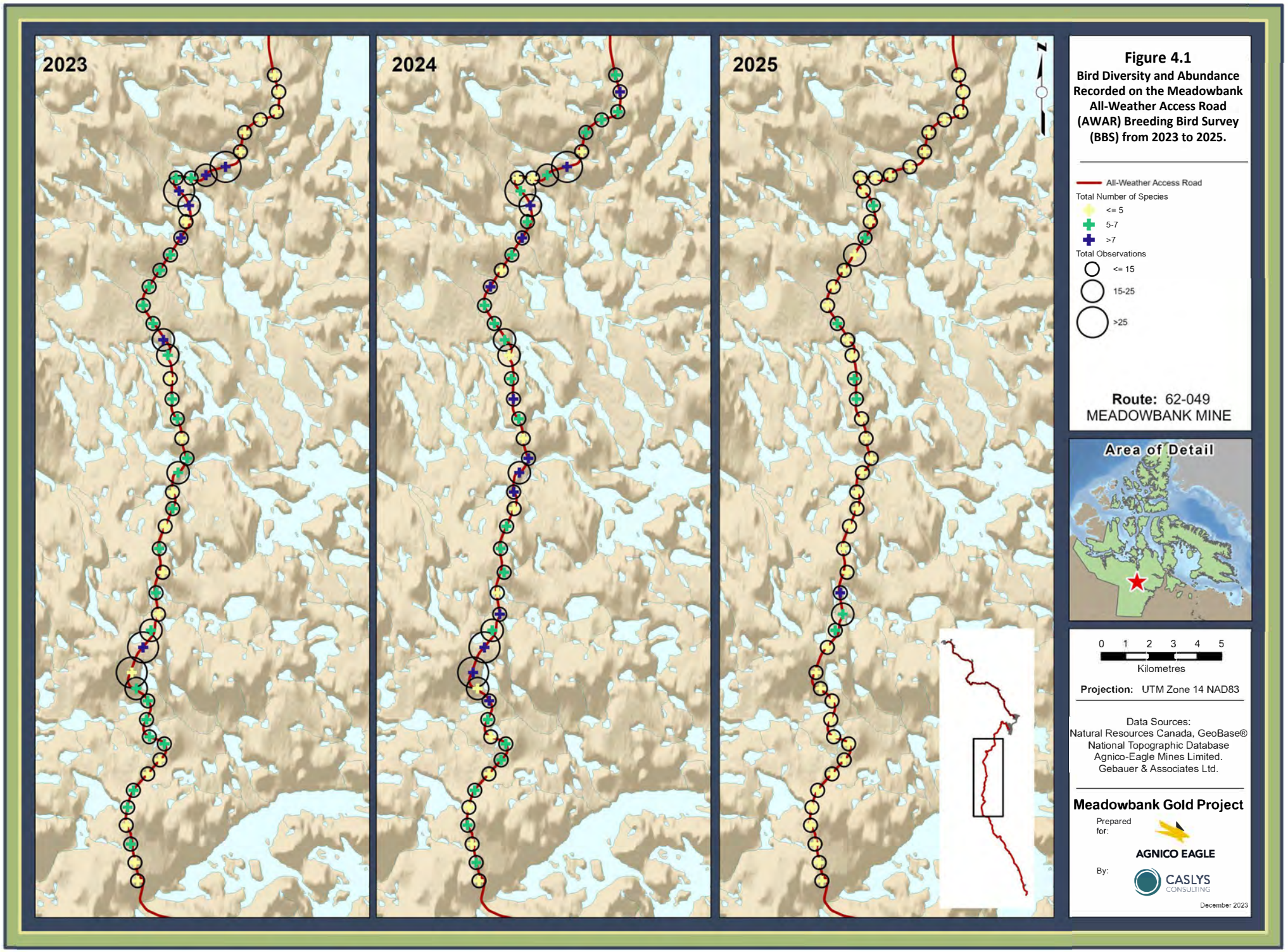
A summary of BBS results from 2023 to 2025 are provided in **Table 4.2**. Comparable numbers of species were seen on the AWAR from 2023 to 2025 (i.e., 24, 23, and 21 species) and on the WTHR (i.e., 19, 25, and 18 species). Overall, bird diversity and abundance and diversity was higher along the AWAR route than the WTHR route (**Table 4.2**).

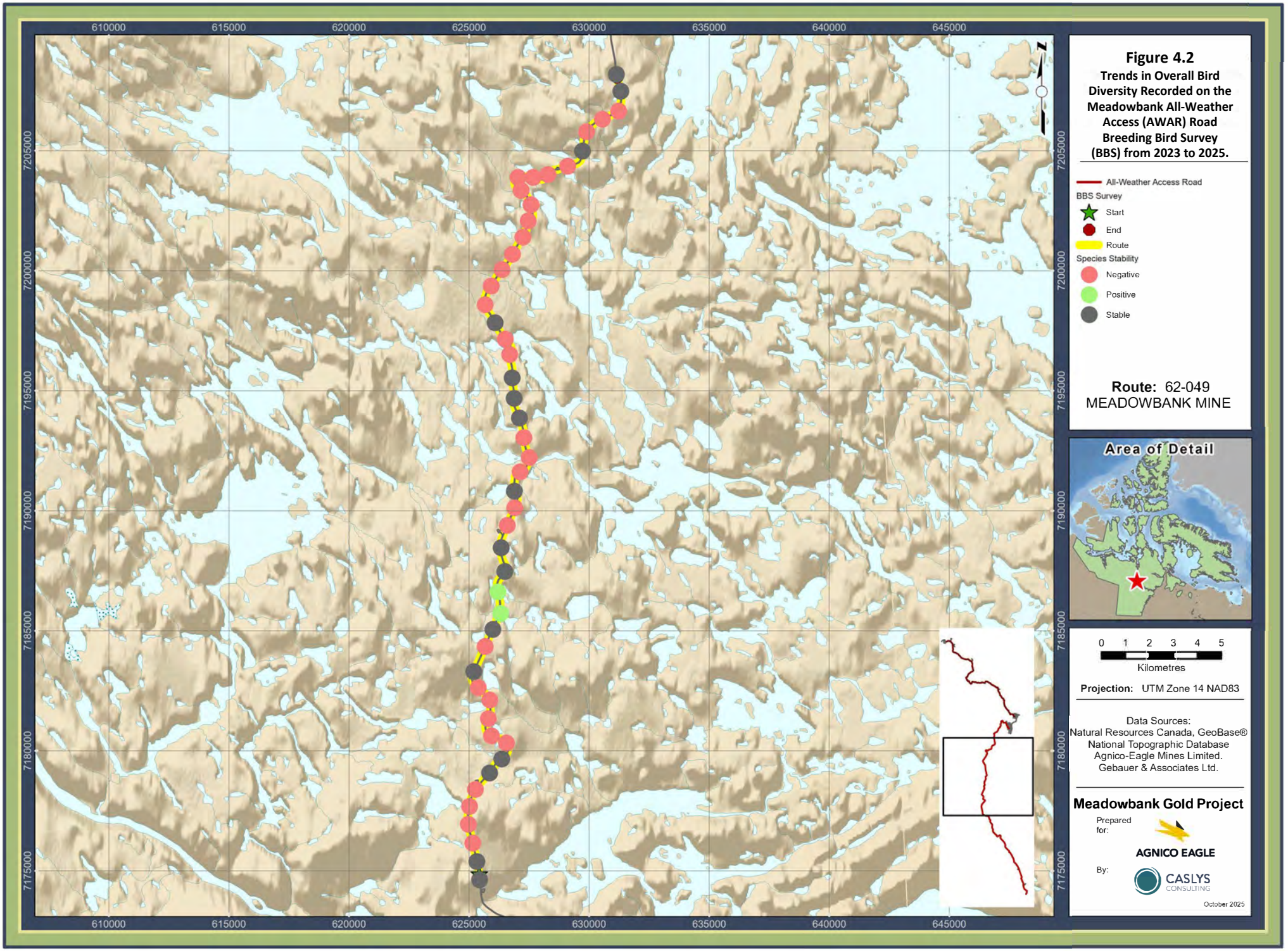
Some preliminary differences in bird abundance and diversity on the BBS between years along the AWAR are provided in **Figures 4.1, 4.2** and **4.3**. **Figure 4.1** summarizes bird diversity and abundance for each of the three years of the survey (2023 to 2025) along the AWAR, while **Figure 4.2** illustrates the trend in number of species observed over the three years. Thirty-two (32) of 50 stations (64%) showed a negative trend, while two (2) of 50 stations (4%) showed a positive trend. When trends for the five most common species (i.e., Lapland Longspur, Horned Lark, Canada Goose, White-crowned Sparrow, and Savannah Sparrow) are mapped, only 15 of 50 stations (30%) show a negative trend with most being stable (**Figure 4.3**).

Similarly, differences in bird abundance and diversity on the BBS between years along the WTHR are provided in **Figures 4.4, 4.5** and **4.6**. **Figure 4.4** summarizes bird diversity and abundance for each of the three years of the survey (2023 to 2025) along the WTHR, while **Figure 4.5** illustrates the trend in number of species observed over the three years. Unlike the trends noted along the AWAR, only 15 of 50 stations (30%) showed a negative trend, while 11 of 50 stations (22%) showed a positive trend. When trends for the five most common species (i.e., Canada Goose, Lapland Longspur, Rock Ptarmigan, Horned Lark, and White-crowned Sparrow) are mapped, only seven (7) of 50 stations (14%) showed a negative trend with most being stable (**Figure 4.6**).

Three listed species were observed at low numbers: Harris's Sparrow (Special Concern, COSEWIC and *SARA*, Sch 1; observed along AWAR and WTHR); Lesser Yellowlegs (Threatened, COSEWIC; not listed by *SARA*; only observed along WTHR), and Red-necked Phalarope (Special Concern, COSEWIC and *SARA*, Sch 1; only observed along AWAR). Harris's Sparrow and Red-necked Phalarope are rare breeders north of the Baker Lake area but more common along the Thelon River system. Lesser Yellowlegs breeds in the boreal forest and is a vagrant in the Arctic.

Green-winged Teal has been seen with increasing frequency in the last two years of the survey. The data suggests an increasing trend; however, additional years of BBS data are required to determine whether this trend will persist.


2023
2024
2025
N
Figure 4.1
Bird Diversity and Abundance Recorded on the Meadowbank All-Weather Access Road (AWAR) Breeding Bird Survey (BBS) from 2023 to 2025.
All-Weather Access Road
Total Number of Species
<= 5
5-7
>7
Total Observations
<= 15
15-25
>25
Route: 62-049
MEADOWBANK MINE
Area of Detail
0 1 2 3 4 5
Kilometres
Projection: UTM Zone 14 NAD83
Data Sources:
Natural Resources Canada, GeoBase® National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.
Meadowbank Gold Project
Prepared for:
AGNICO EAGLE
By:
CASLYS CONSULTING
December 2023


610000
615000
620000
625000
630000
635000
640000
645000
7205000
7200000
7195000
7190000
7185000
7180000
7175000
Figure 4.2
Trends in Overall Bird Diversity Recorded on the Meadowbank All-Weather Access (AWAR) Road Breeding Bird Survey (BBS) from 2023 to 2025.
All-Weather Access Road
BBS Survey
Start
End
Route
Species Stability
Negative
Positive
Stable
Route: 62-049
MEADOWBANK MINE
Area of Detail
0 1 2 3 4 5
Kilometres
Projection: UTM Zone 14 NAD83
Data Sources:
Natural Resources Canada, GeoBase® National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.
Meadowbank Gold Project
Prepared for:
AGNICO EAGLE
By:
CASLYS CONSULTING
October 2025

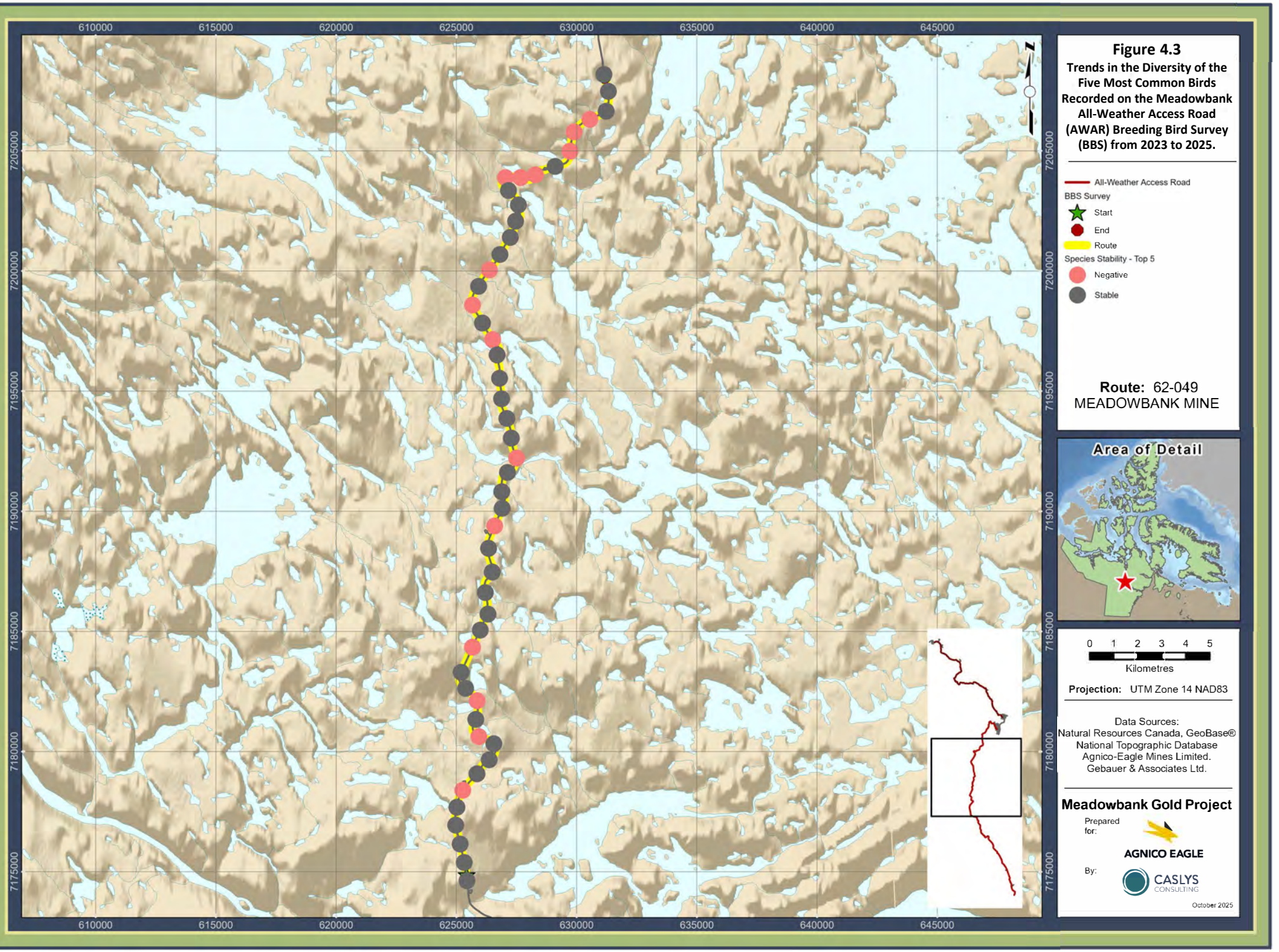


Figure 4.3

Trends in the Diversity of the Five Most Common Birds Recorded on the Meadowbank All-Weather Access Road (AWAR) Breeding Bird Survey (BBS) from 2023 to 2025.

All-Weather Access Road

BBS Survey

Start

End

Route

Species Stability - Top 5

Negative

Stable

Route: 62-049
MEADOWBANK MINE

Area of Detail

0 1 2 3 4 5
Kilometres

Projection: UTM Zone 14 NAD83

Data Sources:
Natural Resources Canada, GeoBase® National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.

Meadowbank Gold Project

Prepared for: AGNICO EAGLE

By: CASLYS CONSULTING

October 2025

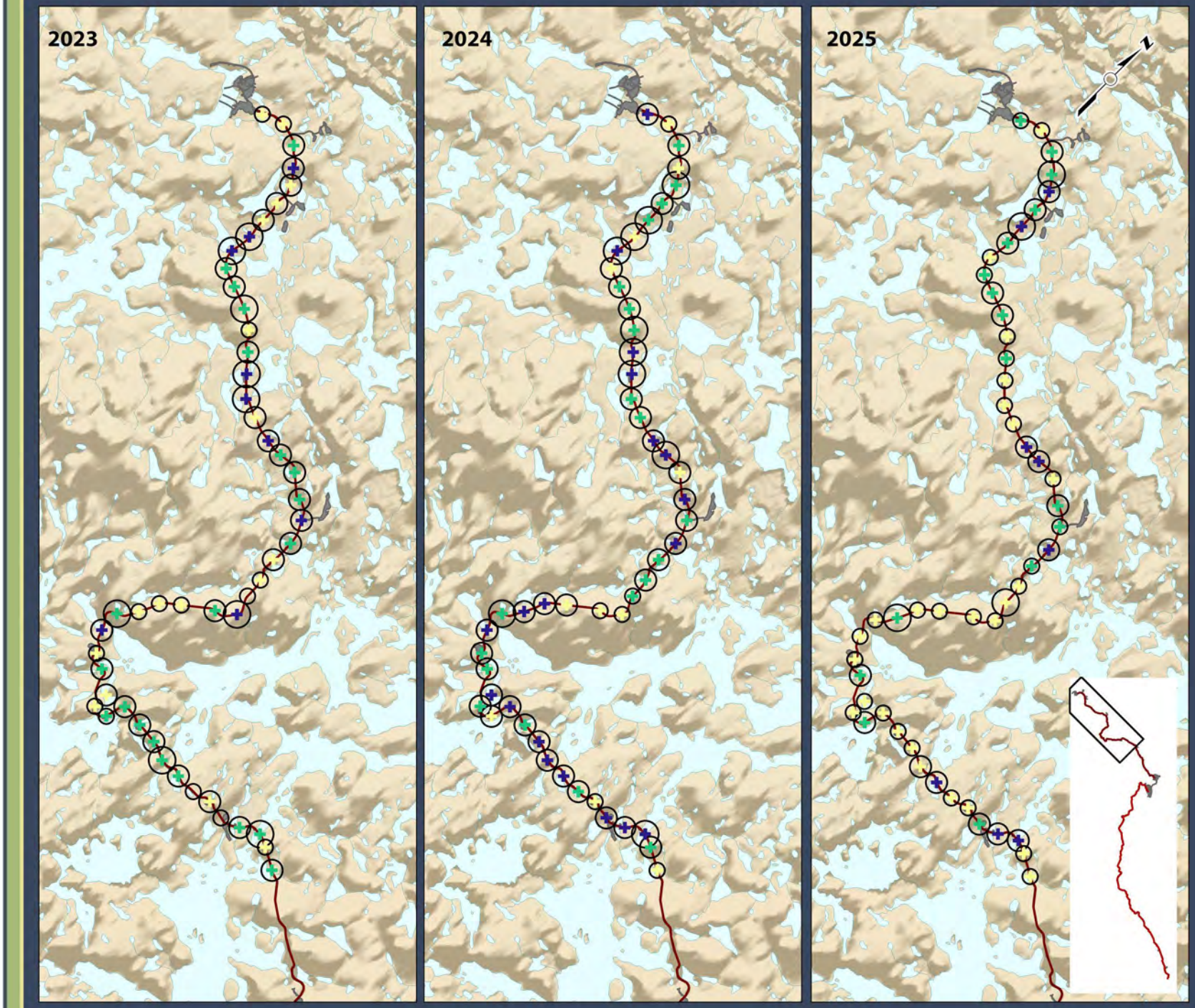


Figure 4.4
Bird Diversity and Abundance Recorded on the Whale Tail Haul Road (WTHR) Breeding Bird Survey (BBS) from 2023 to 2025.

Whale Tail Haul Road

Total Number of Species
- <=3
- 3-5
- >5

Total Observations
- <=5
- 6-10
- >10

Route: 62-091
WHALE TAIL MINE

Area of Detail

0 1 2 3 4 5
Kilometres

Projection: UTM Zone 14 NAD83

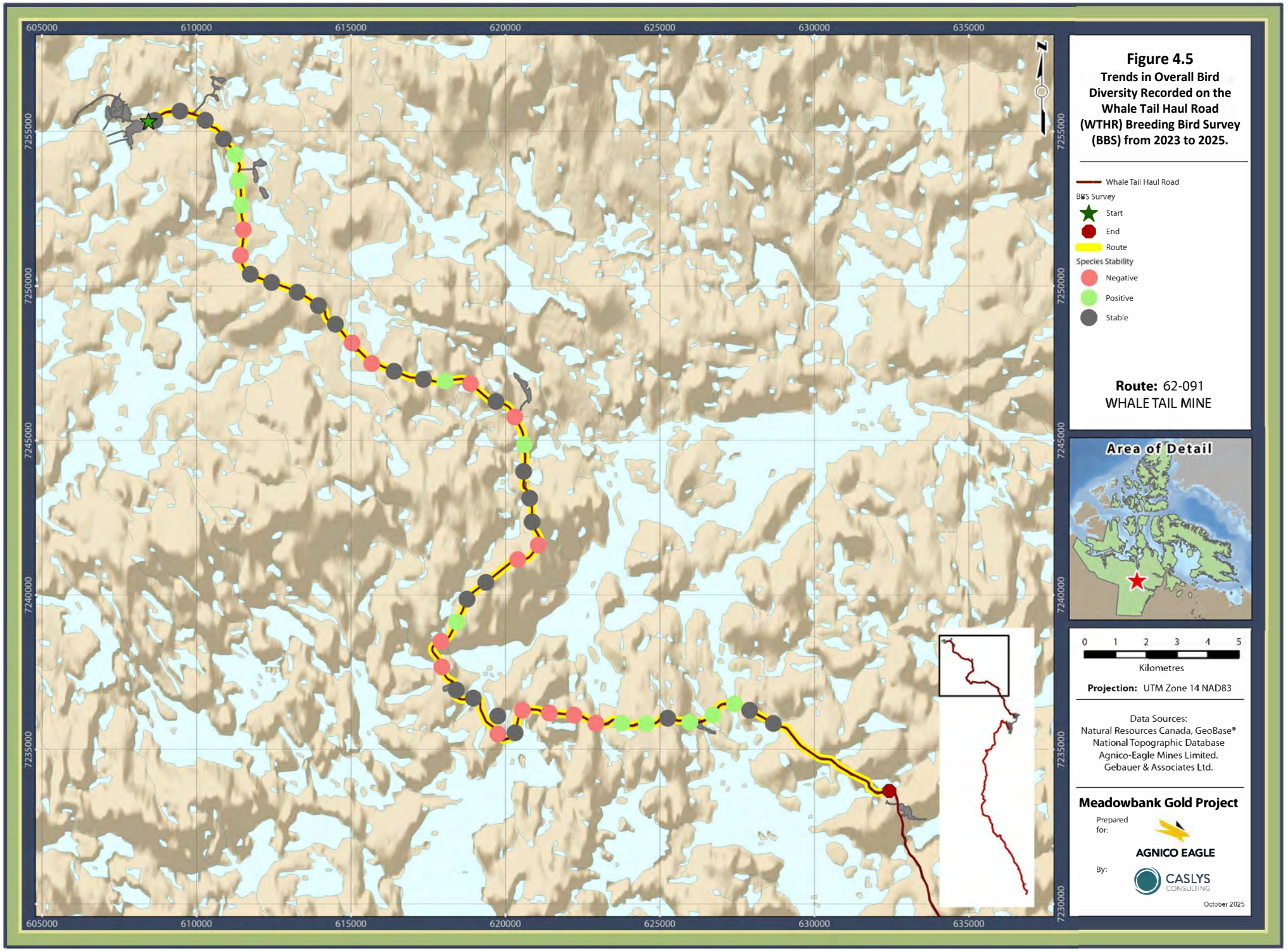
Data Sources:
Natural Resources Canada, GeoBase® National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.

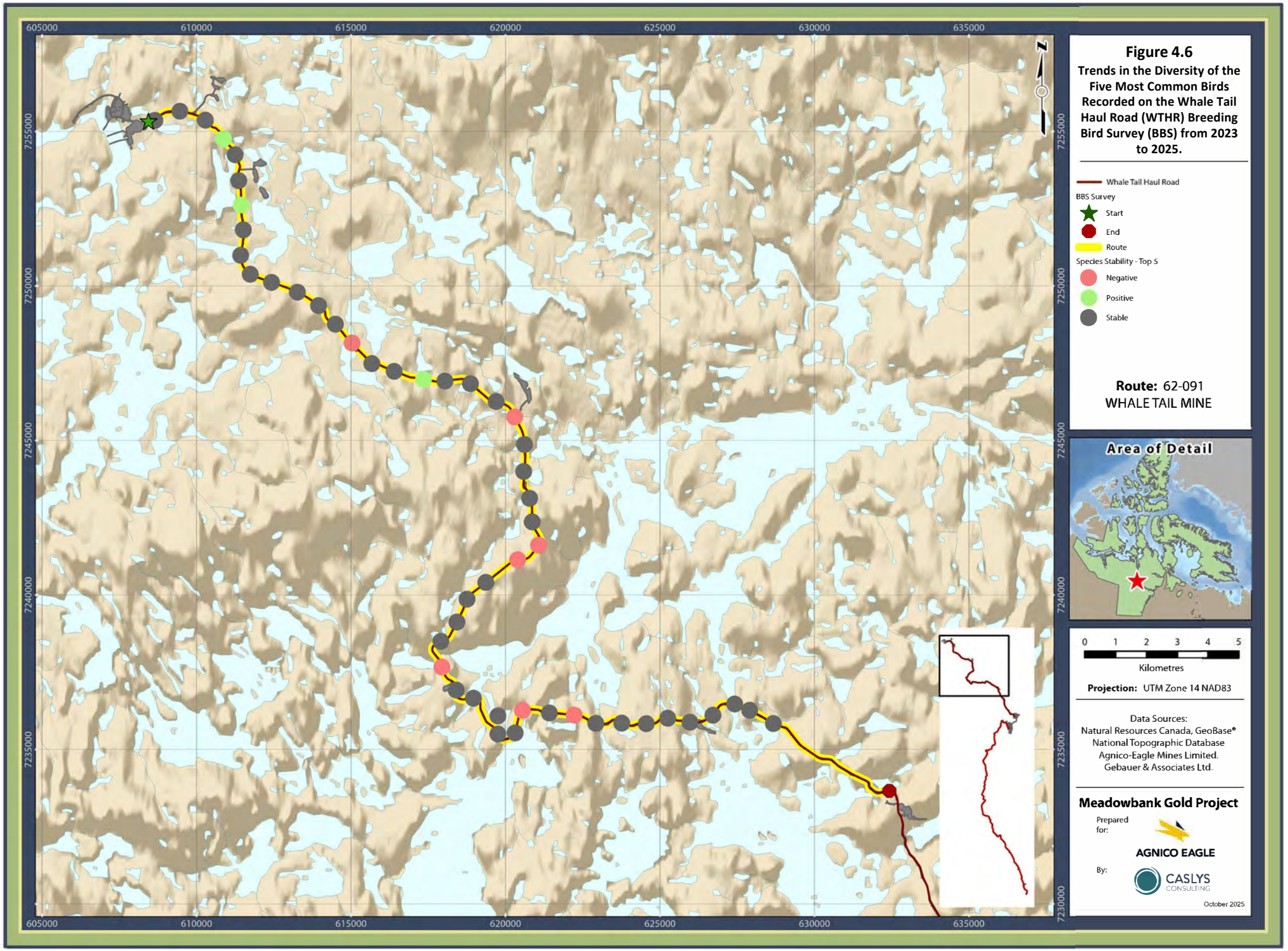
Meadowbank Gold Project

Prepared for:
AGNICO EAGLE

By:
CASLYS CONSULTING

October 2025


605000
610000
615000
620000
625000
630000
635000
7255000
7250000
7245000
7240000
7235000
7230000
N
Figure 4.5
Trends in Overall Bird Diversity Recorded on the Whale Tail Haul Road (WTHR) Breeding Bird Survey (BBS) from 2023 to 2025.
Whale Tail Haul Road
BBS Survey
Start
End
Route
Species Stability
Negative
Positive
Stable
Route: 62-091
WHALE TAIL MINE
Area of Detail
0 1 2 3 4 5
Kilometres
Projection: UTM Zone 14 NAD83
Data Sources:
Natural Resources Canada, GeoBase® National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.
Meadowbank Gold Project
Prepared for:
AGNICO EAGLE
By:
CASLYS CONSULTING
October 2025


605000
610000
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620000
625000
630000
635000
7255000
7250000
7245000
7240000
7235000
7230000
N
Figure 4.6
Trends in the Diversity of the Five Most Common Birds Recorded on the Whale Tail Haul Road (WTHR) Breeding Bird Survey (BBS) from 2023 to 2025.
Whale Tail Haul Road
BBS Survey
Start
End
Route
Species Stability - Top 5
Negative
Positive
Stable
Route: 62-091
WHALE TAIL MINE
Area of Detail
0 1 2 3 4 5
Kilometres
Projection: UTM Zone 14 NAD83
Data Sources:
Natural Resources Canada, GeoBase® National Topographic Database
Agnico-Eagle Mines Limited.
Gebauer & Associates Ltd.
Meadowbank Gold Project
Prepared for:
AGNICO EAGLE
By:
CASLYS CONSULTING
October 2025

SECTION 5 • PRISM PLOT RESULTS

5.1 2025 RESULTS

Fourteen (14) PRISM plots were surveyed in 2025 between June 16 and 21: AMA-021, AMA-022, AMA-023, AMA-024, AMA-025, AMA-026, AMA-032, AMA-033, AMA-034, AMA-035, AMA-036, AMA-038, AMA-039, and AMA-040 (see **Table 5.1** for timing and weather details, **Figures 3.3** and **3.4** for plot locations). The focus in 2025 was remaining PRISM plots around the Whale Tail area.

Nests of Lapland Longspur (4 nests), American Pipit (1), and Redpoll sp. (*Acanthis* sp.; 1) were documented on PRISM plots in 2025. Nests of Lapland Longspur (2 nests), and American Golden Plover (*Pluvialis dominica*; 1) were observed incidentally outside PRISM plots. Nest details and photos are provided in **Table 5.2** and **Appendix I**.

Table 5.1: Meadowbank PRISM Plot 2025 Fieldwork Details.

Plot (AMA)	Date	Time	Weather	Observers[1]
AMA-021	June 18	10:30 to 11:50	6ºC, mainly clear, no precipitation, moderate breeze	LQ & DW
AMA-022	June 18	12:24 to 13:40	8ºC, mainly clear, no precipitation, gentle breeze	LQ & DW
AMA-023	June 17	12:18 to 13:50	5ºC, cloudy, no precipitation, moderate breeze	LQ & DW
AMA-024	June 18	14:10 to 15:30	~9ºC, mainly clear, no precipitation, light breeze	LQ & DW
AMA-025	June 17	14:35 to 15:50	~7ºC, cloudy, no precipitation/drizzle, moderate breeze	LQ & DW
AMA-026	June 17	10:10 to 11:30	~4ºC, cloudy, freezing drizzle, fresh breeze	LQ & DW
AMA-032	June 20	12:22 to 13:50	7ºC, mainly clear, no precipitation, moderate breeze	LQ & DW
AMA-033	June 16	13:15 to 14:33	6ºC, cloudy, no precipitation/drizzle, gentle breeze	LQ & DW
AMA-034	June 20	10:36 to 11:54	5ºC, mainly clear, no precipitation, moderate breeze	LQ & DW
AMA-035	June 18	17:55 to 19:30	~9ºC, mainly clear, no precipitation, gentle breeze	LQ & DW
AMA-036	June 19	14:05 to 15:30	2ºC, cloudy, drizzle, fresh breeze	LQ & DW
AMA-038	June 20	14:23 to 15:42	7C, mainly clear, no precipitation, moderate breeze	LQ & DW
AMA-039	June 20	16:10 to 17:21	~8ºC, mainly clear, no precipitation, moderate breeze	LQ & DW
AMA-040	June 21	09:55 to 11:30	3ºC, mainly clear, no precipitation, moderate breeze	LQ & DW

[1] LQ = Lars Qaqqaq; DW = Dylan White

Twenty-three (23) bird and three (3) mammal species were observed during 2025 PRISM plot surveys (**Table 5.3**). Nine (9) of these (8 birds and 1 mammal) were only observed incidentally outside plots, while the other species were observed while surveying PRISM plots (**Table 5.3**). Species numbers, behaviours, nests, and other details have been recorded in the PRISM plot data spreadsheets as per the templates provided by CWS that will be provided to ECCC by March 31, 2026.

Table 5.2: Details and Representative Photos of Nests Found during 2025 PRISM Plots.

Date (2025)	Plot (AMA)	Nest Name	Species[1]	# of Eggs/ Chicks	UTM Coordinates (14W)	Details	Representative Photo
June 18	AMA-021	AMA-021_LALO	LALO	5	605779 7252215	On Heath Tundra under vegetation; female flushed	
June 18	AMA-022	AMA-022_LALO	LALO	5	606418 7252645	On Heath Tundra only partially under vegetation; female flushed	
June 17	AMA-026	AMA-026_LALO	LALO	5	608989 7252302	On Heath Tundra only partially under vegetation; female flushed	
June 17	AMA-026 (outside plot)	AMA-026_AMGP	AMGP	4	608790 7252290	Fully exposed in open in Rock Lichen habitat; female flushed	

Table 5.2: Continued.

Date (2025)	Plot (AMA)	Nest Name	Species[1]	# of Eggs/ Chicks	UTM Coordinates (14W)	Details	Representative Photo
June 20	AMA-032	AMA-032_AMPI	AMPI	5	604106 7255681	Nest hidden on Heath Tundra with Rock Habitat; female flushed	
June 20	AMA-038 (outside plot)	AMA-038_LALO	LALO	4	605572 7257525	On Heath Tundra partially hidden under vegetation; female flushed	
June 21	AMA-040	AMA-040_LALO Nest 1	LALO	2/2	605625 7258645	Fairly exposed on Heath Tundra; female flushed	
June 21	AMA-040	AMA-040_REDP	REDP	5	605700 7258343	Fairly exposed in Shrub Birch; female flushed	

Table 5.2: Continued.

Date (2025)	Plot (AMA)	Nest Name	Species[1]	# of Eggs/ Chicks	UTM Coordinates (14W)	Details	Representative Photo
June 21	AMA-040 (outside plot)	AMA-040_LALO Nest 2	LALO	4	605671 7258275	On Heath Tundra under vegetation; female flushed	

[1] AMGP = American Golden Plover; AMPI = American Pipit; LALO = Lapland Longspur; REDP = Redpoll species

Table 5.3: Wildlife Species Observed on PRISM Plots in 2025. Additional Species Observed outside Plots are Listed as Incidental. Species only Observed Incidentally are in Gray.

Common Name	Scientific Name	AMA-0														Incidental (Plot #s)
		21	22	23	24	25	26	32	33	34	35	36	38	39	40	
Birds																
American Golden Plover	*Pluvialis dominica*						1									AMA-026
American Pipit	*Anthus rubescens*	2						2	1					4		AMA-034
American Robin	*Turdus migratorius*															AMA-035
Canada Goose	*Branta canadensis*		10	2												AMA-021, AMA-022, AMA-023, AMA-035
Common Loon	*Gavia immer*															AMA-023, AMA-038
Common Raven	*Corvus corax*															AMA-024, AMA-026, AMA-035
Green-winged Teal	*Anas crecca*		2													AMA-022
Herring Gull	*Larus argentatus*											1				AMA-025, AMA-026
Hoary Redpoll	*Acanthis hornemanni*			5	3			3		1	1	3	1		2	AMA-035, AMA-040
Horned Lark	*Eremophila alpestris*	2		3	1	2	1	2	1	2	3	5	2		3	AMA-023, AMA-032, AMA-033, AMA-035, AMA-036
Lapland Longspur	*Calcarius lapponicus*	8	10	8	3	8	9	2	6	4	4	5	5	1	10	AMA-022, AMA-024, AMA-032, AMA-033, AMA-034, AMA-038, AMA-040
Least Sandpiper	*Calidris minutilla*					1					1					
Long-tailed Duck	*Clangula hyemalis*															AMA-023
Redpoll sp.	*Acanthis sp.*	4	2		2									1	3	AMA-024
Red-breasted Merganser	*Mergus serrator*															AMA-036
Red-throated Loon	*Gavia stellata*															AMA-033
Rock Ptarmigan	*Lagopus muta*			1	1	2	2			1						AMA-023, AMA-025
Savannah Sparrow	*Passerculus sandwichensis*		1	1	1				1				1		1	AMA-033, AMA-040
Semipalmated Plover	*Charadrius semipalmatus*			1					1		2		1			AMA-036

Table 5.3: Continued.

Common Name	Scientific Name	AMA-0														Incidental (Plot #s)
		21	22	23	24	25	26	32	33	34	35	36	38	39	40	
Birds																
Semipalmated Sandpiper	*Calidris pusilla*	2	10		2	3	2				1	6	1			AMA-036
Tundra Swan	*Cygnus columbianus*															AMA-021
White-crowned Sparrow	*Zonotrichia leucophrys*			1				1		1				1	1	AMA-033, AMA-035
Yellow-billed Loon	*Gavia adamsii*															AMA-034
Total # of Species		**5**	**6**	**8**	**6**	**5**	**5**	**5**	**5**	**5**	**6**	**5**	**6**	**4**	**5**	
Mammals																
Barren-ground Caribou	*Rangifer tarandus* ssp. *groenlandicus*	2														
Lemming sp.		1														
Muskox	*Ovibos moschatus*															AMA-024, AMA-032

5.2 SUMMARY OF RESULTS TO DATE

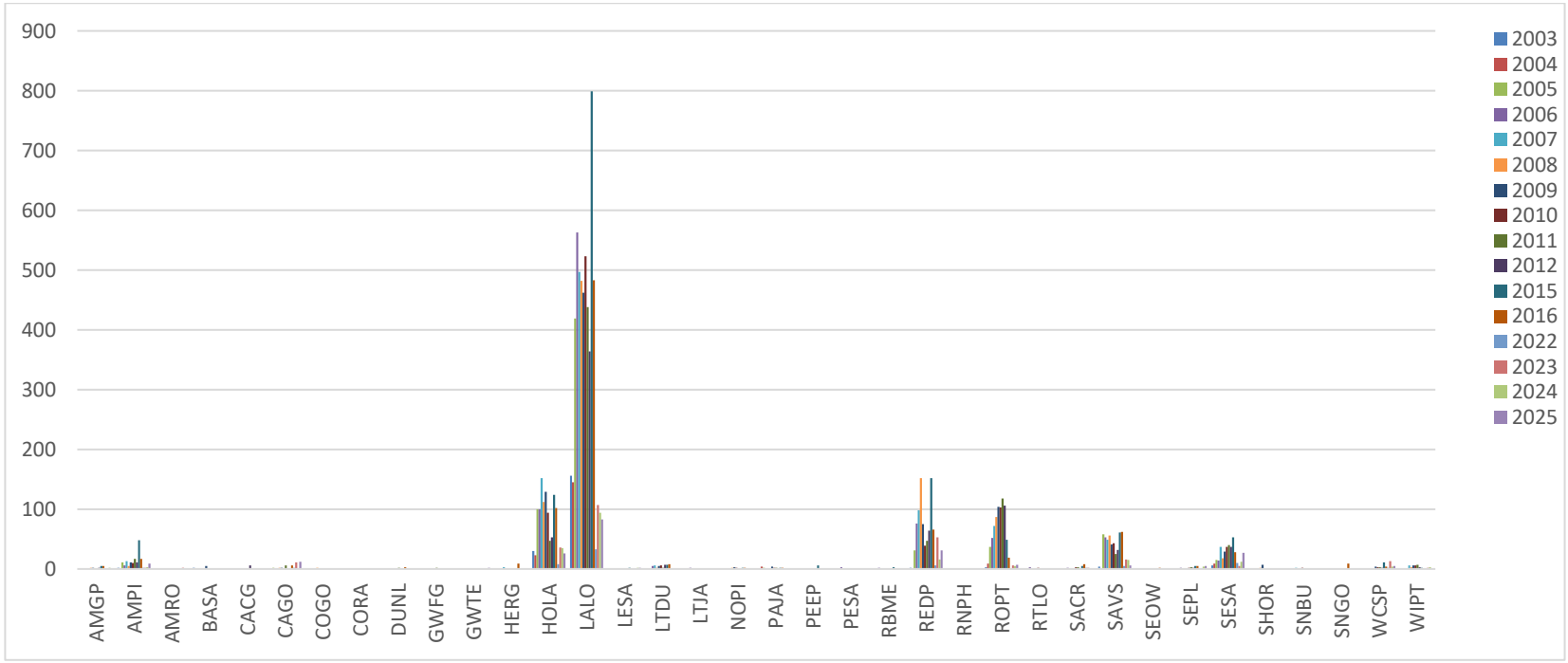
PRISM plots were conducted in 16 separate years between 2003 and 2025. A total of 65 plots were established with 25 plots near the Meadowbank Mine area, 20 Control plots southwest of the Meadowbank Mine, and 20 plots at the Whale Tail Mine site. **Table 5.4** summarizes the number of plots surveyed in each year and at each site.

Table 5.4: Summary of PRISM Plots Conducted at the Meadowbank, Whale Tail, and Control Sites Between 2003 and 2025.

Year	Meadowbank	Whale Tail	Control
2003	13		
2004	12		
2005	19		20
2006	24		19
2007	25		20
2008	25		20
2009	25		20
2010	25		20
2011	25		20
2012	25		20
2015	25	20	20
2016		20	20
2022	4		
2023	17		
2024	4	6	3
2025		14	
Total	**268**	**60**	**202**

Over all years, the ten (10) most common species from most to least abundant were Lapland Longspur, Horned Lark, redpoll sp., Rock Ptarmigan, Savannah Sparrow, Semipalmated Sandpiper (*Calidris pusilla*), American Pipit, White-crowned Sparrow, Long-tailed Duck (*Clangula hyemalis*), and Canada Goose (see **Figure 5.1**).

A comparison of the average number of birds seen each year in each of the three study areas is provided in **Figure 5.2**. In general, the average number of birds seen per plot has been relatively consistent over the years.



Bird Codes: AMGP (American Golden Plover), AMPI (American Pipit), AMRO (American Robin), BASA (Baird's Sandpiper), CACG (Cackling Goose), CAGO (Canada Goose), COGO (Common Goldeneye), CORA (Common Raven), DUNL (Dunlin), GWFG (Greater White-fronted Goose), GWTE (Green-winged Teal), HERG (Herring Gull), HOLA (Horned Lark), LALO (Lapland Longspur), LESA (Least Sandpiper), LTDU (Long-tailed Duck), LTJA (Long-tailed Jaeger), NOPI (Northern Pintail), PAJA (Parasitic Jaeger), Peep (Small Sandpiper), PESA (Pectoral Sandpiper), RBME (Red-breasted Merganser), REDP (Redpoll), RNPH (Red-necked Phalarope), ROPT (Rock Ptarmigan), RTLO (Red-throated Loon), SACR (Sandhill Crane), SAVS (Savannah Sparrow), SEOW (Short-eared Owl), SEPL (Semipalmated Plover), SESA (Semipalmated Sandpiper), SHOR (Shorebird), SNBU (Snow Bunting), SNGO (Snow Goose), WCSP (White-crowned Sparrow), WIPT (Willow Ptarmigan)

Figure 5.1: Bird Species Observed on PRISM Plots at the Meadowbank, Whale Tail, and Control Locations between 2003 and 2025.

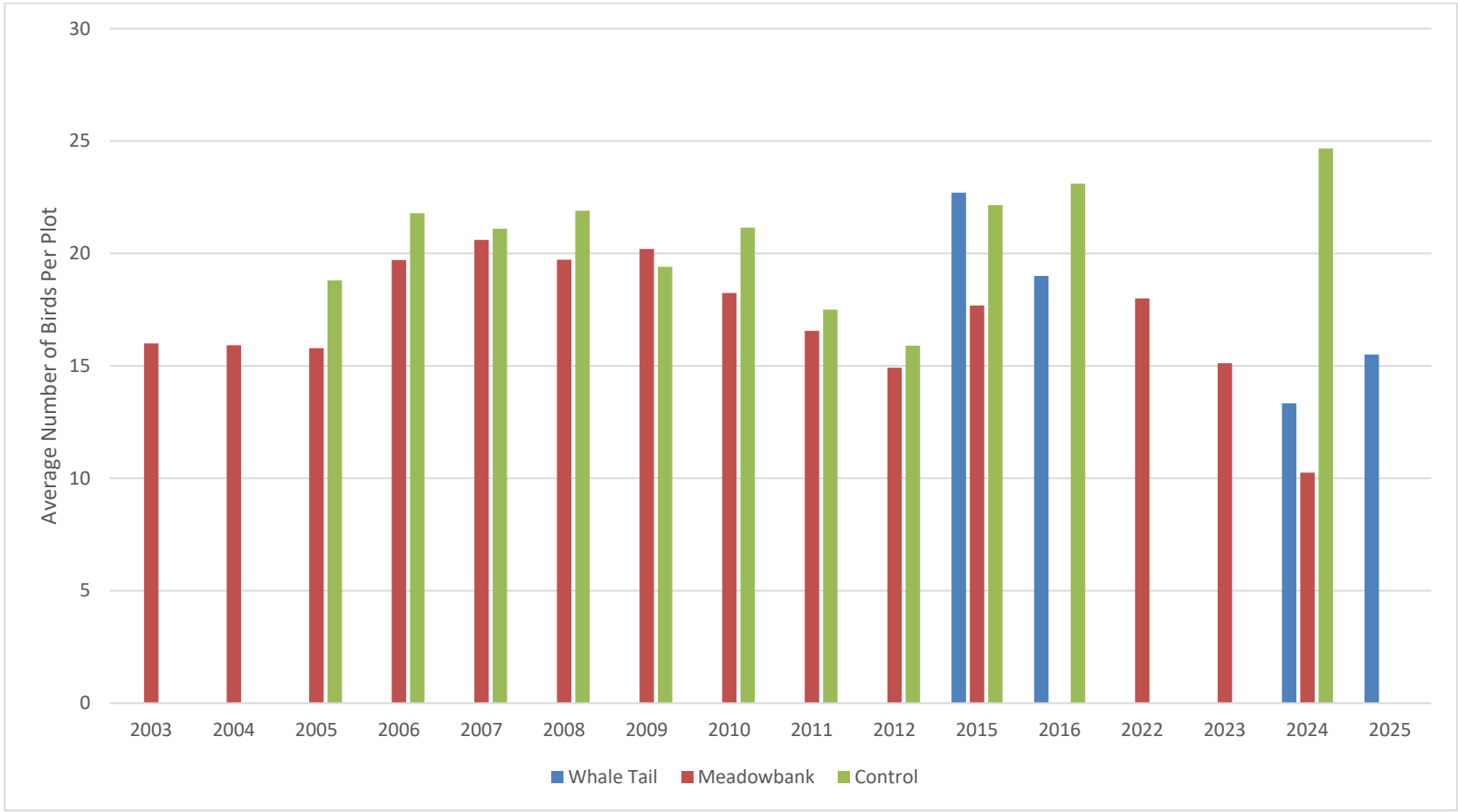


Figure 5.2: Average Number of Bird Species seen on PRISM Plots at the Meadowbank, Whale Tail, and Control Sites between 2003 and 2025.

SECTION 6 • RECOMMENDATIONS

Agnico Eagle Meadowbank Complex has completed its commitment to ECCC of conducting 48 PRISM plots selected by Canadian Wildlife Service over a 10-year period during operation of the mine. As per the ECCC Agreement, Agnico Eagle will conduct the BBS routes surveys along the AWAR and the WTHR opportunistically when qualified individuals are on site. At a minimum, BBS routes will be conducted every three (3) years during the operations, closure, and post-closure phases of the Project. The next BBS survey is expected to be conducted in 2028.

SECTION 7 • LITERATURE CITED

Bart, J., Andres, B., Brown, S., Donaldson, G., Harrington, B., Johnston, V., Jones, S., Morrison, G., and Skagen, S. 2005. The Program for Regional and International Shorebird Monitoring (PRISM). USDA Forest Service General Technical Report, PSW-GTR-191, 893-901.

Rausch, J., and Clyde, N. 2022. The Arctic PRISM Survey Details – For Agnico Eagle Crews to Meadowbank/Amaruq (part of Arctic PRISM Region 6.2).

APPENDIX I

2025 PRISM BIRD NEST SUMMARY

NEST INFORMATION – All Species **Site** Amaruq **Year** 2025

Plot Association	Nest ID	Date *dd/mm/yyyy*	Time *24hr format*	UTM Coordinates NAD83	Observer(s) *3-letter Initials*	Species *4-letter code*	# of Egg	# of Chick	Flush distance *(m)*	Nest Concealm't *% cover to nearest 5%*
plot ID AMA-021 ☐ no plot Location X inside ☐outside	AMA-021_LALO_Region6.2_2025_DylanWhite	18/06/2025	11:43	Zone 14W 6 0 5 7 7 9 E 7 2 5 2 2 1 5 N	LQ, DW	LALO	5		ND	Or: ☐ nest not disturbed ☐ flush not seen 50
Camera ID / See Nest ID: See Nest ID – Photos 1 to 6	Photo # (to track photos until they can be relabeled post-season)				Comments					
plot ID AMA-022 ☐ no plot Location X inside ☐outside	AMA-022_LALO_Region6.2_2025_DylanWhite	18/06/2025	13:04	Zone 14W 6 0 6 4 1 8 E 7 2 5 2 6 4 5 N	LQ, DW	LALO	5		ND	Or: ☐ nest not disturbed ☐ flush not seen 10
Camera ID / See Nest ID: See Nest ID – Photos 1 to 5	Photo # (to track photos until they can be relabeled post-season)				Comments					
plot ID AMA-026 ☐ no plot Location X inside ☐outside	AMA-026_LALO_Region6.2_2025_DylanWhite	17/06/2025	11:56	Zone 14W 6 0 8 9 8 9 E 7 2 5 2 3 0 2 N	LQ, DW	LALO	5		ND	Or: ☐ nest not disturbed ☐ flush not seen 10
Camera ID / See Nest ID: See Nest ID – Photos 1 to 2	Photo # (to track photos until they can be relabeled post-season)				Comments					
AMAAMplot ID AMA-026 ☐ no plot Location ☐inside X outside	AMA-026_AMGP_Region6.2_2025_DylanWhite	17/06/2025	12:35	Zone 14W 6 0 8 7 9 0 E 7 2 5 2 2 9 0 N	LQ, DW	AMGP	4		ND	Or: ☐ nest not disturbed ☐ flush not seen 0
Camera ID / See Nest ID: See Nest ID – Photos 1 to 6	Photo # (to track photos until they can be relabeled post-season)				Comments					
plot ID AMA-032 ☐ no plot Location X inside ☐outside	AMA-032_AMPI_Region6.2_2025_DylanWhite	20/06/2025	13:30	Zone 14W 6 0 4 1 0 6 E 7 2 5 5 6 8 1 N	LQ, DW	AMPI	5		ND	Or: ☐ nest not disturbed ☐ flush not seen 50
Camera ID / See Nest ID: See Nest ID – Photos 1 to 4	Photo # (to track photos until they can be relabeled post-season)				Comments					
plot ID AMA-038 ☐ no plot Location ☐inside X outside	AMA-038_LALO_Region6.2_2025_DylanWhite	20/06/2025	15:00	Zone 14W 6 0 5 5 7 2 E 7 2 5 7 5 2 5 N	LQ, DW	LALO	4		ND	Or: ☐ nest not disturbed ☐ flush not seen 25
Camera ID / See Nest ID: See Nest ID – Photos 1 to 3	Photo # (to track photos until they can be relabeled post-season)				Comments					
plot ID AMA-040 ☐ no plot Location X inside ☐outside	AMA-040_LALO Nest 1_Region6.2_2025_DylanWhite	21/06/2025	10:45	Zone 14W 6 0 5 6 2 5 E 7 2 5 8 6 4 5 N	LQ, DW	LALO	2	2	ND	Or: ☐ nest not disturbed ☐ flush not seen 10
Camera ID / See Nest ID: See Nest ID – Photos 1 to 4	Photo # (to track photos until they can be relabeled post-season)				Comments					

NEST INFORMATION – All Species **Site** Amaruq **Year** 2025

Plot Association		Nest ID	Date *dd/mm/yyyy*	Time *24hr format*	UTM Coordinates NAD83	Observer(s) *3-letter Initials*	Species *4-letter code*	# of Egg	# of Chick	Flush distance *(m)*		Nest Concealm't *% cover to nearest 5%*
plot ID: AMA-040 Location: X inside ☐outside	☐ no plot	AMA-040_REDP_Region6.2_2025_DylanWhite	21/06/2025	11:00	Zone 14W: 6 0 5 7 0 0 E 7 2 5 8 3 4 3 N	LQ, DW	REDP	5		ND	Or: ☐ nest not disturbed ☐ flush not seen	10
Camera ID: See Nest ID	Photo # (to track photos until they can be relabeled post-season): See Nest ID – Photos 1 to 5										Comments:	
plot ID: AMA-040 Location: ☐ inside X outside	☐ no plot	AMA-040_LALO Nest 2_Region6.2_2025_DylanWhite	21/06/2025	11:35	Zone 14W: 6 0 5 6 7 1 E 7 2 5 8 2 7 5 N	LQ, DW	LALO	4		ND	Or: ☐ nest not disturbed ☐ flush not seen	50
Camera ID: See Nest ID	Photo # (to track photos until they can be relabeled post-season): See Nest ID – Photos 1 to 4										Comments:	

APPENDIX I

Snow Study Final Report

TECHNICAL MEMORANDUM

DATE 22 January 2026 **Reference No.** CA0055337.7557_4006_Snow_Study_Rev0

TO Eric Haley
Agnico Eagle Mines Limited

CC Robin Allard

FROM Jennifer Foca, Josh Pigeon, Dan Coulton **EMAIL jennifer.foca@wsp.com**

SNOW STUDY FINAL REPORT

1.0 INTRODUCTION

During the environmental review of the Whale Tail Expansion Project, the Government of Nunavut expressed concern that snow management activities on the Whale Tail Haul Road may result in conditions that may make passage by caribou difficult and more energetically expensive. To address this concern Agnico Eagle made Commitment 9 at the Technical Meeting held in Baker Lake June 11-13, 2019, which included completing a three-year snow monitoring program as part of the Terrestrial Ecosystem Management Plan (TEMP) that measures snow conditions related to removal of snow from the Whale Tail Haul Road. The approach to monitoring snow conditions as caribou migrate through the Haul Road area are described below. The goal of the snow monitoring was to determine whether changes to snow resulting from snow removal along the Haul Road result in conditions that potentially inhibit caribou movements. Following the circulation of version 1 of the study design to members of the Terrestrial Advisory Group (TAG) on October 02, 2019, the Kivalliq Inuit Association (KivIA) recommended monitoring of areas of caribou use and non-use along the Haul Road (KivIA 2019). Agnico Eagle modified the study design to follow the KivIA's recommendation. The variables measured include the height, width and slope of snowbanks, snow depth of deposited snow, snow hardness, and the depth of fresh tracks.

Collared caribou from the Lorillard herd have historically interacted with the All-Weather Access Road (AWAR) and Whale Tail Haul Road (WTHR) during their spring and fall migrations. The following sections focus exclusively on characterizing snow conditions and caribou interaction along the WTHR during spring migration (see Section 3.6 for information on caribou interaction with the AWAR).

The direction of travel for caribou crossing the WTHR has always been from the west to the east in the spring. Snow is removed periodically from the WTHR (and AWAR) to promote safe driving conditions for the transport of Meadowbank Mine staff and supplies, and mined ore between Whale Tail and the Meadowbank Mine sites. Snow is removed or redistributed from the road surface to areas adjacent to the roads. The snow is redistributed in a way to minimize the size of any snow berms formed on the side of the roads (i.e., snow is pushed to the eastern, downwind side of the road). Doing so also reduces the amount of snow management activity required due to snow drifting back onto the WTHR.

Per Whale Tail Expansion Project Commitment 9, Agnico Eagle committed to complete a multi-year snow monitoring program. Snow hardness and sinking depth are important for caribou energy expenditure of locomotion, where the combination of softer and deeper snow may inhibit caribou movements (Fancy and White 1987). The two key questions to be answered by the snow study monitoring were:

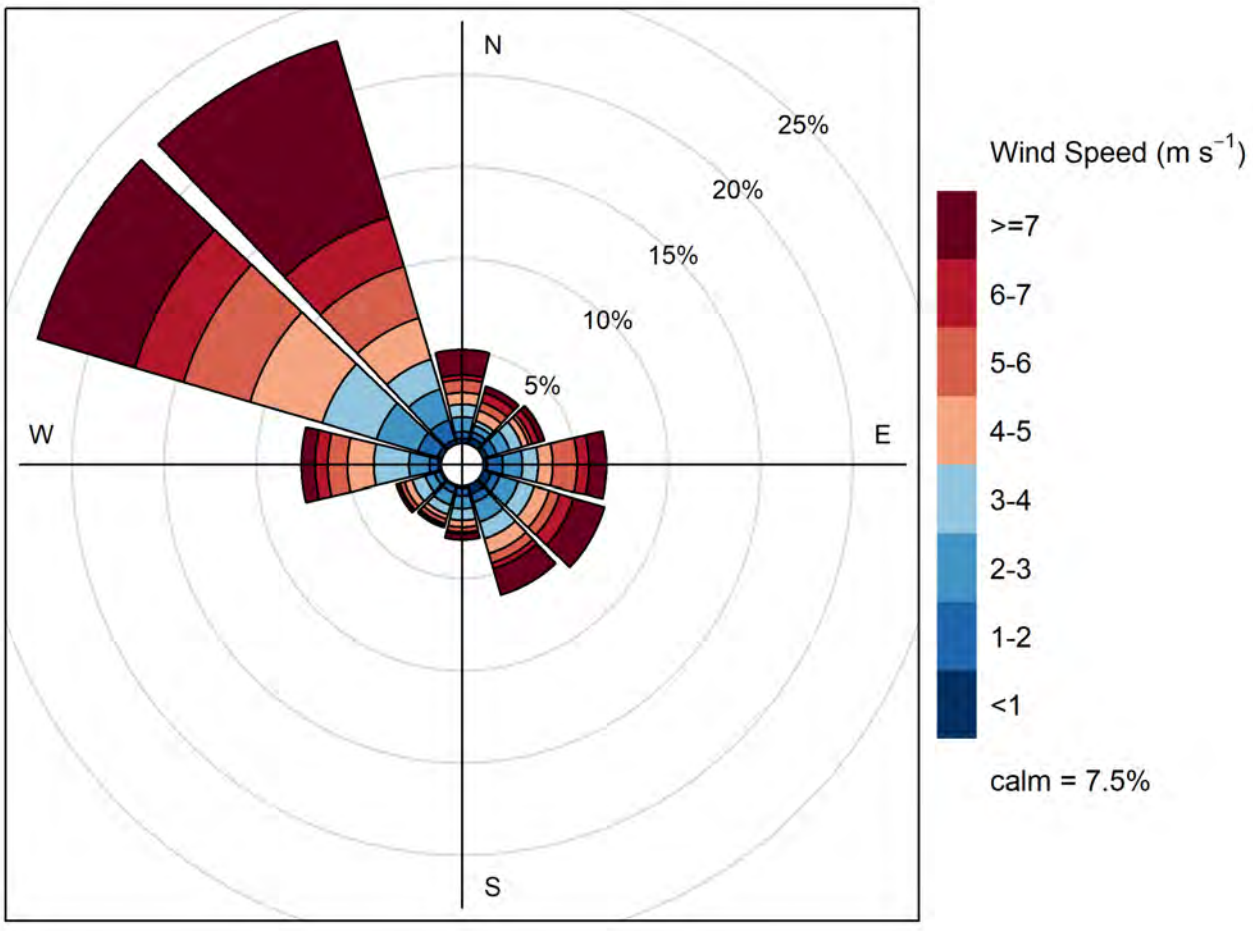
1) How do snow conditions within the managed snow area where caribou are crossing the WTHR differ from the snow conditions in adjacent portions of the berm where crossing did not occur?

2) How do snow conditions and caribou track characteristics differ between areas within the snow berm and areas beyond the berm where snow conditions have not been altered by snow removal activity?

Variation in snow conditions on either side of the haul road was also considered.

Over the course of winter, snow will drift naturally and become hardened as the result of wind, temperature and weight of additional snowfall. Wind monitoring data from Meadowbank Mine indicates that the predominant long-term winter and spring (December 15 to May 10) wind direction is from the northwest (Figure 1). As average temperatures rise above 0°C, snowmelt will occur and reduce the weight-bearing potential of snow cover. As a result of prolonged exposure to the dominant wind direction, it is anticipated that snow along the upwind side of the Haul Road will be harder than the downwind side. If snow conditions are softer and deeper on the eastern, downwind side of the road, caribou may expend more energy travelling through these areas compared to the upwind side of the road.

Originally, an annual sample goal of 36 survey locations was proposed over three years. Since 2020, a number of challenges have limited the program from achieving this goal including locating fresh caribou tracks. In 2022, a power analysis was completed based on monitoring results from 2020 to 2022 (n = 36 locations) (WSP 2023). The power analysis assumptions included power of 0.80, and a type I error rate of 0.10. The analysis considered effect sizes of 0.10, 0.25 and 0.50 to detect differences in snow hardness between use plots and snow-managed control plots and use plots versus non-managed control plots using mixed-model linear regressions. The results of the power analysis indicated that greater than 320 locations, 65 locations and 20 locations would be required to detect differences of 0.10, 0.25 and 0.50, respectively. The results were already adequate to detect a difference of 0.50, which was not evident from the patterns in the data. The target sample size of 65 locations was applied to the study to detect an effect size of 0.25 (Cohen 1988; Sawilowski 2009).



Note: Each spoke represents the direction wind is coming from, and the length of each spoke indicates the relative frequency.

Figure 1: Wind Rose of Predominant Winter and Spring Wind Direction and Speed at Meadowbank Mine, 2013 - 2025

2.0 METHODS

To capture changes in snow conditions as caribou migrate across the Haul Road, snow monitoring surveys were completed during caribou spring migration. The monitoring generally occurred between April 1 and May 18, during the time when caribou are expected to be in the area based on historical observations. Survey locations were chosen opportunistically based on the availability of fresh caribou tracks crossing the road, and while the majority of plots sampled were located along the WTHR, sampling locations along the AWAR were included opportunistically to achieve sampling goals. Snow management practices are consistent between the WTHR and AWAR, and any patterns identified for potential effects of snow characteristics on caribou crossing are not expected to differ between the two roads. Surveyors established six plots (approximately 1.5 m x 1.5 m) at each survey location and collected data on the snow depth, snow hardness, caribou track depth, as well as the height, width, and slope of the snow-managed berm that occurred adjacent to the haul road (Figure 2) (Golder 2020). Snow and caribou track depth were measured using a metre stick while snow hardness was measured in units of Newtons (N) using a mechanical dynamometer (i.e., push-pull gauge; Lundmark and Ball 2008).Three replicates were collected for snow depth, and five replicates were collected for both snow hardness and track depth per plot. Berm height, width, and slope were only measured once per plot.

Of the six plots, three plots were established on the upwind side of the haul road (i.e., the side of the road that the prevailing westerly wind blows from) and three plots were established on the downwind side of the haul road (i.e., the east side of the road). The three survey plots on each side of the road included a “use” plot, a “snow-management control” plot and a “non-managed control” plot (Figure 2). The use plot occurred within the snow-managed berm in an area where caribou had left tracks while crossing the haul road. The snow-managed control plot occurred approximately 5 m from the use plot, within the snow-managed berm but in a portion of it that did not contain caribou tracks. Monitoring at caribou use areas and the finer spatial scale of the snow-managed control and use plots was a recommendation by the TAG (KivIA 2019). The non-managed control plot occurred beyond the snow-managed berm and in an area where caribou tracks were present (Figure 2).

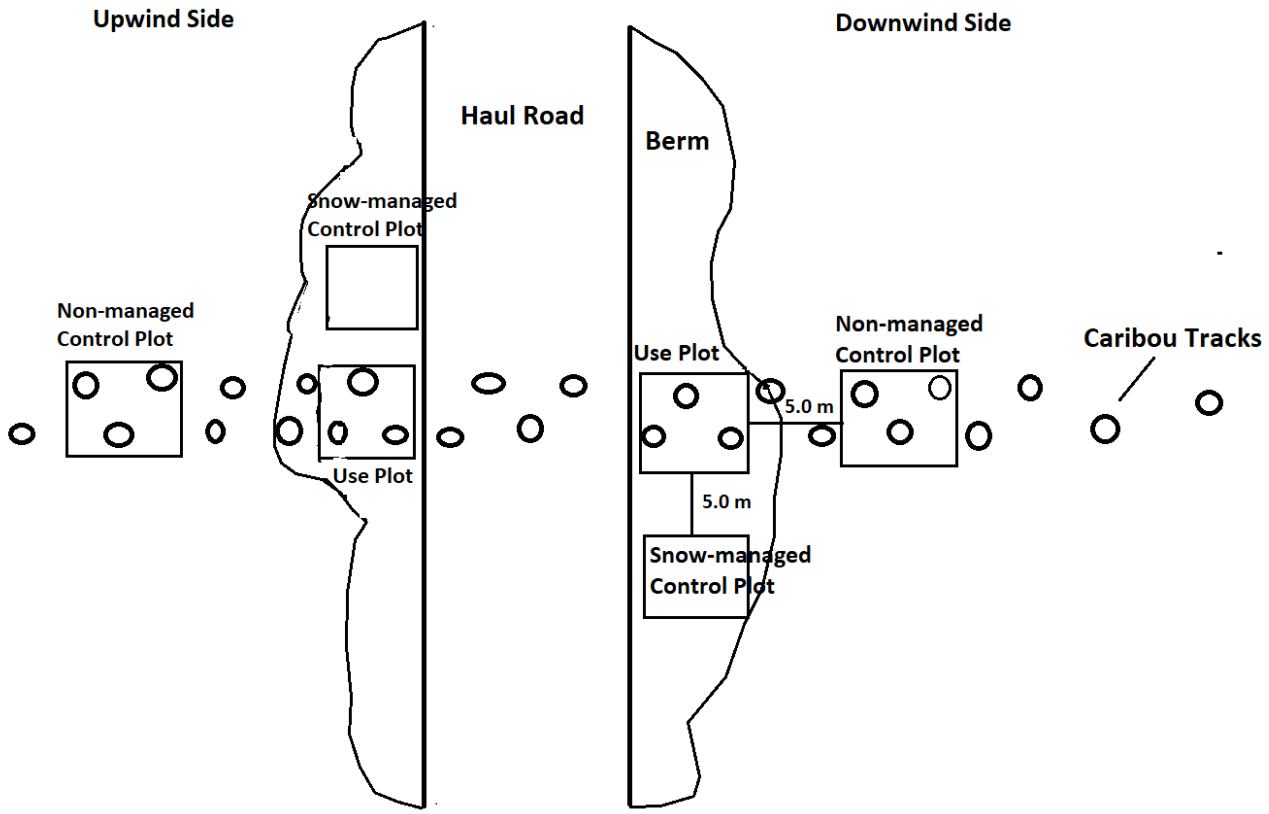


Figure 2: Survey Plot Configuration Used During Snow Survey Monitoring Along the All-Weather Access Road and Whale Tail Haul Road

Using data from all years, averages and 95% confidence intervals were calculated for each snow metric and plot type. In the results, intervals shown in brackets are 95% confidence intervals unless stated otherwise. T-tests were used to evaluate the differences in snow metrics on the upwind vs downwind side of the haul road. Analysis of variance tests (ANOVA) were used to evaluate differences in snow depth and snow hardness among plot type (Use plot, snow-managed control plot, and non-managed control plot). Statistical significance was tested at a Type I error rate of 0.05. When significant differences were detected based on the ANOVA, a post-hoc Tukey's test was applied to determine, which plot types were significantly from each other. A paired t-test was used to evaluate differences in track depth between use plots and non-managed control plots. Finally, generalized linear mixed models (GLMM) were used to explore the relationship between plot type and snow depth, snow hardness, and track depth. The GLMM will indicate the strength (i.e., how related are plot type and the snow metrics?) and direction (i.e., does the snow metric increase or decrease at use plots relative to control plots) of relationships tested and allows for the inclusion of other variables that may be impacting the relationship (i.e., berm width, height, and slope).

To address the key questions, GLMMs were used to test for snow metric variation among the plot types that pertained to one key question at a time. To address the first question, variation between use plots and snow-managed control plots was tested. The second key question was addressed separately by testing variation between use plots and non-managed plots. The GLMMs included plot type as a variable and were tested against a null model (i.e., no explanatory variables) using corrected Akaike Information Criterion (AICc), which determines the model that best explains the variation (i.e., the null model or the model that includes plot type as a variable) relative to other candidate models considered (Burnham and Anderson 2002). The model with the lowest AICc score indicates the best fit with the data relative to other candidate models. If the model with the lowest AICc score is 2 below the other model score(s), it is considered a significantly better fitting model (Richards 2005).

During the September 2025 TAG workshop, additional questions were posed regarding weather patterns across study years (2020-2025) compared to a broader timescale (Agnico Eagle 2025). As a result, weather data from 2013 – 2025 were analysed to explore two main questions:

1) Do the weather patterns observed during the study period reflect general weather patterns in the area?

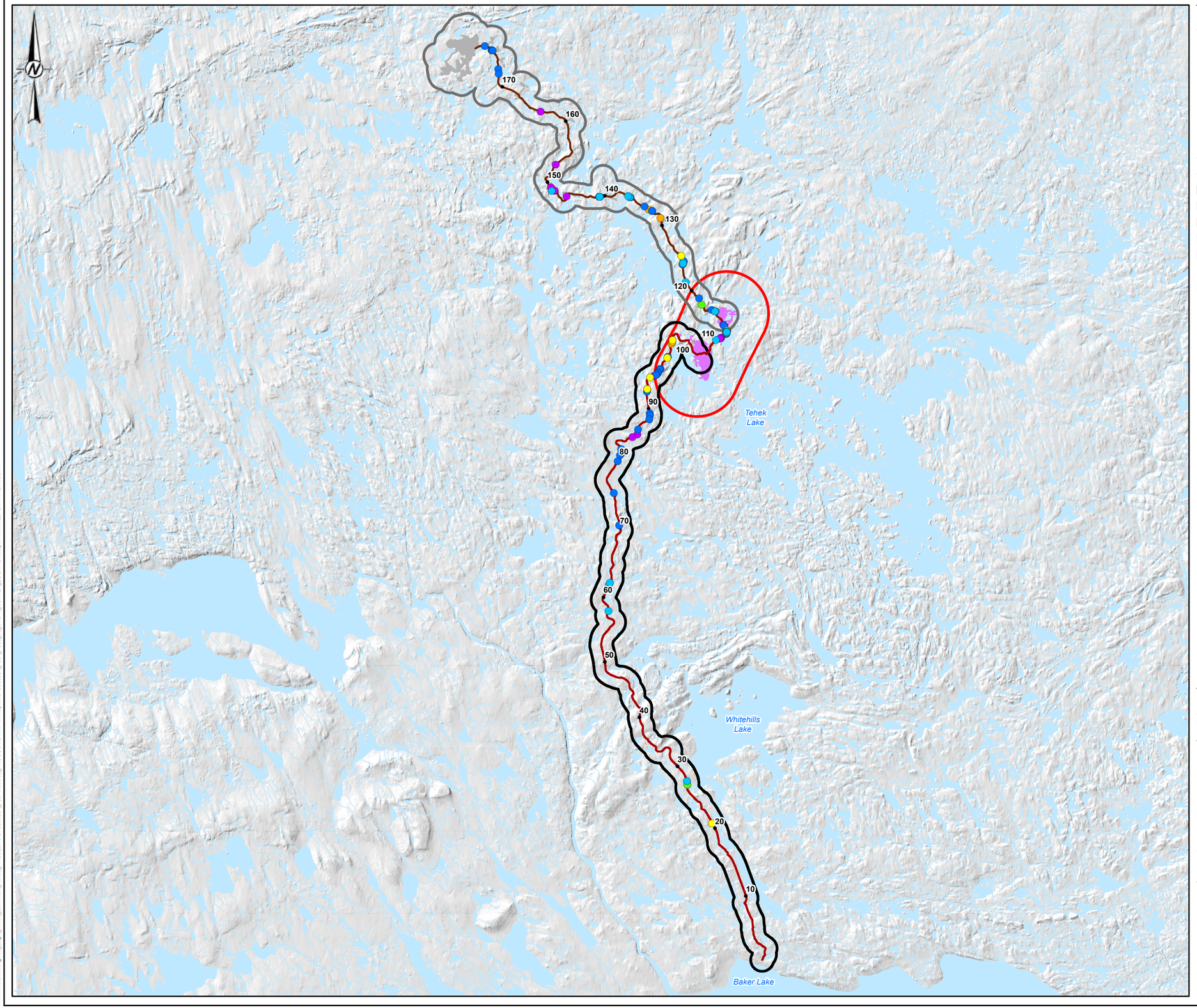
2) Is there evidence of climate change affecting the local weather trends observed during the study period?

Temperature data collected from the Meadowbank airport weather station from 2013 – 2025 were examined to address these questions. Average daily temperatures and temperature anomalies were assessed during the migration season for each year with available data. Temperature anomalies are calculated by subtracting the average temperature for the entire data set from the annual values. Anomalies are valuable visual representations of weather/climate data variation because they emphasize deviations from a baseline value, which highlight potential shifting trends.

To assess snow conditions during spring migration, precipitation data collected from 2014 – 2025 were examined. A “snow season” was identified to consider snow accumulation during the fall and winter prior to spring migration, as well as snow accumulation during migration. November 1 was selected as the start of the snow season because temperatures generally remained below freezing starting at this date. Temperatures generally remain below 0˚C during the snow season, so the sum of the precipitation during the snow season can be used as a proxy for snow accumulation. This assumption does not consider snow movement by wind because the weather data collected are not robust enough to track changes to snow depth from wind effects. The end of spring migration season, May 25, was used as the end date for the snow season. Total precipitation and precipitation anomalies were assessed during the snow season for each year with available data. Total precipitation anomalies are calculated by subtracting the average total winter season precipitation for the entire data set from the annual total precipitation values.

3.0 RESULTS

In total, 98 survey locations were sampled along the AWAR and WTHR between 2020 and 2025, including five survey locations in May 2020, three locations in April 2021, twenty locations in April and May of 2022, thirty-six locations in April of 2023, 9 locations in February, March and April of 2024, and 25 locations in April and May of 2025 (Figure 3; Figure 4). Of these 98 locations, 70 include the full suite of snow data. The addition of the 25 locations surveyed in 2025 met and surpassed the target number of 65 surveys with the full suite of snow data, as determined from the 2022 power analysis. Of the 25 surveys completed during the spring migration of 2025, 21 were along the WTHR and 4 were along the AWAR. Environment technicians were patrolling on a regular basis, along the AWAR and the WTHR during the migration season (between 1 April and late May) for signs of caribou crossing tracks adequate for snow sampling measurements. Surveys during 2025 took place during four days, including three days in April and one day in May (Figure 4). Prior to 2023, a full suite of snow data were collected at use plots and snow-managed control plots but not at non-managed control plots, and caribou track data were collected at use plots but not non-managed control plots. Data sheet improvements implemented in 2023 allowed for additional data fields to be collected during 2023-2025. Locations surveyed in 2023 onward included the full suite of snow data for each applicable plot type and caribou track data were collected at both use plots and non-managed control plots. Some snow measurements collected prior to 2023 were excluded from 2024 snow summaries due to inconsistencies with reporting units or missing data fields. Although some locations do not contain the full suite of snow data, the analysis includes all the 98 survey locations where possible.



LEGEND

SNOW SURVEY LOCATION (SURVEY YEAR)

- 2020
- 2021
- 2022
- 2023
- 2024
- 2025
- KILOMETRE MARKER
- ALL-WEATHER ACCESS ROAD (AWAR)
- WHALE TAIL HAUL ROAD (WTHR)
- AWAR LOCAL STUDY AREA (LSA)
- WTHR LOCAL STUDY AREA (LSA)
- MEADOWBANK LOCAL STUDY AREA (LSA)
- WHALE TAIL MINE SITE
- MEADOWBANK MINE SITE
- WATERCOURSE
- WATERBODY

0 10 20
1:500,000 KILOMETRES

REFERENCE(S)

1. INFRASTRUCTURE OBTAINED FROM AGNICO EAGLE MINES LIMITED.
2. WATERCOURSE AND WATERBODY DATA OBTAINED FROM NATURAL RESOURCES CANADA.
COORDINATE SYSTEM: NAD 1983 CSRS UTM ZONE 14N

CLIENT

AGNICO EAGLE

AGNICO EAGLE MINES LIMITED:
MEADOWBANK DIVISION

PROJECT

MEADOWBANK COMPLEX
SNOW STUDY FINAL REPORT

TITLE

SNOW SURVEY LOCATIONS ALONG THE ALL-WEATHER ACCESS ROAD AND WHALE TAIL HAUL ROAD (2020-2025)

CONSULTANT

wsp

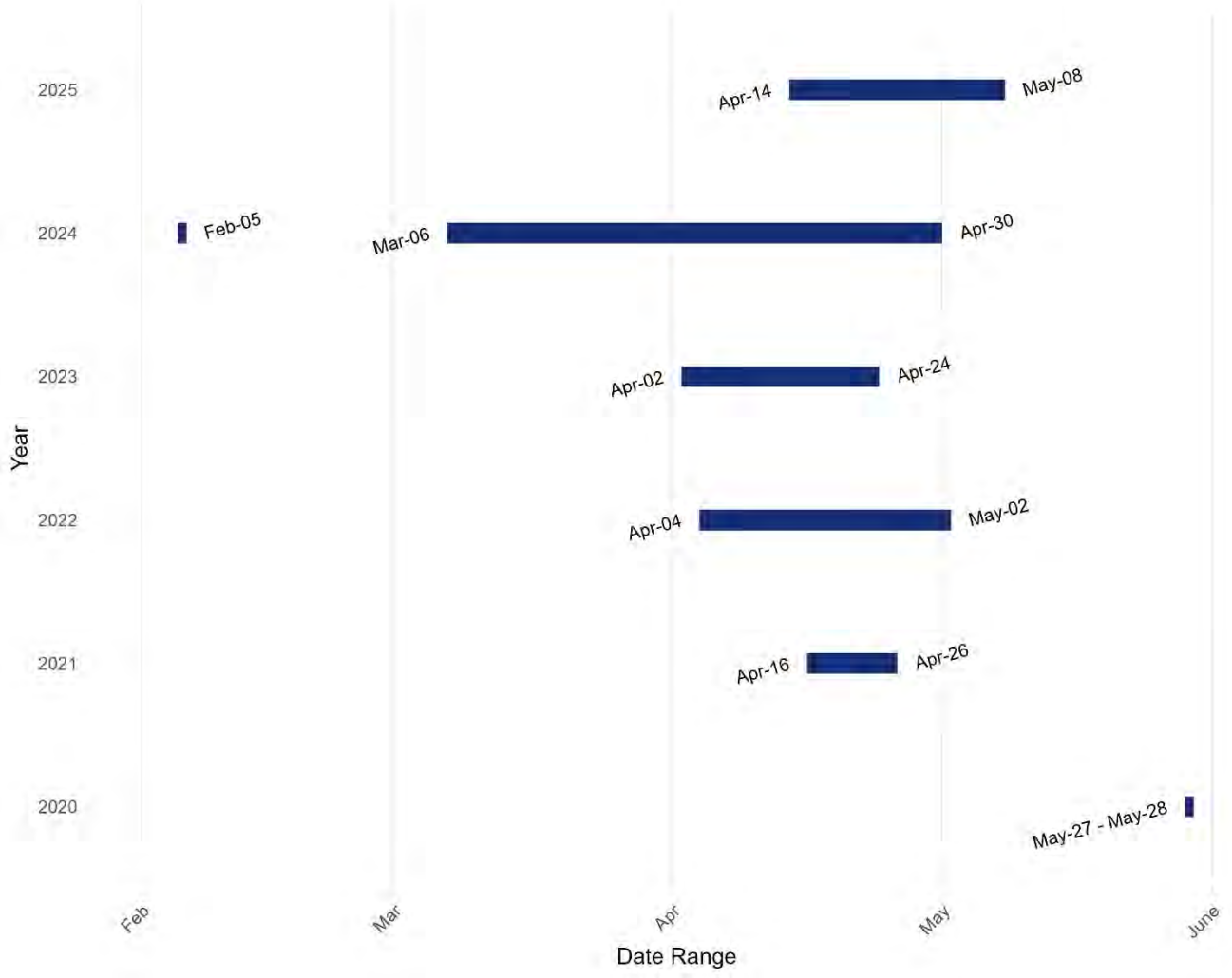
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DESIGNED	JP
PREPARED	CDB
REVIEWED	JF
APPROVED	DC

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Note: Dates selected for sampling were dependent on the timing of migrating caribou presence as well as weather conditions.

Figure 4: Snow Study Maximum and Minimum Dates of Sampling Effort by Year

3.1 Upwind and Downwind Comparison

Table 1 provides a summary of snow metrics recorded at upwind and downwind use plots, snow-managed control plots, and non-managed control plots during 2020, 2021, 2022, 2023, 2024, and 2025 survey periods. Considering all plot types sampled, average berm width was greater on the downwind (east) side of the haul road than on the upwind (west) side (paired t-test, t = -3.81, df = 87, p < 0.01), and berm height was not significantly higher on the downwind side of the road (paired t-test, t = -1.99, df = 87, p = 0.05) (Figure 5). While berm height was higher on the downwind side of the road, average berm height was less than 0.22 m on both sides of the road (downwind berm height, 0.21 [95% CI: 0.14, 0.28]; upwind berm height, 0.10 m [0.06, 0.14]). Berm width was almost 4-times greater on the downwind (4.59 m [3.34, 5.84]) than the upwind side (1.16 m [0.77, 1.55]). Differences in berm height and width can be explained by the snow management procedures. By pushing the snow to the downwind side of the road to reduce the need for further snow management due to snow drift, the berm is expected to be wider on the downwind side of the road. Slope values on the upwind and downwind sides of the road were not significantly different (paired t-test, t = -0.54, df = 84, p = 0. 59) (Table 1; Figure 5). Slope values varied from 0˚to 45˚, but 90% of values are between 0˚to 17˚ (upwind 7˚ [6, 8] and downwind 8˚ [7, 9]).

Mean snow depth across all plot types was not significantly different (paired t-test, t = -0.04, df = 88, p = 0.97) when comparing upwind (0.56 m [0.51, 0.61]) to downwind (0.57 m [0.52, 0.62]) sides of the haul road (Table 1; Figure 5). Snow hardness was similar (paired t-test, t = 0.16, df = 88, p = 0.87) between plots on the upwind side (14.3 N [13.3, 15.3]) and the downwind side (14.7 N [13.6, 15.8]) of the haul road (Table 1; Figure 5). Caribou track depth measurements were only collected in use plots during 2020, 2021, and 2022, and in both use and non-managed control plots in 2023, 2024, and 2025. Mean track depth across plot types was not significantly different (paired t-test, t = -1.49, df = 88, p = 0.14) on the upwind side (4.02 cm [3.42, 4.62]) compared to the downwind side of the haul road (4.31 m [3.66, 4.96]) (Table 1; Figure 5).

Table 1: Summary of Snow Metrics Collected at Survey Plots on the Upwind and Downwind Side of the Whale Tail Haul Road, 2020-2025.

Snow Metric	Plot Type	Upwind	Downwind
Snow Berm Height (m) (Average [95% CI])	Use Plot	0.10 [0.04, 0.16]	0.22 [0.11-0.33]
	Snow-management Control	0.10 [0.04, 0.16]	0.20 [0.10-0.30]
	Non-managed Control	NA	NA
Average Snow Berm Height - All Plots		**0.10 [0.06, 0.14]**	**0.21 [0.14, 0.28]**
Snow Berm Width (m) (Average [95% CI])	Use Plot	1.17 [0.61, 1.73]	4.71 [2.88, 6.54]
	Snow-management Control	1.16 [0.6, 1.72]	4.47 [2.76, 6.18]
	Non-managed Control	NA	NA
Average Snow Berm Width – All Plots		**1.16 [0.77, 1.55]**	**4.59 [3.34, 5.84]**
Slope (°) (Average [95% CI])	Use Plot	7.53 [5.76, 9.30]	8.52 [6.55, 10.49]
	Snow-management Control	7.42 [5.7, 9.14]	8.56 [6.62, 10.50]
	Non-managed Control	6.15 [4.31, 7.99]	7.14 [4.95, 9.33]
Average Slope - All Plots		**7.10 [6.07, 8.13]**	**8.14 [6.97, 9.31]**
Snow Depth (m) (Average [95% CI])	Use Plot	0.53 [0.44, 0.62]	0.50 [0.41, 0.59]
	Snow-management Control	0.52 [0.43, 0.61]	0.52 [0.43, 0.61]
	Non-managed Control	0.67 [0.57, 0.77]	0.73 [0.64, 0.82]
Average Snow Depth - All Plots		**0.56 [0.51, 0.61]**	**0.57 [0.52, 0.62]**
Snow Hardness (N) (Average [95% CI])	Use Plot	13.0 [11.0, 15.0]	15.0 [13.0, 17.0]
	Snow-management Control	16.0 [14.0, 18.0]	16.0 [14.0, 18.0]
	Non-managed Control	14.0 [12.0, 15.0]	14.0 [12.0, 15.0]
Average Snow Hardness - All Plots		**14.0 [13.0, 15.0]**	**15.0 [14.0, 16.0]**
Track Depth (cm) (Average [95% CI])	Use Plot	4.36 [3.53, 5.19]	4.76 [3.88, 5.64]
	Snow-management Control	NA	NA
	Non-managed Control	3.56 [2.71, 4.41]	3.72 [2.76, 4.68]
Average Track Depth - All Plots		**4.02 [3.42, 4.62]**	**4.31 [3.66, 4.96]**

Note: 95% CI = 95% confidence interval; m = metre; cm = centimetre; N = Newtons of force; NA = not applicable.

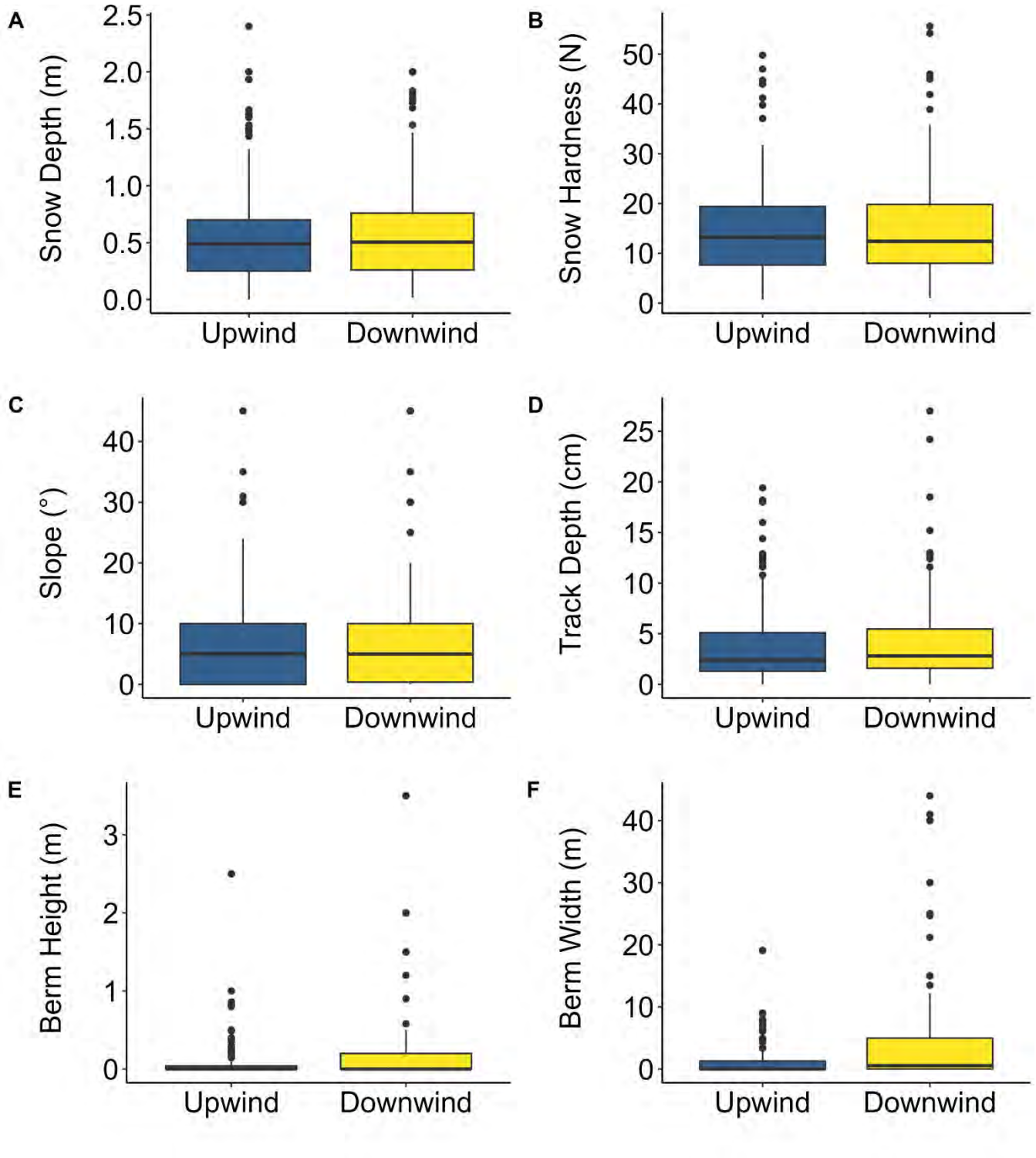


Figure 5: Snow Metric Comparisons for A) Snow Depth (m), B) Snow Hardness (N), C) Slope (°), D) Track Depth (cm), E) Berm Height (m), and F) Berm Width (m) at Snow Survey Plots on the Upwind and Downwind Side of the All-Weather Access Road and Whale Tail Haul Road, 2020-2025.

3.2 Among plot type comparison

Average snow depth was significantly different by plot type (ANOVA, F = 10.79, df = 2, p < 0.01) (Table 2). Specifically, average snow depth in use plots and snow-managed control plots (i.e., plots within the berm but not used by caribou) were similar (Tukey, p = 0.98), but snow depth was greater in non-managed control plots compared to both plot types in the berm area (Tukey, p < 0.01) (Figure 6). This could potentially be due to the difference in elevation on and off the berm so that when berm snow is redistributed the snow may be shallower on the raised road shoulder. Note that the comparison between berm plots (used plots and snow managed control plots) could only be compared with non-managed control plots using data collected in 2023-2025 data because snow depth was not collected in non-managed control plots prior to 2023.

Average snow hardness differed significantly between use plots, snow-managed control plots, and non-managed control plots (ANOVA, F = 3.52, df = 2, p = 0.03) (Table 2; Figure 7). Specifically, snow hardness was similar between use plots and both snow-managed (Tukey, p = 0.12) and non-managed control plots (Tukey, p = 0.92), and snow hardness was slightly different between snow-managed and non-managed control plots (Tukey, diff = 2.23, p = 0.04). Mean track depth was similar between use plots compared to non-managed control plots (paired t-test, t = 1.50, df = 69, p = 0.14) (Table 2; Figure 8).

Table 2: Summary of Statistical Tests on Snow Depth, Snow Hardness, and Track Depth Data Collected at Survey Plots along the All-Weather Access Road and Whale Tail Haul Road across 2020-2025.

Snow Metric	Plot Type	Sample size[(A)]	Test-stat	p-value
Snow Depth (m)	Use Plot	98	6.52[(a)]	<0.01
	Snow-management Control	98		
	Non-managed Control	70		
Snow Hardness (N)	Use Plot	98	3.21[(a)]	0.04
	Snow-management Control	98		
	Non-managed Control	98		
Track Depth (cm)	Use Plot	70	1.50[(b)]	0.13
	Non-managed Control	70		

Note: m = metre; cm = centimetre; N = Newtons of force

(a) = ANOVA test F-statistic;

(b) = paired t-test test t-statistic.

(A) Note: Sample sizes vary as not all snow metrics were collected at all plots during data collection from 2020-2021.

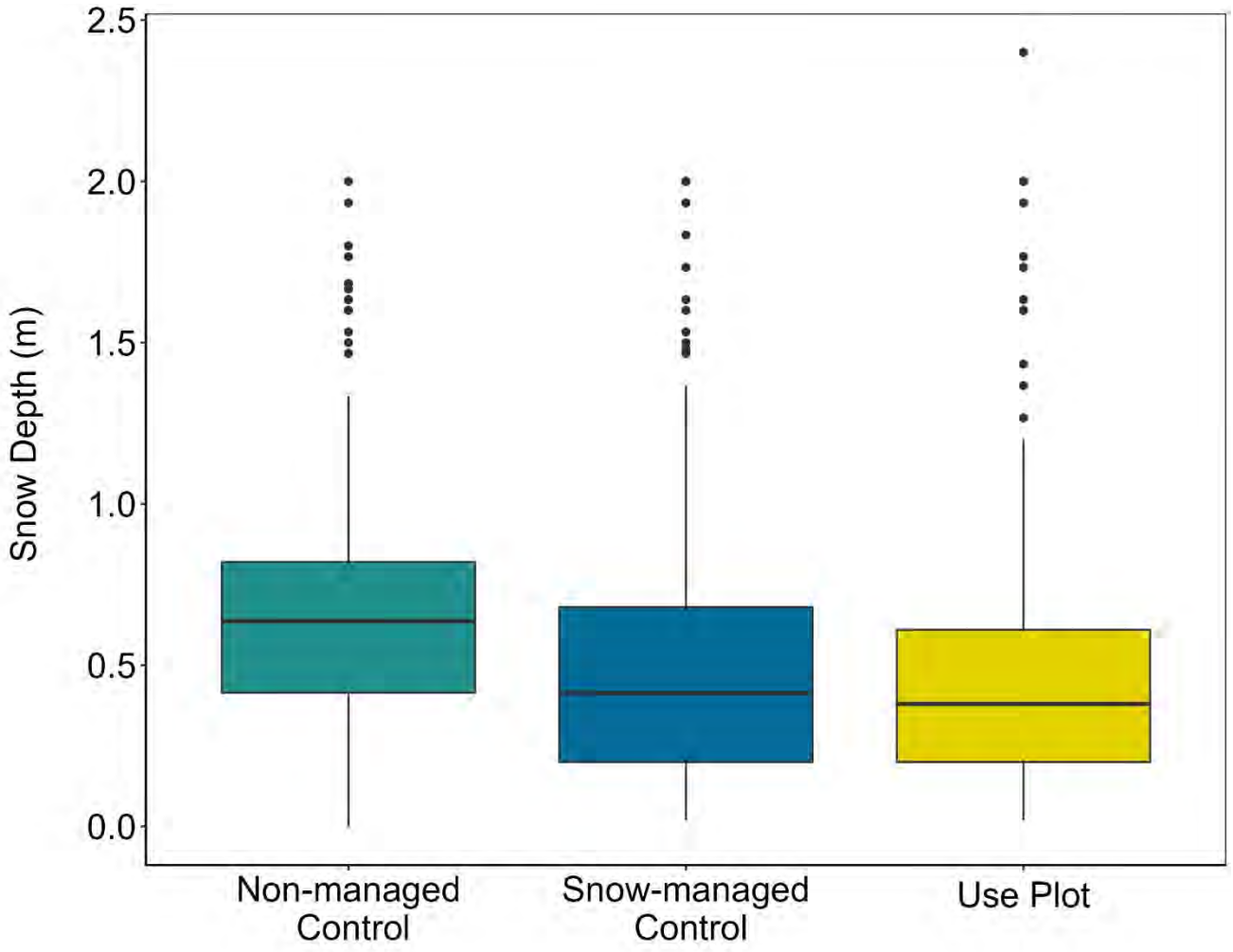


Figure 6: Snow Depth (m) by Plot Type, at Snow Survey Plots along the All-Weather Access Road and Whale Tail Haul Road.

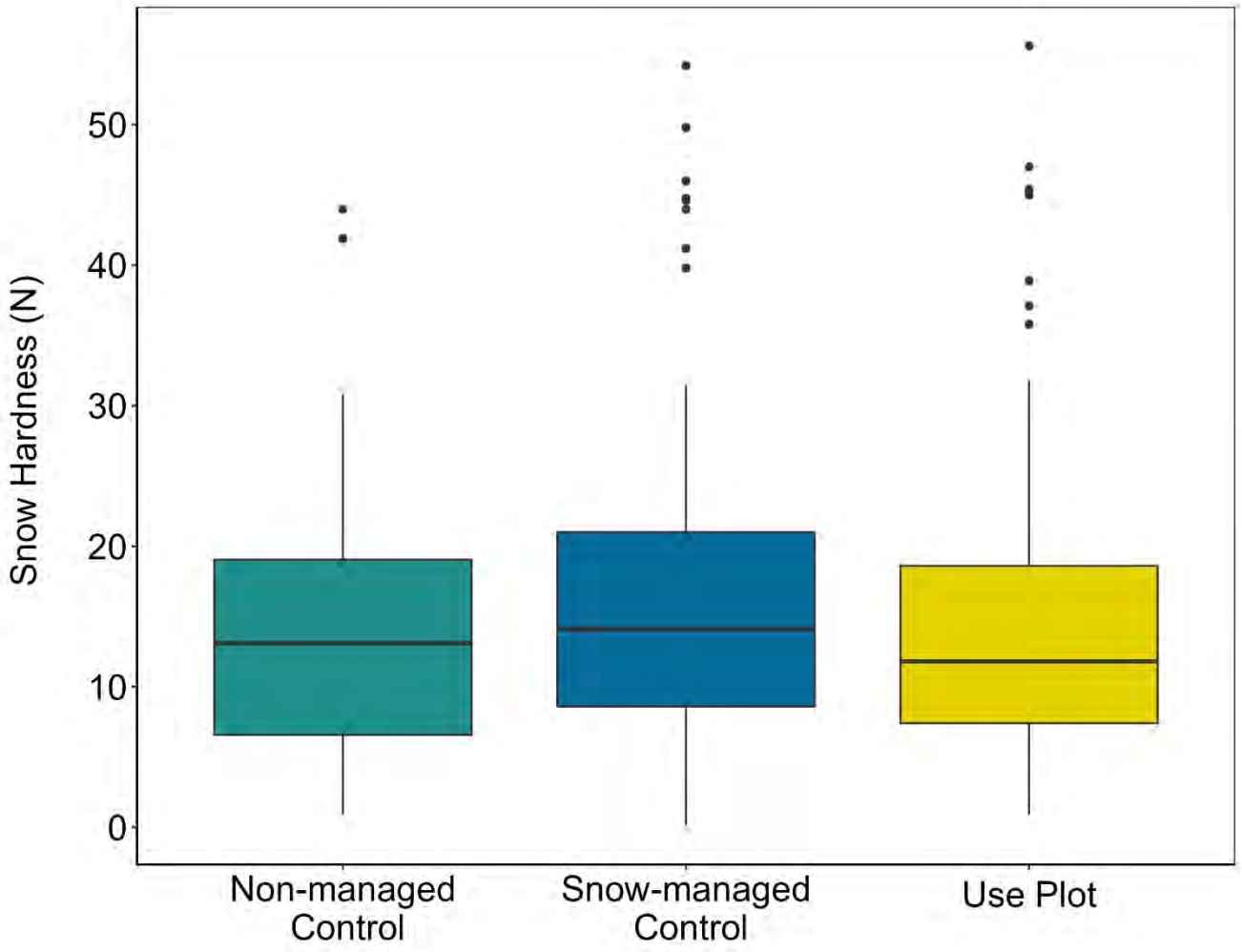


Figure 7: Snow Hardness (N) by Plot Type at Snow Survey Plots along the All-Weather Access Road and Whale Tail Haul Road.

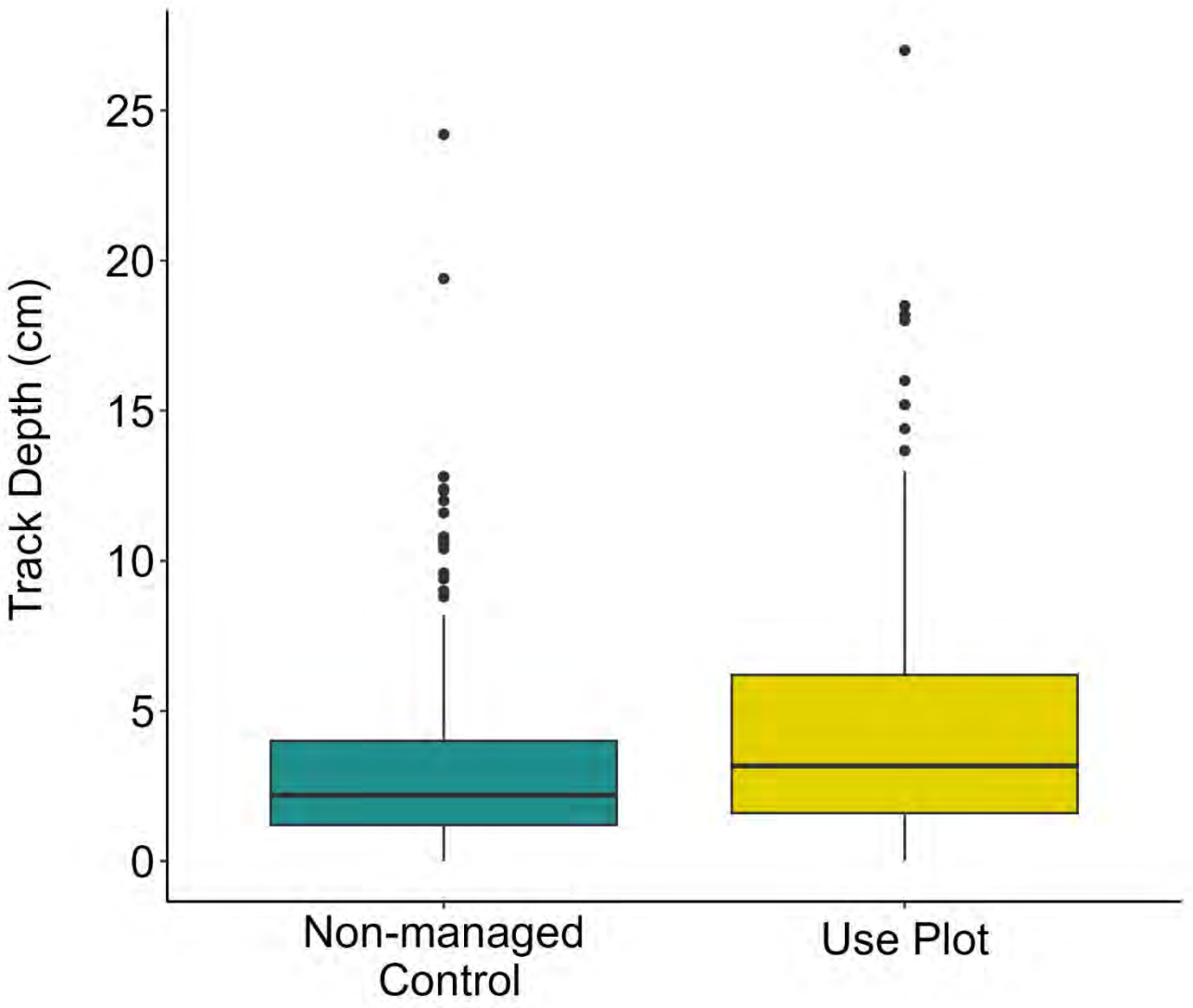


Figure 8: Caribou Track depth (cm) by Plot Type at Snow Survey Plots along the All-Weather Access Road and Whale Tail Haul Road.

3.3 Objective 1 & 2 Comparisons

A GLMM was used to explore the relationship between snow metrics of snow depth and snow hardness for berm use (i.e., use plots) and areas of the berm caribou did not use (i.e., snow-managed control plots). Initial models evaluated included berm width, height, and slope as potential explanatory variables. However, these variables did not differ significantly among plot types (Table 3; Figure 9) and were therefore excluded from the final models. Model comparisons focused on two competing models: a null model (i.e., no explanatory variables) and a test model including plot type as a variable.

Table 3: Summary of Statistical Tests on Berm Height, Berm Width, and Slope Data Collected at Survey Plots along the All-Weather Access Road and Whale Tail Haul Road across 2020-2025.

Snow Metric	Plot Type	Sample size(A)	Test-stat (a)	p-value
Berm Height (m)	Use Plot	98	0.13	0.88
	Snow-management Control	98		
Berm Width (m)	Use Plot	98	0.02	0.88
	Snow-management Control	98		
Slope (˚)	Use Plot	95	0.61	0.54
	Snow-management Control	95		
	Non-managed Control	70		

Note: m = metre; ˚ = degrees; N = Newtons of force;

(a) = ANOVA test F-statistic.

(A) Note: Sample sizes vary as not all snow metrics were collected at all plots during data collection from 2020-2021.

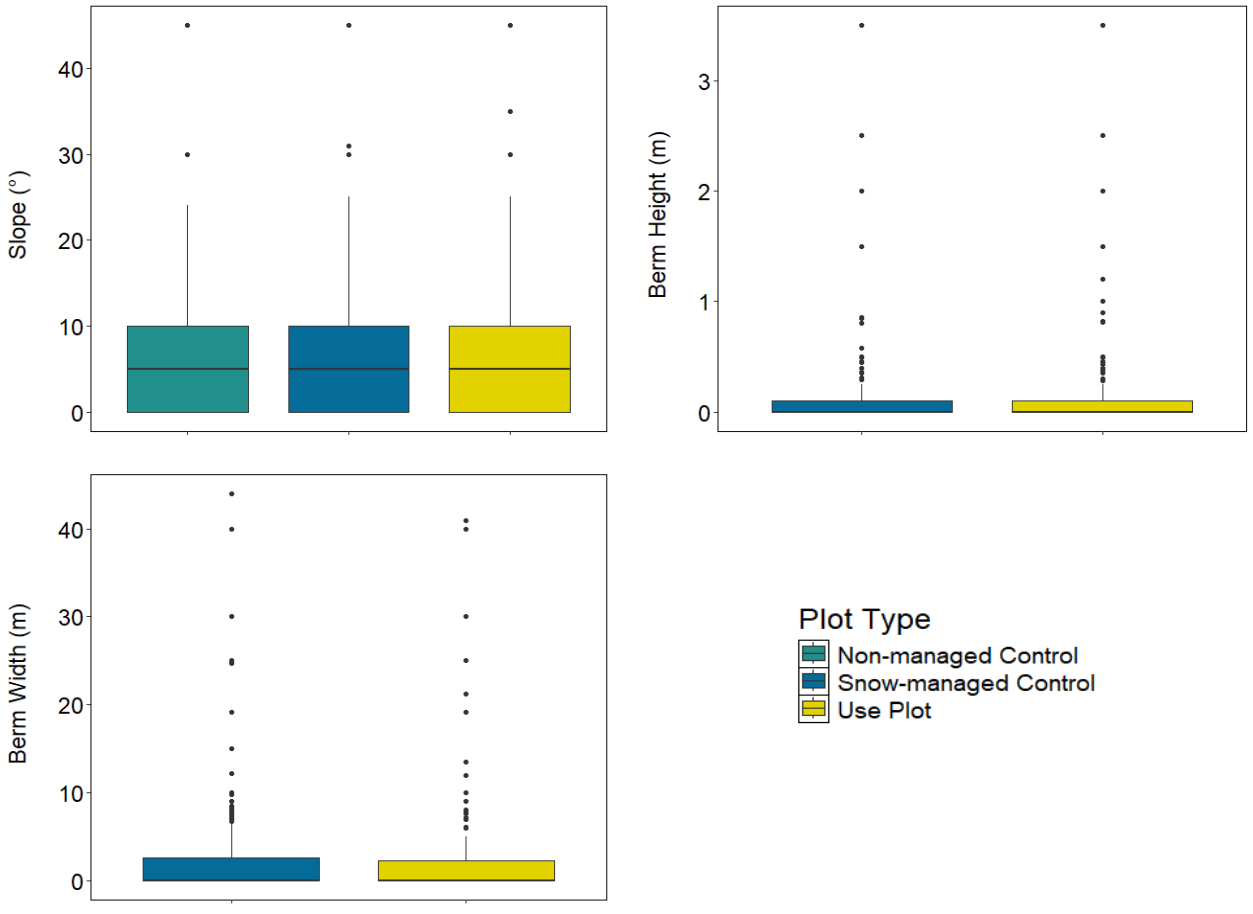


Figure 9: Slope, Berm Width, and Berm Height by Plot Type along the All-Weather Access Road and Whale Tail Haul Road.

3.3.1 Objective 1: Use Plot vs Snow-Managed Control Plot Comparison

The null model best explained variation in snow depth (Table 4), indicating that plot type (use plot and snow-managed control plot) was not a useful variable for explaining variation in snow depth. Although there is no support for the test model, the test model including beta coefficients and model predictions are presented.

The standardized beta coefficient for plot type was near zero, and the 95% confidence interval overlapped zero, further supporting the findings that no meaningful difference in snow depth was detected between use plots and snow-managed control plots (β = -0.03 [-0.12, 0.06]). Test models were used to calculate predicted snow depth values for use plots and snow-managed plots. Model predicted snow depth values were similar, indicating no significant effects among plot type (Figure 10).

Plot type accounted for some of the variation in snow hardness between use plots and snow-managed plots, with the test model being selected as the top model over the null model (Table 4). The snow was slightly softer at use plots compared to snow-managed plots, based on the small negative beta-coefficient (β = -0.16 [-0.27, -0.04]). Predicted snow hardness values from the test model differed, but 95% confidence intervals overlap, indicating any among plot effects are weak (Figure 10).

Table 4: Summary of Corrected Akaike Information Criteria Scores (AICc) from Generalized Linear Mixed Models Comparing Use Plots to Snow-Managed Plots, based on Data Collected at Survey Plots along the All-Weather Access Road and Whale Tail Haul Road across 2020-2025

Model	Model Structure	AICc	ΔAICc	Weight
Snow Depth				
Null	**y-intercept only**	**-19.26**	**0.00**	**0.69**
Test Model	Plot Type	-17.67	1.59	0.31
Snow Hardness				
Test Model	**Plot Type**	**2564.72**	**0.00**	**0.89**
Null	y-intercept only	2568.97	4.25	0.11

AICc = Corrected Akaike Information Criterion

The top model (shown in **bold)** was selected based on the lowest AICc and ΔAICc of at least two. Weight refers to the relative likelihood of each candidate model being the best among the set of models tested.

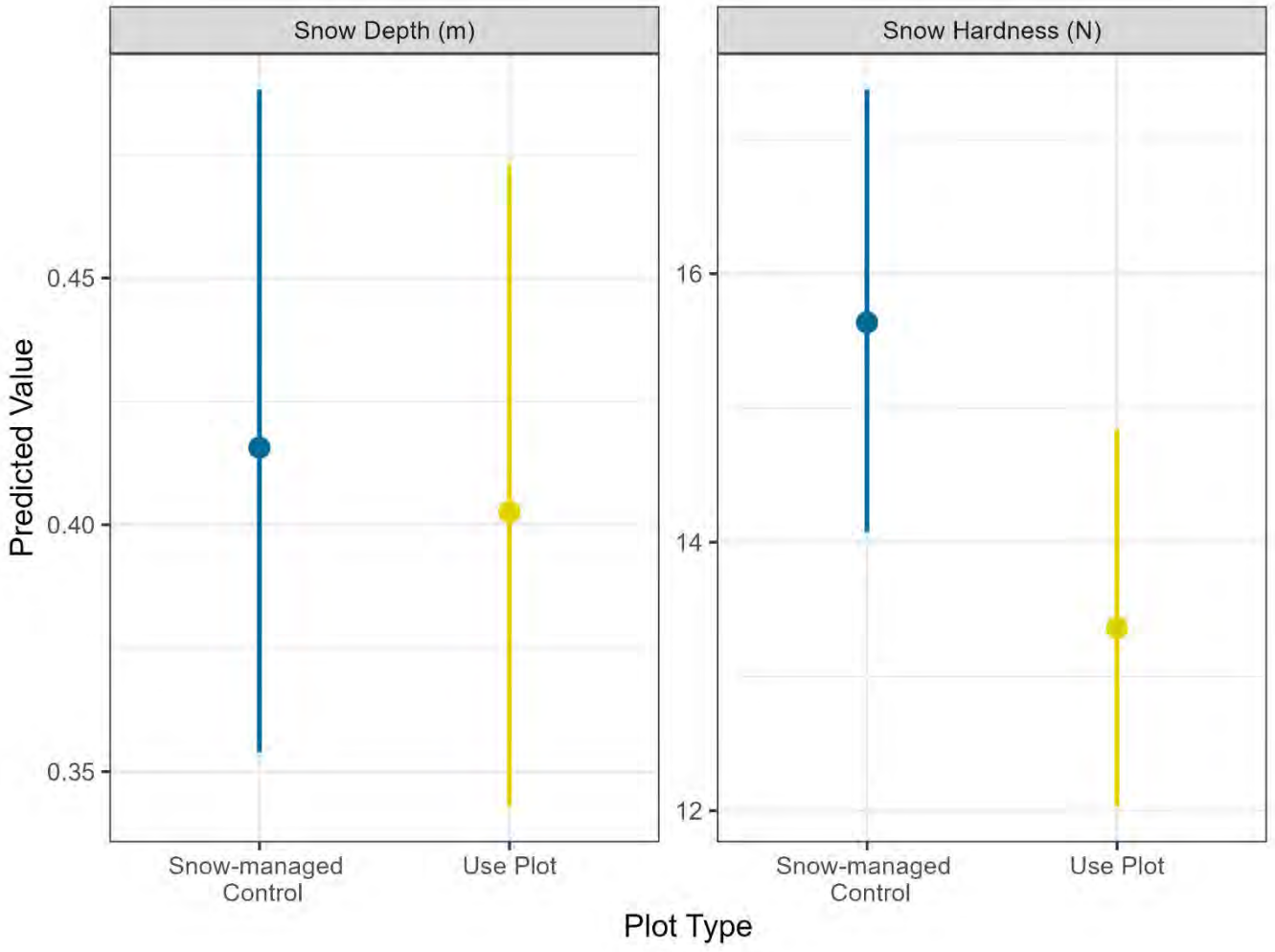


Figure 10: Predicted Values from Generalized Linear Mixed Models Comparing Use-Plots to Snow-Managed Plots. Error bars represent 95% confidence intervals.

3.3.2 Objective 2: Use Plot vs Non-Managed Control Plot Comparison

For objective 2, which compares use plots to non-managed control plots, the test model for snow depth was selected over the null model (Table 5). This indicates there is a relationship between plot type and snow depth, which was the strongest effect detected in this analysis (β = -0.26 [-0.38, -0.14]). Predicted snow depth values support these findings, with deeper snow depths predicted for non-managed control plots compared to use plots (Figure 11).

Regarding snow hardness, the test model did not perform better than the null model, indicating that plot type (i.e., use plot vs. non-managed control plot) did not explain variation in snow hardness (Table 5). Although there is no support for the test model, the test model beta coefficients and model predictions are presented. The beta-coefficient for plot type in the test model is near zero with 95% confidence interval that overlaps zero, indicating no clear relationship between snow hardness and plot type (β = 0.09 [-0.03, 0.20]). Predicted snow hardness values did not differ among plot types (Figure 11).

For track depth, the test model selected over the null model, but the test model performed similarly to the null model (ΔAICc < 2), so the model is not considered to be a significantly better fit than the null model (Table 5). Although there is no support for the test model, the test model results including beta coefficients and model predictions are presented. The test model indicated that track depth was marginally deeper at use plots than non-managed control plots. The 95% confidence intervals overlap zero, indicating a weak relationship (β = 0.15 [0.00, 0.31]). Predicted track depth values differed by less than 1 cm (Figure 11).

Table 5: Summary of Corrected Akaike Information Criteria Scores (AICc) from Generalized Linear Mixed Models Comparing Use Plots to Non-Managed Plots.

Model	Model Structure	AICc	ΔAICc	Weight
Snow Depth				
Test Model	**Plot Type**	**155.53**	**0.00**	**1.00**
Null	y-intercept	169.82	14.29	0.00
Snow Hardness				
Null	**y-intercept**	**1809.64**	**0.00**	**0.50**
Test Model	Plot Type	1809.67	0.03	0.50
Track Depth				
Test Model	Plot Type	1203.83	0.00	0.69
Null	y-intercept	1205.41	1.58	0.31

AICc = Akaike Information Criterion corrected for small sample sizes

The top model (shown in bold) was selected based on the lowest AICc and ΔAICc of at least two. A ΔAICc of less than two indicates an insignificant difference between support for either model. Weight refers to the relative likelihood of each candidate model being the best among the set of models tested.

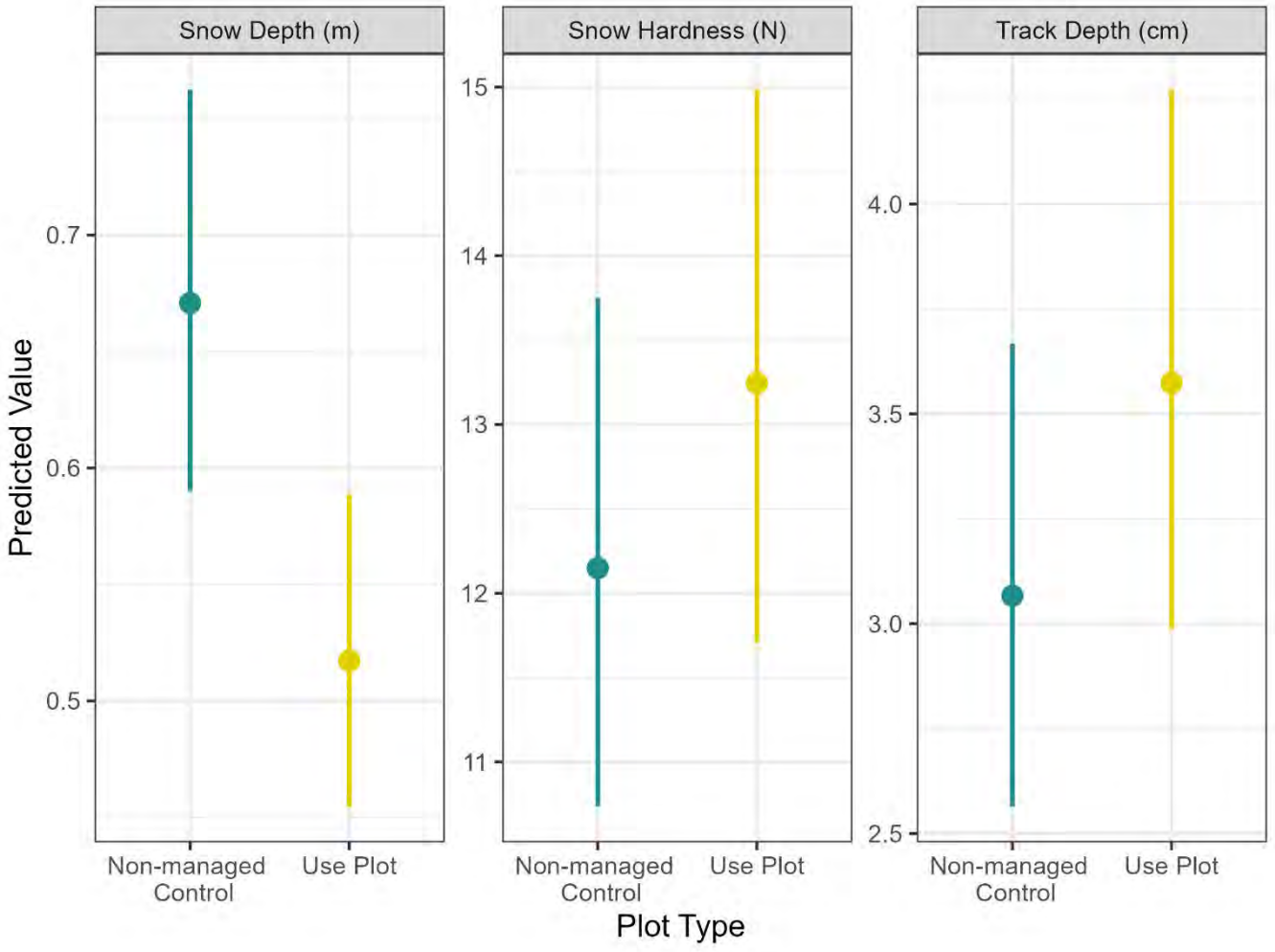


Figure 11: Predicted Values from Generalized Linear Mixed Models Comparing Use-Plots to Non-Managed Control Plots. Error bars represent 95% confidence intervals.

3.4 Climate Analysis

3.4.1 Temperature

Temperature data collected during the spring migration season (April 1 – May 25) at the Meadowbank airstrip weather station from 2013 to 2025 were analyzed to compare weather data during snow study years (2020 to 2025) to previous years (2013 to 2019). The temperature datasets during the migration season for these years were available for the majority of days, with one year missing one day of data (98.2% - 100% complete; Table 6).

Average temperature during the migration season was slightly warmer during the study period compared to the years prior (Table 6; Figure 12). Seasonal mean daily average anomalies (i.e. deviations from an average temperature for the entire dataset) were compared among years (Figure 13). Years 2013 – 2020 were colder on average than the baseline temperature, and 2022 – 2025 were warmer on average. This trendline aligns with projected climate warming trends, but due to the small number of years analyzed, it is unclear whether this is a short- or long-term pattern. Thaw-freeze events were more common during the study period than the period prior (Table 6).

Table 6: Annual Temperature Metrics from the Migration season (April 1 to May 25) from 2013 to 2025.

Migration Year	Migratory Period Sample Size (n)	Mean Daily Average Temperature (˚C)	Thaw-Freeze Events(A)
2013	55	-13.12	0
2014	55	-9.74	4
2015	55	-11.30	1
2016	55	-11.63	0
2017	55	-11.73	4
2018	55	-12.75	0
2019	55	-10.57	0
2020	54	-12.28	0
2021	55	-10.75	3
2022	55	-11.82	0
2023	55	-6.65	13
2024	55	-7.71	9
2025	55	-11.29	2

(A) Note: Thaw-freeze events are considered events when a daily average temperature of >0 ˚C is followed by a daily average temperature of <0 ˚C the following day.

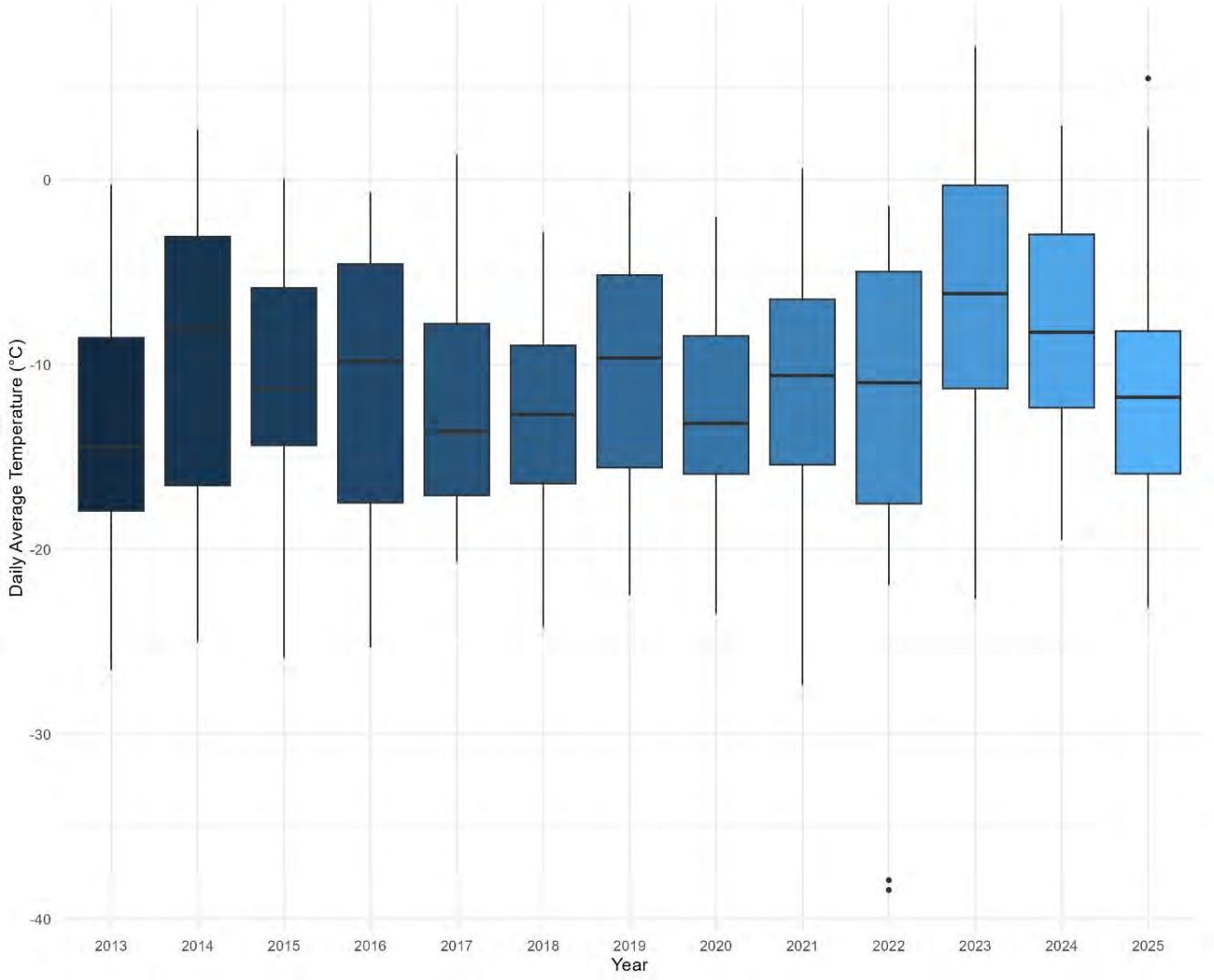


Figure 12: Mean Temperatures During the Migration Season (April 1 to May 25).

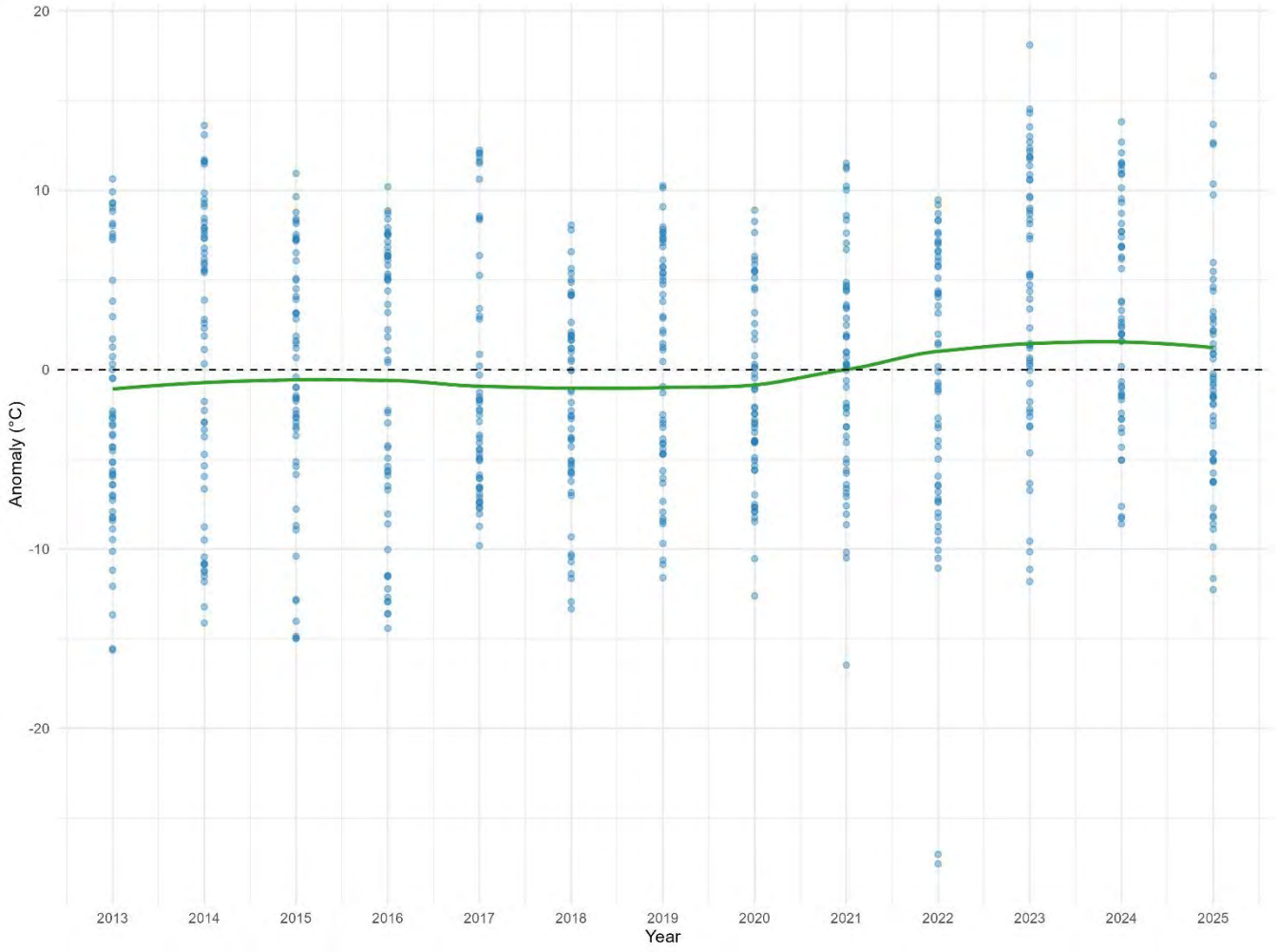


Figure 13: Temperature Anomalies During the Migration season (April 1 to May 25).

3.4.2 Precipitation

Precipitation data from 2014 to 2025 were analyzed for the snow season (November 1 to May 25) to compare weather data during snow study years (2020 to 2025) to previous years (2014 to 2019). Precipitation data for the snow season during these years were available for the majority of days, with some years missing one day of data (98.5% - 100% complete; Table 7). The assumption that the sum of the precipitation during the snow season can be used as a proxy for snow accumulation is supported by the infrequency of temperatures above 0˚C during the snow season and the average monthly temperature during the migration season being below 0˚C from 2013 to 2025 (i.e., the snow is unlikely to have melted before caribou migration) (Figure 12).

Total Precipitation during the snow season was lower during the years of the snow study (2020 to 2025), compared to previous years (2014 to 2019; Table 7; Figure 14). As note for temperature trends, the timescale is relatively short for assessing whether these are short- or long-term precipitation trends.

Table 7: Total Precipitation from the Snow seasons (November 1 to May 25) from 2014 to 2025.

Migration Year	Snow season (November 1 to May 25)	
	Sample Size (n)	Total Precipitation (mm)
2014	206	74.55
2015	207	157.25
2016	205	69.6
2017	206	133.75
2018	207	105.85
2019	206	61.7
2020	206	63.025
2021	206	39.775
2022	206	23.5
2023	206	38
2024	207	58.15
2025	206	45.7

Note: mm = millimetre.

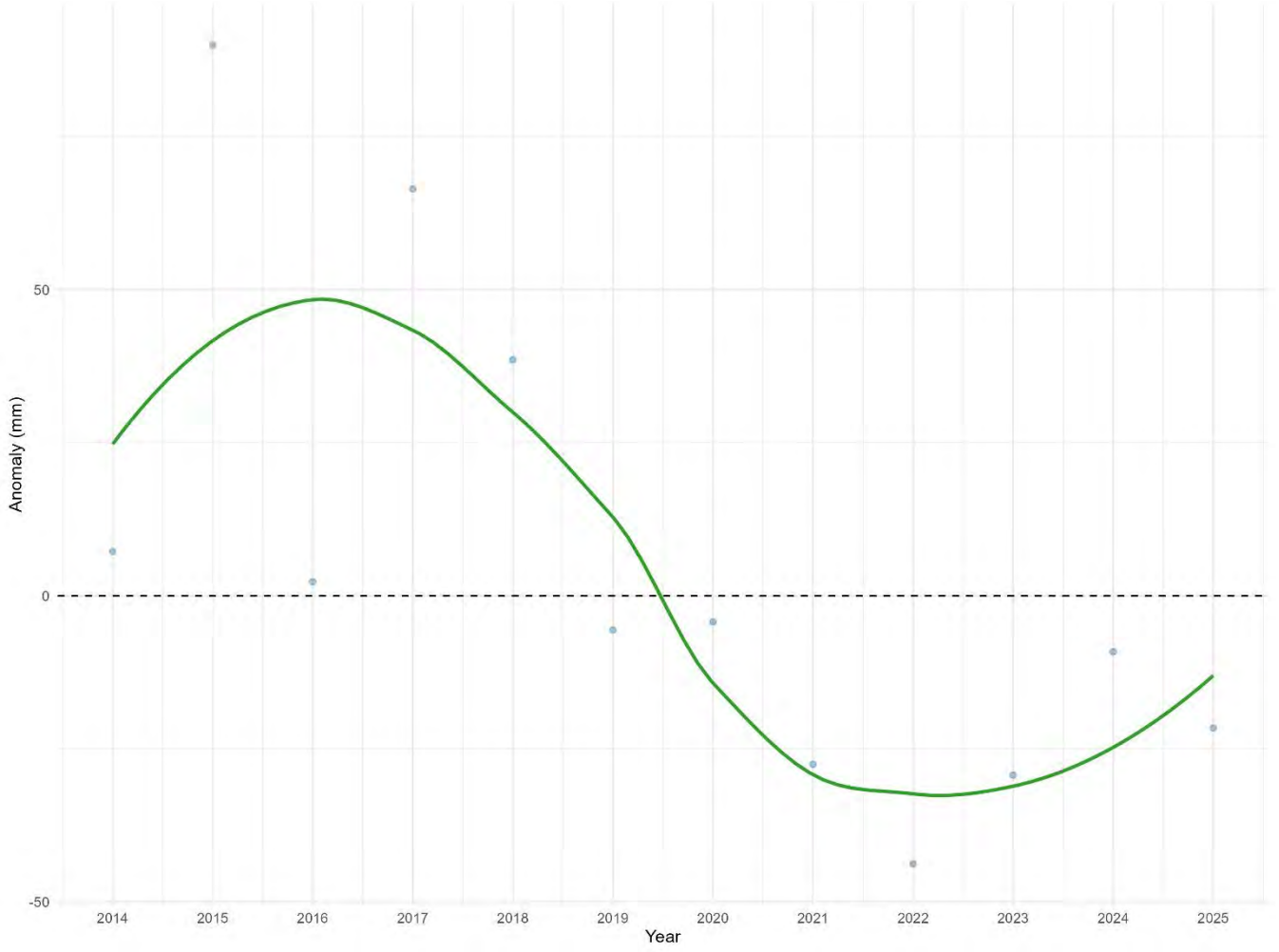


Figure 14: Precipitation Anomalies During the Snow Season (November 1 to May 25).

4.0 SUMMARY AND CONCLUSIONS

The snow study completed by Agnico Eagle was designed to investigate whether there was evidence that how snow is managed along the WTHR has implications to caribou movements. The snow study was designed and reviewed with the TAG to answer two key questions:

1) How do snow conditions within the managed snow area where caribou are crossing the WTHR differ from the snow conditions in adjacent portions of the berm where crossing did not occur?

2) How do snow conditions and caribou track characteristics differ between areas within the snow berm and areas beyond the berm where snow conditions have not been altered by snow removal activity?

Between 2020 to 2025, 98 locations were surveyed for the snow study, 25 of which were completed in 2025. Improvements for data collection implemented in 2023 and carried forward into 2024 and 2025 allowed for a full suite of snow data (snow depth, snow hardness, slope) and caribou track data (in used plots and non-managed control plots) to be collected at a total of 70 of the 98 survey locations. Although the key questions were targeted at the WTHR, due to low detection of fresh caribou tracks it was necessary to also monitor the AWAR. Snow management practices are similar for both roads, so no systematic difference is anticipated to influence results.

For key question 1, snow managed plots were not measurably deeper than caribou use plots indicating that caribou are not choosing areas based on snow depth at fine scales. Snow depth was typically around 0.5 m and this was the case whether measurements were taken on the east or west side of the roads. For reference, caribou winter ranges in non-forested areas can exhibit snow depths of 0.2 m to 0.6 m (Pruitt 1959) and the measured depth in this study is within this range. Results indicating that snow depth is similar between use plots and snow-managed control plots is not surprising because sampling of use and snow managed control plots at a given location along the WTHR or AWAR are approximately 5 m apart (see Figure 1). Overall, snow depth in snow managed areas was relatively shallow. For snow hardness, snow managed plots were harder than caribou use plots indicating that caribou may be choosing softer snow within snow managed areas around the WTHR and AWAR. However, the difference in hardness is about 1 to 2 Newton units and softer snow may be associated with the upwind side of roads (Table 1). Snow hardness of use plots and snow-managed control plots were similar on the downwind side of roads and similar to the snow-managed control plot results for the upwind side of roads.

For key question 2, snow depth was found to be shallower in use plots compared to non-managed control plots, and the snow depth of non-managed control plots did not vary by side of the road. This indicates that caribou are encountering (and using) deeper snow outside of the areas where managed snow occurs. It's possible that deeper snow is occurring away from roads due to varying topography and geology than supports road development. For snow hardness, no difference was detected between use plots and non-managed control plots. On average, after for controlling for differences at each road location, caribou track depth within use plots was 0.15 cm deeper than track depth in non-managed control plots. This small difference is not anticipated to result in a measurable change in effort for caribou as they move across the WTHR or AWAR (Fancy and White 1987).

In addition to the snow metrics measured to meet objectives 1 and 2, metrics associated with managed snow were measured at each of the road survey locations within the six sampling plots. Snow metric data included the snow berm height on roads and the width and slope of snow berms into adjacent areas. Considering snow survey locations across all years, the average snow berm height on both downwind and upwind sides of the road was less than 0.25 m (Table 1), which is about 22% of the leg length of female caribou (115 cm; Gauthier and Farnell 1986) and low enough that caribou can move over them. Average snow berm height was higher on the downwind

wide of the road, which is likely related to how Agnico Eagle manages snow to minimize the amount of blowing snow accumulating on roads for safety and to reduce the time required to clear snow. This approach also minimizes the amount of time road management vehicles are on the WTHR and AWAR. It is highly unlikely that snow berm height restricts caribou movement across the WTHR or AWAR during spring migration. Snow berms were wider on the downwind (east) than the upwind (west) sides of the road and were typically less than 5 m wide. The widest road surface along the WTHR and AWAR is approximately 8 m. Based on the measures in this study, the combined width of snow managed areas, including the road surface, is less than 15 m. This represents a small distance for caribou to traverse.

Regarding weather data, temperature during the migratory season (April 1 – May 25) was marginally warmer and total precipitation during the snow season (November 1 – May 25) was lower during the study period compared to the years prior. Note that while it is important to consider how weather during the study period differs from previous years to interpret results of the study, these weather patterns are not climate trends. Climate analysis generally requires 30 years of data or more to determine climate averages and trends (WMO 2025). The weather trends observed in this analysis do align with some climate trends (e.g., warmer average temperatures), but the cause of these weather trends can't be confidently linked to climate change without more data collection. Despite this distinction between climate and weather, comparing pre-study to study period weather patterns to determine how applicable the results of the study are is possible and relevant. Total precipitation was calculated from November 1 to May 25 and given that this period consistently remains below 0°C it can be used as a proxy for snow accumulation and snow depth. Therefore, snow depth was likely shallower during the study period than the years prior. However, snow depth on the berm was significantly shallower in use plots than non-managed control plots. Therefore, more precipitation likely would not mean deeper snow on the berm or higher berms. The berms are flattened during road clearing, so more precipitation could lead to wider berms. However, there is no clear relationship between berm width and track depth, so wider berms are unlikely to impede caribou movement. Temperatures during the migration season were slightly warmer during snow study years compared to previous years, and the number of thaw-freeze events (events when the daily average is above zero, followed by a daily average below zero) increased during the study period. While these may be ecologically relevant for caribou, it is unlikely to impact future snow mitigation recommendations.

In conclusion, the results of this study indicate that snow depth and hardness associated with snow removal from the WTHR and AWAR are similar or show very small differences relative to snow conditions of unmanaged snow. Managed snow is not deep and is within the range that caribou may encounter on the tundra. Snow hardness was not substantially different than non-managed snow where caribou may become stuck while crossing roads during spring migration. The results of other snow metrics measured for snow berm height, width and slope do not support that they may impede movements by caribou. Slope was similar on upwind and downwind sides of the road. The cost of locomotion on inclines in caribou is reduced by easier movement during descent (Fancy and White 1987). Considering that the width of snow berms is small generally and four times wider on the descending side of roads (i.e., east side), the net energetic cost of traveling over road snow slopes is likely unmeasurable (Fancy and White 1987). For example, based on the movement speed of 500 m/hr measured for collared caribou during spring migration (WSP 2025), it would take caribou about 2 minutes to cross over snow managed areas and road. Note that the referenced speed includes all behaviour activities such as feeding and resting and does not explicitly reflect only movement. A typical walking speed for caribou is about 3,000 m/hr (Fancy and White), which would require less time over the same 15 m distance. The results do not support that snow management areas along the WTHR or AWAR are likely to result in measurable energetic or ecological impacts to caribou.

Agnico Eagle has fulfilled Commitment #9 to assess snow conditions from snow management practices, so the snow study can be discontinued.

5.0 CLOSURE

We trust that this submission meets your current requirements. If you have any questions regarding the contents of this memorandum, please contact the undersigned.

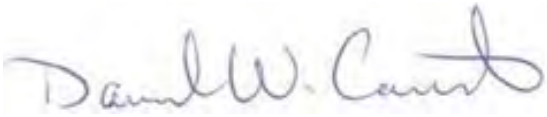
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https://wsponlinecan.sharepoint.com/sites/ca-2024ca347557/shared documents/06. deliverables/snow study final report/03 final/ss/ca0055337.7557-mbk2025_026-aem_2025_snow_study_final_report_rev0_20260122.docx

REFERENCES

Agnico Eagle. 2025. Meadowbank Terrestrial Advisory Group Official Meeting No. 24 (Minutes). 40 p.

Burnham KP, Anderson, DR. 2002. Model Selection and Multimodel Inference: A practical Information-Theoretic Approach. New York, NY: Springer. 488 p.

Cohen J. 1988. Statistical Power Analysis for the Behavioral Sciences, 2nd Edition. New York NY: Routledge. 567 p.

Fancy SG, White RG. 1987. Energy expenditures for locomotion by barren-ground caribou. *Canadian Journal of Zoology*. 65(1): 122-128. https://doi.org/10.1139/z87-018.

Gauthier DA, Farnell RF. 1986. Comparison of physical characteristics from Yukon and neighboring caribou herds. *Rangifer*, Special Issue 1; 131-135.

Golder. 2020. Whale Tail Expansion Project Commitment 9: Proposed Haul Road Snow Study. Unpublished Technical Memorandum prepared for Agnico Eagle Mines Ltd. 9 pp.

KivIA (Kivalliq Inuit Association). 2019. Kivalliq Inuit Association review of Whale Tail Expansion Project Commitment 9: Proposed Haul Road Snow Study. 2 October 2019. Prepared for the Kivalliq Inuit Association by Aurora Wildlife Research. Nelson, BC.

Lundmark C, Ball JP. 2008. Living in snowy environments: Quantifying the influence of snow on moose behaviour. *Arctic, Antarctic, and Alpine Research*. 40(1): 111-118.

Pruitt WO, Jr. 1959. Snow as a factor in the winter ecology of the barren ground caribou (*Rangifer arcticus*). *Arctic 12*(3): 158-179.

Richards SA. 2005. Testing ecological theory using the information-theoretic approach: Examples and cautionary results. Ecology. 86 (10): 2805-2814. DOI:10.1890/05-0074.

Sawilowsky, SS. 2009. New effect size rules of thumb. Journal of Modern Applied Statistical Methods. 8(2): Article 26. DOI:10.22237/jmasm/1257035100.

World Meteorological Organization. 2025. Weather. [accessed November 2025]. https://wmo.int/topics/weather.

WSP (WSP Canada Inc). 2023. Meadowbank Complex 2022 Wildlife Monitoring Summary Report. 158 p + Appendices.

WSP. 2025. (Draft) Agnico Eagle Mines Limited Technical Memorandum: Year Two of the Lead Caribou Pilot Program: Results from the 2025 Spring Migration. 17 p.

APPENDIX J

Caribou Behaviour Monitoring

PREPARED FOR

AGNICO EAGLE

Meadowbank Mine

2025 Caribou Behaviour Study

DATE
February 2026

REFERENCE
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Meadowbank Mine

2025 Caribou Behaviour Study

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ACRONYMS AND ABBREVIATIONS

ΔAIC	difference in AIC
>	greater than
%	percent
≤	smaller than or equal to
Agnico Eagle	Agnico Eagle Mines Limited
AIC	Akaike Information Criterion
AWAR	All-Weather Access Road
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
Complex, the	Meadowbank Complex (Meadowbank Mine and Whale Tail Mine)
ERM	ERM Consultants Canada Ltd.
GLMM	generalized linear mixed-effects model
GPS	Global Positioning System
IOL	Inuit Owned Land
IQ	Inuit Qaujimajatuqangit
KivIA	Kivalliq Inuit Association
km	kilometre
m	metre
NIRB	Nunavut Impact Review Board
p-value	probability value
Road, the	All-Weather Access Road and Whale Tail Haul Road
SD	standard deviation
T&C	Term(s) and Condition(s)
TAG	Terrestrial Advisory Group
TEMP	Terrestrial Ecosystem Management Plan
WTHR	Whale Tail Haul Road

EXECUTIVE SUMMARY

The Meadowbank Complex (the Complex), owned and operated by Agnico Eagle Mines Limited (Agnico Eagle), is located on Inuit Owned Land (IOL) and includes the Meadowbank Mine, approximately 90 kilometres (km) north of the Hamlet of Baker Lake, and the Whale Tail Mine located approximately 150 km north of Baker Lake. A 108 km All-Weather Access Road (AWAR) connects the Meadowbank Mine to Baker Lake, and the 72 km Whale Tail Haul Road (WTHR) connects the Meadowbank Mine to the Whale Tail Mine. During spring and fall migration, caribou from the Lorillard caribou herd, along with smaller numbers of Wager Bay and Ahiak caribou periodically cross through the Complex, AWAR, and WTHR.

As part of the Nunavut Impact Review Board (NIRB) Project Certificates #004 and #008, Agnico Eagle is required to study and report on the effects of the two mines on caribou. The Meadowbank Complex Terrestrial Ecosystem Management Plan (TEMP; Agnico Eagle 2025) outlines a behaviour monitoring program for caribou, which has been conducted annually from 2020 through 2025. Agnico Eagle retained ERM Consultants Canada Ltd. (ERM) to support the reporting of the monitoring results.

In 2019, a Terrestrial Advisory Group (TAG) was formed as a collaborative forum to discuss Inuit Qaujimajatuqangit (Inuit Traditional Knowledge), Traditional Knowledge, and Western science applications to mitigation and monitoring programs related to caribou movement in proximity to the Complex. Caribou monitoring and analyses methods have been revised since 2019 to incorporate suggestions and recommendations of the TAG and the Kivalliq Inuit Association (KivIA).

During the spring and fall migration periods, summer calving period, and winter period of 2025, Agnico Eagle environmental technicians, contractors, and Nunavummiut seasonal workers completed caribou behaviour monitoring surveys at the Complex.

Behaviour monitoring data from 2025 was combined with data from 2020 through 2024 to include an analysis of temporal trends. The key findings from the 2025 program were similar to previous years and included the following:

- Caribou behaviours were predominantly non-response behaviours (i.e., standing, laying, and feeding).
- Caribou group sizes ranged from 1 to 2 individuals to greater than (>) 100 individuals.
- Small groups of caribou (1 to 2 individuals) tended to have a higher proportion of response behaviours (trotting or running, alert) than larger groups, irrespective of disturbances.
- Caribou behaviour was not correlated with their distance to the road.
- Modelling indicates that following a single disturbance, 90% of groups would return to baseline behaviour after 6 minutes, and 98% groups would return to baseline behaviour after 9 minutes.
- In response to comments from KivIA in 2022, “walking” behaviour was investigated to determine if it could be considered a response behaviour instead of a non-response behaviour. From 2023 to 2025, disturbances were found to statistically increase the proportion of caribou walking.

- When large groups of caribou were present, the roads were closed to non-essential Complex related traffic. Closure of the roads followed a decision-making framework outlined in the Meadowbank Complex TEMP. Road closure status did not affect response behaviour, although the road being open was positively correlated with walking behaviour.
- Groups of caribou were observed on both the east and west sides of the road in all seasons but were more commonly observed on the west side during spring migration and the east side during fall migration (i.e., upstream of the dominant direction of travel).

1. PROJECT OVERVIEW

The Meadowbank Complex (the Complex), owned and operated by Agnico Eagle Mines Limited (Agnico Eagle), is located on Inuit Owned Land (IOL) and includes the Meadowbank Mine and the Whale Tail Mine. The Meadowbank Mine, located in the Kivalliq Region of Nunavut (Figure 1-1), received a Project Certificate (#004) from the Nunavut Impact Review Board (NIRB) in 2006. The adjacent Whale Tail Mine received a Project Certificate (#008) from the NIRB in 2018, which was amended in 2020. The Project Certificates and subsequent Water Licences (2AM-WTP1830 and 2AMMEA1526), Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) Land Lease, and Kivalliq Inuit Association (KivIA) Production Lease, allowed development of five gold deposits since the start of operations at the Meadowbank Mine and the first phase of the Whale Tail Mine. This has included construction of a gold mine and ancillary facilities, including a 108 km all weather access road (AWAR), 72 km Whale Tail Haul Road (WTHR), barge unloading facilities, laydown area, and a fuel tank farm near the Hamlet of Baker Lake. The AWAR connects the Meadowbank Mine to Baker Lake, and WTHR (collectively referred to hereafter as the Road) connects the Meadowbank Mine to Whale Tail Mine to form a continuous road. The Meadowbank Mine is located approximately 90 km north of the Hamlet of Baker Lake. Mining has ceased at Meadowbank, but the site hosts accommodation facilities; an active mill; and ancillary mechanical facilities, maintenance facilities, and vehicles. The Whale Tail Mine, located approximately 150 km north of the Hamlet of Baker Lake and 50 km northwest of Meadowbank, is an open-pit, truck-and-shovel mine operation and will produce an estimated 31.8 million tonnes of ore. Ore is hauled from the Whale Tail Mine to the Meadowbank Mine for milling via the WTHR.

From 2020 to 2025, studies of caribou behaviour were conducted year-round at the Complex, including the Road, to monitor for potential mine effects on caribou.

Project Terms and Conditions and Terrestrial Ecosystem Management Plan

In the NIRB Certificate (#008) for the Whale Tail Mine, Term and Condition (T&C) 28 requires the Whale Tail Mine to have a terrestrial ecosystem management plan (TEMP):

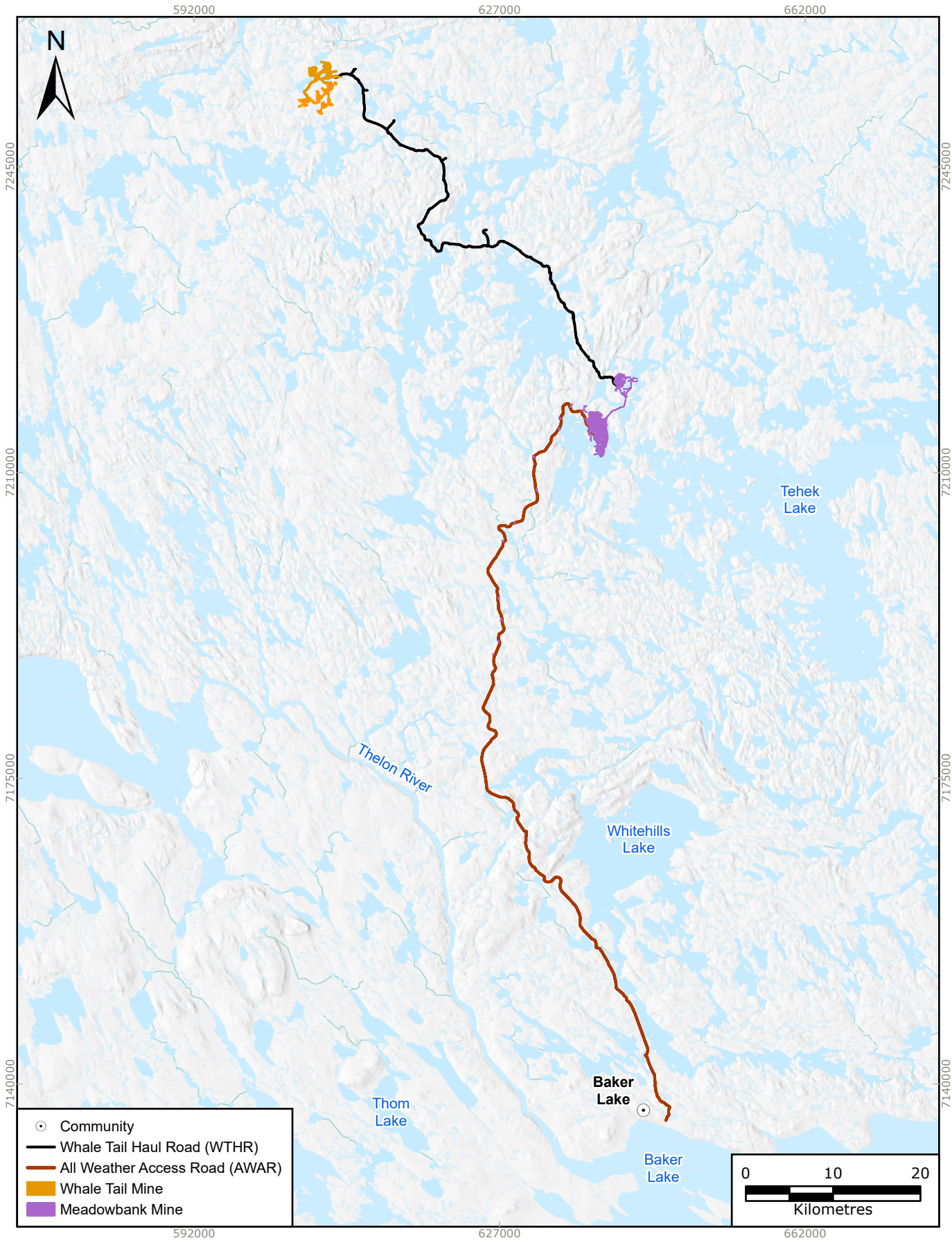
> (NIRB #008; T&C 28) The Proponent shall maintain a Terrestrial Ecosystem Management Plan (TEMP) throughout all phases of the Project. The Plan shall include detailed monitoring, mitigation, and adaptive management measures for wildlife, with consideration for each Project activity predicted to affect wildlife, and with inclusion of specific triggers for mitigation and adaptive management intervention. The TEMP shall demonstrate consideration for all relevant commitments made by the Proponent throughout the Nunavut Impact Review Board's review of the Project.

Additionally, in the NIRB Certificate (#004) for the Meadowbank Mine, T&C 54 further outlines requirements for a TEMP, including:

> (NIRB #004, T&C 54) Statistical validation to support the conclusions drawn from monitoring impacts of the mine and infrastructure on wildlife.

The Meadowbank Complex TEMP (Agnico Eagle 2025) is designed to meet these conditions and includes a survey program for caribou that records caribou behaviour in response to various disturbances.

FIGURE 1-1 LOCATION OF MEADOWBANK MINE AND WHALE TAIL MINE



ERM

CLIENT: AGNICO EAGLE MINES LIMITED
GIS NUMBER: AEG-15-075-01

DATE: 23 February 2026

PROJECTION: NAD 1983 UTM Zone 14N
SCALE: 1:600,000 when printed at 8.5x11

2. STUDY OBJECTIVES

Based on guidance from the TEMP, the overall objective of the caribou behaviour monitoring program is to **determine if caribou activity budgets** (i.e., the proportion of time caribou spend exhibiting different behaviours) **change with distance from the Complex, and to document caribou response to stressors**.

To address the overall objective, detailed sub-objectives in 2025 were as follows:

1. Estimate how mine infrastructure at the Complex, including the Road that crosses through the Complex area, influence the proportion of caribou displaying response behaviours.
2. Identify the stressors that influence the proportion of caribou showing response behaviours near mine infrastructure at the Complex, including the Road. To identify the stressors, the following characteristics in relation to caribou behaviour were examined:
    a. Road crossings with group size and distance to infrastructure;
    b. Behaviour type with group size and distance to infrastructure;
    c. Behaviour type and environmental/temporal variables;
    d. Road closure status;
    e. Season and side of the road;
    f. Number of disturbances;
    g. Response to disturbances;
    h. Direction of caribou and travel; and
    i. Convoy duration and size.

The primary hypothesis of this study was that caribou closer to mine infrastructure and the road would demonstrate a stronger response to disturbances, including vehicles. Predictions included that caribou would be more responsive to the same disturbances at closer distance from the source, and when present in smaller groups.

3. BACKGROUND

Five caribou subpopulations may occur in proximity to the Complex: Lorillard, Wager Bay, Qamanirjuaq, Beverly, and Ahiak. However, it is primarily caribou from the Lorillard herd that occur near the Complex, as well as smaller numbers of caribou from the Ahiak and Wager Bay herds. Collar data indicate that caribou are present in the Complex area mostly in late winter and during fall rut.

3.1 LORILLARD HERD

The Lorillard caribou herd is a mid-sized caribou herd that totalled 33,454 animals in 2021 (Government of Nunavut Department of Environment 2021). Previous population estimates from 2002 and prior included caribou from the Wager Bay herd, because the delineation of calving areas was not known at the time. The Lorillard herd range occurs entirely in Nunavut, with the core of its range stretching northward from Chesterfield Inlet on the Hudson Bay coast and westward toward Baker Lake.

The herd generally winters on the tundra in northern central mainland Nunavut. Spring migration is westward and north of Chesterfield Inlet, past the Hamlet of Baker Lake, to a calving ground south of Wager Bay and close to the Hudson Bay coast (Nagy and Campbell 2012). Although caribou may be near to the Hamlet of Baker Lake, Meadowbank Mine, Whale Tail Mine, the AWAR, and the WTHR year-round, they frequent the area during late April and early May, which coincides with spring migration (Agnico Eagle 2025).

Following calving, the caribou form into large groups and generally move west and inland, gradually returning west toward their wintering areas by early December (Nagy and Campbell 2012). Throughout this period, caribou may be near to or cross the mine infrastructure at the Complex.

3.2 EXISTING CARIBOU MANAGEMENT MEASURES

As per the TEMP, during peak migration, the Road is closed to all but essential mine traffic. To reduce sensory disturbance during road closures, essential mine traffic typically travels in scheduled convoys. During non-peak periods, caribou observations near the road trigger speed restrictions that apply to all mine traffic. Road closures are triggered separately for the WTHR and the AWAR. Drivers for the two mines are also trained to slow down when caribou are within sight and to follow the mitigation measures outlined in the TEMP.

Caribou surveys were considered an essential activity by the two mines, allowing for the use of a pickup truck on the Road during road closures.

3.3 TERRESTRIAL ADVISORY GROUP

In 2019, a Terrestrial Advisory Group (TAG) was formed as a collaborative forum to discuss Inuit Qaujimajatuqangit (Inuit Traditional Knowledge), Traditional Knowledge, and Western science applications to mitigation and monitoring programs for the Meadowbank Mine, including on caribou movement in the Meadowbank Mine area. Members of the group include the Government of Nunavut, KivIA, and the Baker Lake Hunters and Trappers Association. Following discussions of

the caribou behaviour survey results in 2020 and 2021, the TAG and particularly KivIA suggested several changes to the survey protocol and analysis methods. These changes included adding a variable for road closures and testing whether the behaviour "walking" could be considered a response behaviour. In 2022, a variable for caribou movement direction relative to the Road was added to the analysis and additional information was collected on the speed of passing vehicles. From 2023, onwards, the duration and number of vehicles in essential mine traffic convoys were recorded to understand how these variables may influence caribou behaviour. Additions for the 2025 analysis based on TAG member comments include additional analysis of caribou travel direction relative to the AWAR or WTHR. Agnico Eagle endeavoured to incorporate all the suggestions of the TAG into the 2025 data collection process and analysis.

4. STUDY AREA

The Meadowbank Mine is located approximately 90 km north of the Hamlet of Baker Lake, and the Whale Tail Mine is located approximately 150 km north of the Hamlet of Baker Lake. The Complex (including both the mines) is approximately 300 km inland from the northwest coast of Hudson Bay and is above the tree line near the Arctic Circle. The local physiography is characterized by numerous lakes and low, rolling hills covered mainly by lichen/rock complexes and heath tundra.

The study area for the caribou behaviour monitoring program extended north from the southern extent of the AWAR at the Hamlet of Baker Lake to the northern end of the Whale Tail Mine footprint and included the Meadowbank Mine and the WTHR (see Figure 1-1). Behaviour surveys were completed on any caribou that could be observed up to 3 km away from the mine infrastructure at the Complex, including the AWAR and WTHR, with the aid of binoculars.

5. METHODS

5.1 BEHAVIOUR SURVEYS

Survey methods for behaviour surveys completed at the Complex followed caribou behaviour monitoring protocols developed by the Government of Northwest Territories Department of Environment and Natural Resources (2017). In 2020, ERM refined these methods for Agnico Eagle's Nunavut mine operations. The updated methods focus on scan samples instead of both scan and focal samples. Given time and personnel constraints, the focus on scan samples was a more efficient use of time and produced better quality data. The updated methods also include an initial survey step to randomize which group of caribou to monitor when multiple groups are available. Each year from 2021 to 2025, these methods were further updated to reflect lessons learned since 2020:

- The 2021 updates included recording additional information such as if the caribou were east or west of the Road;
- The 2022 updates included recording the direction of caribou travel and the speed of vehicle traffic;
- The 2023 updates included recording the size and duration of convoys operating on the closed road; and
- All of these updates were retained and incorporated in 2024 and 2025. Detailed survey protocols are attached in Appendix A.

Behaviour surveys were completed by:

- Identifying caribou groups visible from mine infrastructure including the Road;
- Randomly selecting groups for observation; and
- Recording the behaviour of individuals in groups of different sizes, including their responses without any disturbance and in response to mine-related activities and natural factors.

Surveys were completed during spring migration, summer, fall migration, and winter with efforts to conduct roughly equal numbers of surveys in spring and fall migration seasons. Reconnaissance surveys were initially completed during the 2020 field season to identify where caribou groups were located but many caribou groups would move away from the Road before the field crew returned to complete the behaviour survey. As such, reconnaissance surveys were not continued from 2021 to 2025. Where multiple groups of caribou were observed, surveyors randomly chose which group to sample, or chose groups to fill sampling gaps specifically for the group size and distance from road variables. Filling survey gaps enables adequate data collection for each key variable to allow for a more thorough analysis.

Information recorded included the location and its Global Positioning System (GPS) coordinates, weather conditions, road structure, and the location of the caribou group in relation to the Road. Initially, distance values were estimated by the observer, but since 2021, a laser rangefinder has been used to record distance. The behaviour of individual caribou in the group was categorized at the start of the survey and every 3 minutes after that (referred to here as a "time interval"), until 30 minutes had elapsed. Behaviour categories and their definitions were standardized following Government of Northwest Territories Department of Environment and Natural Resources (2017) classifications. The behaviour categories were feeding, lying down, standing, alert, walking, and trotting or running.

At each 3-minute interval, surveyors recorded the number of individuals in the group exhibiting each behaviour at that time. When surveying large groups (greater than [>] 100 individuals), a subset of individuals was surveyed as opposed to the entire herd. Therefore, the behaviour of large groups was defined by the behaviour of the sampled subset. A disturbance event is defined as any human-caused loud noise, low-flying aircraft, or a vehicle travelling on the road. If a disturbance event occurred during the survey, the time and type of disturbance was recorded. Of the disturbances recorded in the 5 years of data collection, 95 percent (%) were from road -related disturbances (vehicles) and 5% were from blasts or helicopters. Blast disturbances were monitored under the scope of the Blast Monitoring Program, developed in collaboration with the TAG (Agnico Eagle 2025). In the analysis, all disturbances were treated equally.

In this report, "alert" and "trotting or running" behaviours are referred to collectively as "response behaviours," but it is important to note that this is irrespective of whether there were disturbances recorded. Walking was also assessed as a response behaviour in some analyses, which are specifically noted in the results.

Following recommendations from the TAG in 2021, an additional set of longer surveys was added to the annual survey methodology to specifically look at the behavioural response to convoys of vehicles. These surveys were 90 minutes each, consisting of a "before convoy," "during convoy," and "after convoy" survey. Observers sought out caribou groups that were likely to remain within view for 90 minutes, based on surrounding terrain. However, caribou frequently walked out of sight prior to completion of the 90-minute survey period. A total of 9 surveys were completed each year in 2021,2022, and 2025, 17 in 2023, and 10 in 2024.

5.2 DATA ANALYSIS

The objective of the data analysis was to quantify trends in the survey data and determine whether factors such as distance to mine infrastructure at the Complex (including the Road), group size, or disturbances influence caribou behaviour. The primary hypothesis was that caribou closer to the road would demonstrate a stronger response to disturbances. An initial exploratory analysis was completed to visualize the data and determine the appropriate method for analyzing the data.

A regression analysis was conducted to test whether the data from these surveys could be analyzed statistically. To increase the power to detect changes in caribou behaviour, the behaviour categories were grouped for analysis into response behaviours (alert and trotting or running) and non-response behaviours (feeding, lying down, standing, and walking).

Following the 2020 analysis, the TAG requested Agnico Eagle to explore whether the proportion of walking caribou changed as a response to disturbance. This was done to see if walking would be better categorized as a response behaviour or non-response behaviour. To test this, a model that included walking and response behaviours was run in addition to the original model that only included response behaviours.

Generalized linear mixed-effects models (GLMMs) were used to assess the differences in the proportion of response behaviours in surveyed animals as a function of various controlling variables, including the occurrence of disturbances. Due to the binary nature of the response

variable, proportions were modelled using a binomial distribution. Because small groups naturally have greater variability in values (e.g., it is more likely that "all" or "none" of caribou are alarmed when there are only two caribou), an offset for the total number of caribou with tallied behaviour was included. This regression framework provides a means to control for environmental variables, repeated measurements, and spatial correlation. Random effects for survey ID were included to account for spatial and temporal autocorrelation.

Statistical analyses were conducted using R Statistical Software version 4.5.2 (R Core Development Team 2025). Two dependent variables were tested:

1. The first dependent variable tested was the proportion of response behaviours in each 3-minute interval in each survey; and
2. The second dependent variable tested was the proportion of walking plus response behaviours in each 3-minute interval in each survey.

The two dependent variables were each modelled against a suite of potentially important predictor variables to determine if there was any statistical relationship between the predictor and response. The variables included in this analysis were group size, distance to the Road, temperature, wind speed, season and side of the Road (upstream/downstream), the Road's status (closed or open), and a binary variable identifying whether a disturbance occurred during each 3-minute interval. The distance to the Road is a binned categorical variable to account for changes in the method of distance recording that was created in 2021 and to allow for the inclusion of 2020 data. Season and side of the Road were included as an interaction term because direction of travel is seasonally dependent. This means that season and side of the Road were combined as one interaction term in the model and individually as fixed effects. The interaction term makes it possible to identify the "upstream" and "downstream" side of the Road, based on the season. In 2025, the duration of each convoy and the number of vehicles in each convoy were recorded; however, limited data precluded the inclusion of these data in models for 2025.

For each dependent variable, GLMMs were constructed and tested for model fit, as evidenced by the Akaike Information Criterion (AIC). The AIC is a number that is helpful for comparing models as it includes measures of both how well the model fits the data and how complex the model is. The top models were identified as having a low AIC and were within a two-unit difference in AIC ($\Delta AIC \leq 2$)[1] of the top-ranked model (i.e., the model with the lowest AIC; Burnham and Anderson 2004). This is the industry standard for identifying models that are essentially "equally good" at explaining the data. Models with ΔAIC of 2 to 4 from the top model are generally considered to have "limited support" (Burnham and Anderson 2004).

A second modelling procedure was used to investigate the amount of time caribou were engaged in response behaviour associated with disturbances during a survey. For a response to be included, the proportion of caribou exhibiting response behaviour after a disturbance had to be 40% greater than in the interval before disturbance. The response was considered "over" when the proportion of caribou exhibiting response behaviour returned to the level observed in the interval before the disturbance (the baseline, ±5%). This variable, called "duration of response," was assessed for

[1] ≤ = smaller than or equal to

each survey during which at least one disturbance occurred. Surveys that started with 100% of individuals exhibiting response behaviour were excluded as the associated disturbance and baseline behaviour was unclear. In surveys where there was more than a single period of response behaviour, the total time disturbed was calculated for that survey. Because the duration of a response is a "time-to-event" variable (time to return to baseline behaviour), Cox's proportional hazards regression was used to model the duration. Durations were right-censored if the caribou did not return to background behaviour prior to the end of the observation period.

As the start and end of the response could happen within 3-minute intervals, but the exact time was not recorded due to sampling constraints, ERM assumed that the duration was 3 minutes for every interval included. For example, if the response behaviour occurred only within one interval, it was given a duration of 3 minutes, while if it occurred in two intervals, it was given a duration of 6 minutes. If no response occurred after a disturbance, it was given a duration of 0 minutes.

A duration-of-response model was fit using caribou group size and a variable indicating the number of intervals that contained a disturbance (number of disturbances). The sample size was too small to include other variables or interaction terms and still achieve convergence.

6. RESULTS AND DISCUSSION

6.1 CARIBOU DISTRIBUTION RELATIVE TO THE MINE

Through a Data Sharing Agreement, the Government of Nunavut provided Agnico Eagle with caribou GPS collar locations during spring migration over the 6 years surveyed (2020 to 2025). Data collected from the GPS collars indicated when collared caribou were approaching the Complex and the Road. When caribou were approaching the Complex, viewsheds or road surveys were conducted as required by Agnico Eagle personnel to identify appropriate management actions. The results of the viewshed or road surveys and the associated collar data informed the decision to begin dedicated caribou behaviour surveys. In addition to spring migration, surveys were also conducted during peak fall migration to enable an even distribution of survey effort across both spring and fall seasons. In 2025, no surveys were completed during the summer season due to a lack of caribou present in the area.

Survey locations by season are presented on Figure 6.1-1. During spring migration and fall migration, scattered groups of caribou from the Lorillard herd were observed passing through or near the study area, with the highest numbers of caribou groups observed in April (a total of 22 distinct groups were observed, comprising 2,363 individuals overall).

Spatial locations of caribou observations and associated behaviour surveys along the Road varied each year from 2020 to 2025 (Figure 6.1-1). In 2025, caribou behaviour surveys were completed roughly equally at the WTHR and AWAR. Caribou were observed most frequently during the fall migration season in the southern portion of the study area along the AWAR from 2020 to 2024; however, this trend was not as prominent in 2025 when caribou were more evenly distributed. Differences in survey distribution between years may result from limited sampling bias primarily in early survey years; however, it is more likely explained by interannual variations in where caribou occur relative to the Complex.

6.2 CARIBOU BEHAVIOUR SURVEYS

A total of 57 behaviour surveys were completed at the Complex in 2025 (Table 6.2-1). Surveys were balanced relatively equally between spring and fall migration periods; however, no surveys were completed in the summer and winter season due to a lack of caribou present during these seasons. In 2021, there was a greater emphasis on surveying during spring migration; however, that emphasis changed in subsequent years to focus on completing surveys during both spring and fall migration. During all survey years, behaviour surveys were opportunistically completed whenever caribou were encountered on reconnaissance drives.

In 2025, survey data were collected across a range of key survey variables, which was consistent with previous years' survey efforts. Surveys were completed on all caribou group sizes in 2025 (Table 6.2-2) and recorded road crossings across a variety of caribou group sizes. Road crossings, however, remained low in occurrence, which was consistent with previous years (Table 6.2-2; Appendix B). In 2025, surveys with disturbance events were captured across all caribou group sizes. At least 44% of those surveys, in all group size categories, recorded a disturbance in 2025 (Table 6.2-2). In over 6 collective years' data, 49% of the surveys contained a disturbance event (Appendix B).

FIGURE 6.1-1 LOCATIONS OF BEHAVIOUR SURVEYS BY DATE

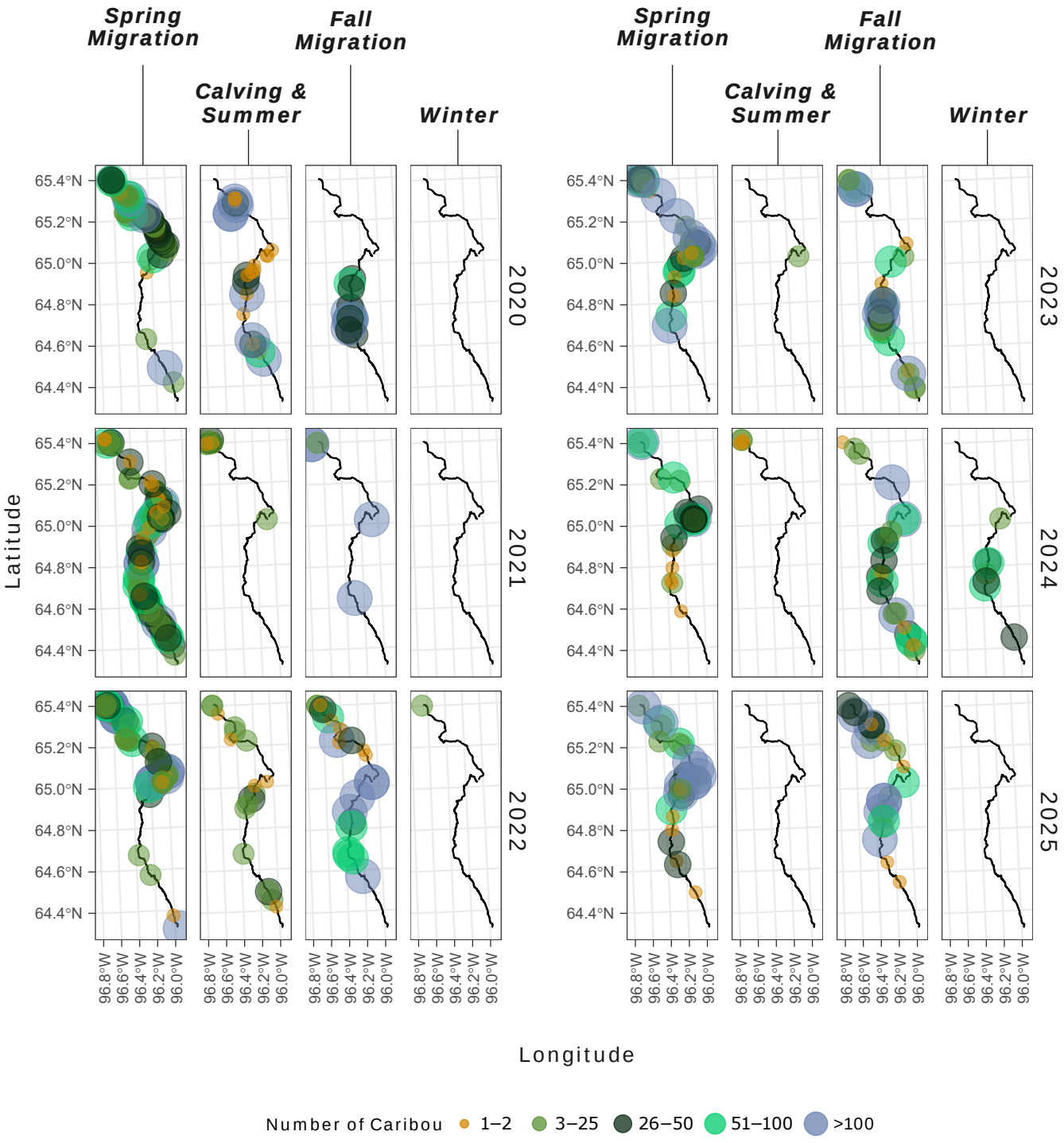


TABLE 6.2-1 CARIBOU BEHAVIOUR SURVEYS SEASONAL DISTRIBUTION, 2020 TO 2025

Season	2020	2021	2022	2023	2024	2025
Spring Migration	71	114	63	38	31	30
Calving/Summer	31	15	18	1	5	0
Fall Migration	14	5	23	31	27	24
Winter	0	0	1	0	7	3
Total	**116**	**134**	**104**	**70**	**70**	**57**

TABLE 6.2-2 MEADOWBANK COMPLEX CARIBOU BEHAVIOUR SURVEYS DATA SUMMARY, 2024

Caribou Group Size	Total Number of Surveys 2025	Surveys with Disturbance 2025	Surveys with Road Crossing 2025
1–2	13	8	2
3–25	15	13	1
26–50	9	5	0
51–100	5	4	0
>100	16	7	3
Total	**58**	**28**	**5**

Note:
> = greater than

Surveys were spatially distributed across both the east and west sides of the Road in each of those 6 years (Table 6.2-3; Appendix C). In 2025, surveys completed during spring migration recorded two surveys where caribou were observed on both sides of the Road during the same survey period. All other spring migration surveys recorded groups on the west side of the Road at the beginning of each survey. During fall migration in 2025, 21 surveys recorded caribou groups on the east side of the Road and 6 surveys recorded caribou groups on the west side of the Road at the start of each survey. Results from all surveys from 2020 through 2025 are reported in Appendix D.

TABLE 6.2-3 SUMMARY OF SPATIAL DISTRIBUTION OF SURVEYS, 2025

Season	Surveys of Caribou on East Side of the Mine Infrastructure 2025	Surveys of Caribou on West Side of the Mine Infrastructure 2025	Surveys of Caribou on Both Sides of the Mine Infrastructure 2025
Spring Migration	0	26	2
Fall Migration	21	6	0
Total	**21**	**32**	**2**

6.3 EXPLORATORY ANALYSIS RESULTS

The exploratory analysis was performed to determine if there were any trends or interactions in the following variables: road crossing, group size, distance to the Road, weather and timing, Road closure status, side of the Road (east or west), number of disturbances, and response time following disturbances. An additional analysis was planned to look at how the number of vehicles in a convoy and the duration of a convoy influence caribou behaviour; however, due to a lack of data, this was not possible in 2025 despite nine convoy surveys being conducted. All results use the combined data from 2020 to 2025, unless otherwise stated. Exploratory analyses are focused on exploring potential trends in the data, with results being a qualitative interpretation of the patterns observed. The statistical analyses are presented in Section 6.4.

6.3.1 COMPARING ROAD CROSSINGS WITH GROUP SIZE AND DISTANCE TO INFRASTRUCTURE

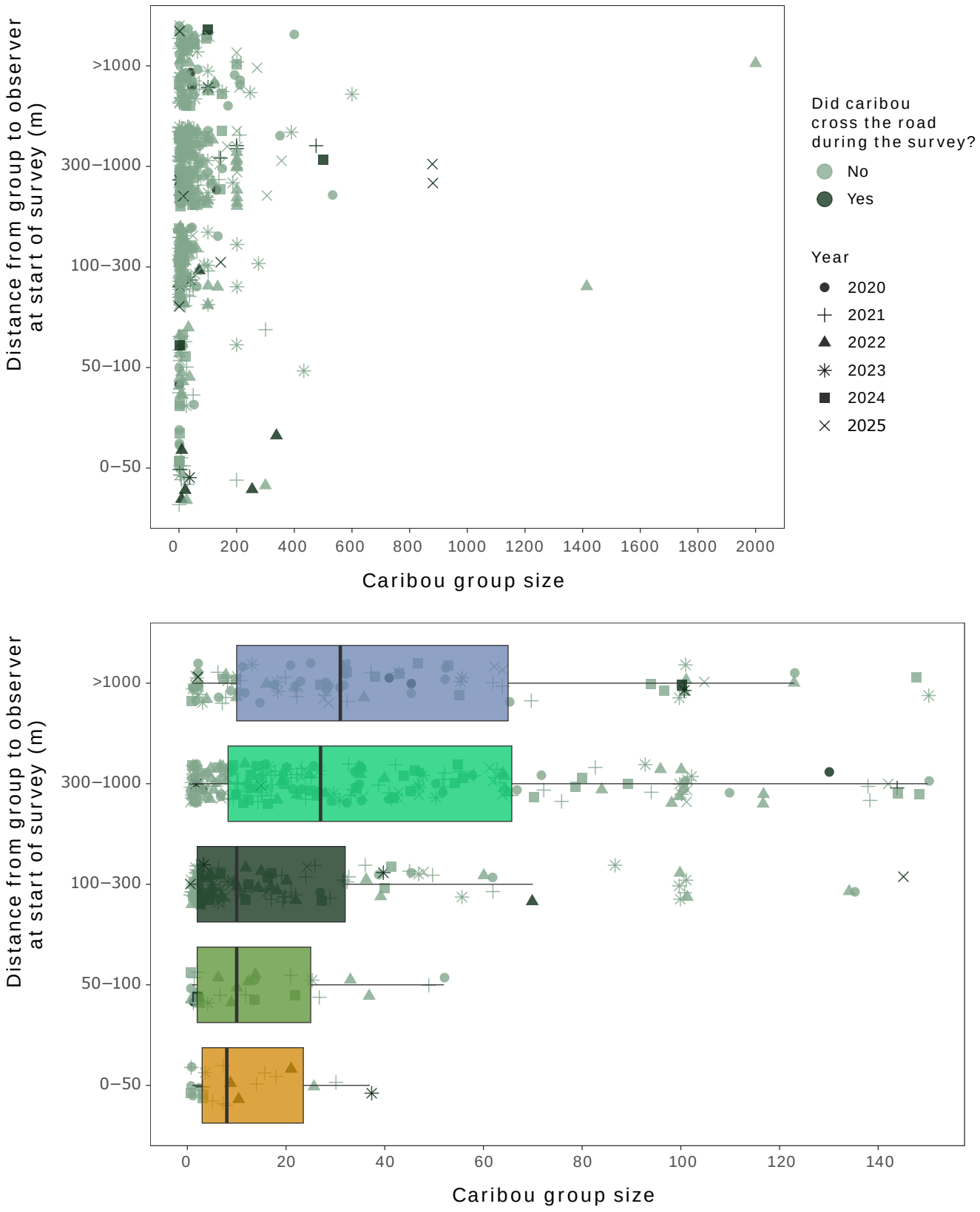
6.3.1.1 ROAD CROSSING

There is no clear relationship between caribou group size and road crossing observations. Across all years, crossings were mostly observed with groups totalling over 100 individuals, which made up 39% of observed crossings (12 observations; Figure 6.3-1; Appendix B). In contrast, groups of 51 to 100 individuals made up only 6% of the observed crossings (two observations; see Table 6.2-2; Figure 6.3-1). In addition, no clear relationship was found between the distance of caribou to the Road and the observation of road crossings. This indicates that caribou observed closer to the Road were not more likely to cross the Road than caribou occurring at further distances from the Road (Figure 6.3-1).

6.3.1.2 GROUP SIZE AND DISTANCE TO INFRASTRUCTURE

Compiled caribou group size data from 2020 to 2025 in relation to distance from the Road are outlined on Figure 6.3-1. From 2021 through 2025, efforts were made to increase the number of surveys containing large groups of caribou within 300 m of the Road. On average, groups of over 50 individuals continue to be observed further away from the road, compared to groups under 50 individuals. To date, 12 groups larger than 50 individuals were recorded within 100 m of the Road at the start of the survey: 2 in 2021, 3 in 2022, 2 in 2023, and 7 in 2025. Note that comparison of the number of caribou within different categorical distance bands is confounded with the range of each distance category (i.e., 0 to 300 m vs 300 to 1000 m). Regardless of the mechanism, this represents a potential source of error and was considered in the statistical analyses so that the results were not biased (see Section 6.4.1).

FIGURE 6.3-1 CARIBOU GROUP SIZE VERSUS DISTANCE FROM THE CARIBOU TO THE ROAD



CLIENT: Agnico Eagle Mines Limited
GRAPHICS NUMBER: AGN-26ERM-003:2

6.3.2 COMPARING BEHAVIOUR TYPE WITH GROUP SIZE AND DISTANCE TO INFRASTRUCTURE

In 2025, caribou behaviour was relatively consistent between group sizes (Figure 6.3-2a). The "feeding" behaviour was the most observed behaviour in all group sizes, and few response behaviours were observed in all group sizes.

Caribou observed more than 100 m from the Road at the beginning of the survey were most frequently recorded feeding. In all years (2020 to 2025), caribou observed within 100 m of the Road at the start of the survey exhibited varied behaviours, with no single behaviour being consistently dominant (Figure 6.3-2b). Similar to group size, no distance category had surveys with more than 10% of caribou displaying response behaviours.

The relationships between behaviour and group sizes or distances to the Road are examined in greater detail in the statistical analysis results in Section 6.4.

6.3.3 BEHAVIOUR TYPE AND ENVIRONMENTAL/TEMPORAL VARIABLES

To determine if environmental factors such as heat or high winds were influencing caribou behaviour, the proportion of response behaviours, environmental variables, and temporal variables were graphed (Figure 6.3-3).

No trend was evident in the relationship between wind speed and response behaviours. It appears that caribou response behaviours may increase slightly with temperature; however, sporadic and limited data in warmer temperatures may have influenced these data, since most surveys were completed at temperatures below 0°C. This suggests that neither wind speed nor temperature appear to have a notable effect on behaviour. It should be noted that surveyors typically did not travel on the road during extreme weather conditions and, therefore, variability in weather conditions was low. Exploration of the relationship between date and caribou behaviour revealed that date was not associated with caribou behaviour.

6.3.4 ROAD CLOSURE STATUS

It was hypothesized that response behaviour would occur at a higher rate when the Road was open as opposed to closed. Starting in 2021, surveyors completed surveys both when the Road was open and while it was closed. More surveys were conducted with the Road closed (305 surveys) compared to open (191 surveys; Figure 6.3-4) across all years. There was no noticeable difference in response behaviours shown by caribou while the Road was closed as opposed to when it was open. The level of response behaviour (averaged across all observations with and without disturbances) was low (less than [<] 10%), both when the Road was open and when it was closed (Figure 6.3-4).

On average, there was a higher proportion of individuals walking and lower proportion of individuals feeding when the Road was closed as opposed to when it was open. However, this may be due to closures occurring more often during peak migration times.

FIGURE 6.3-2 AVERAGE PROPORTION OF EACH BEHAVIOUR TYPE OBSERVED

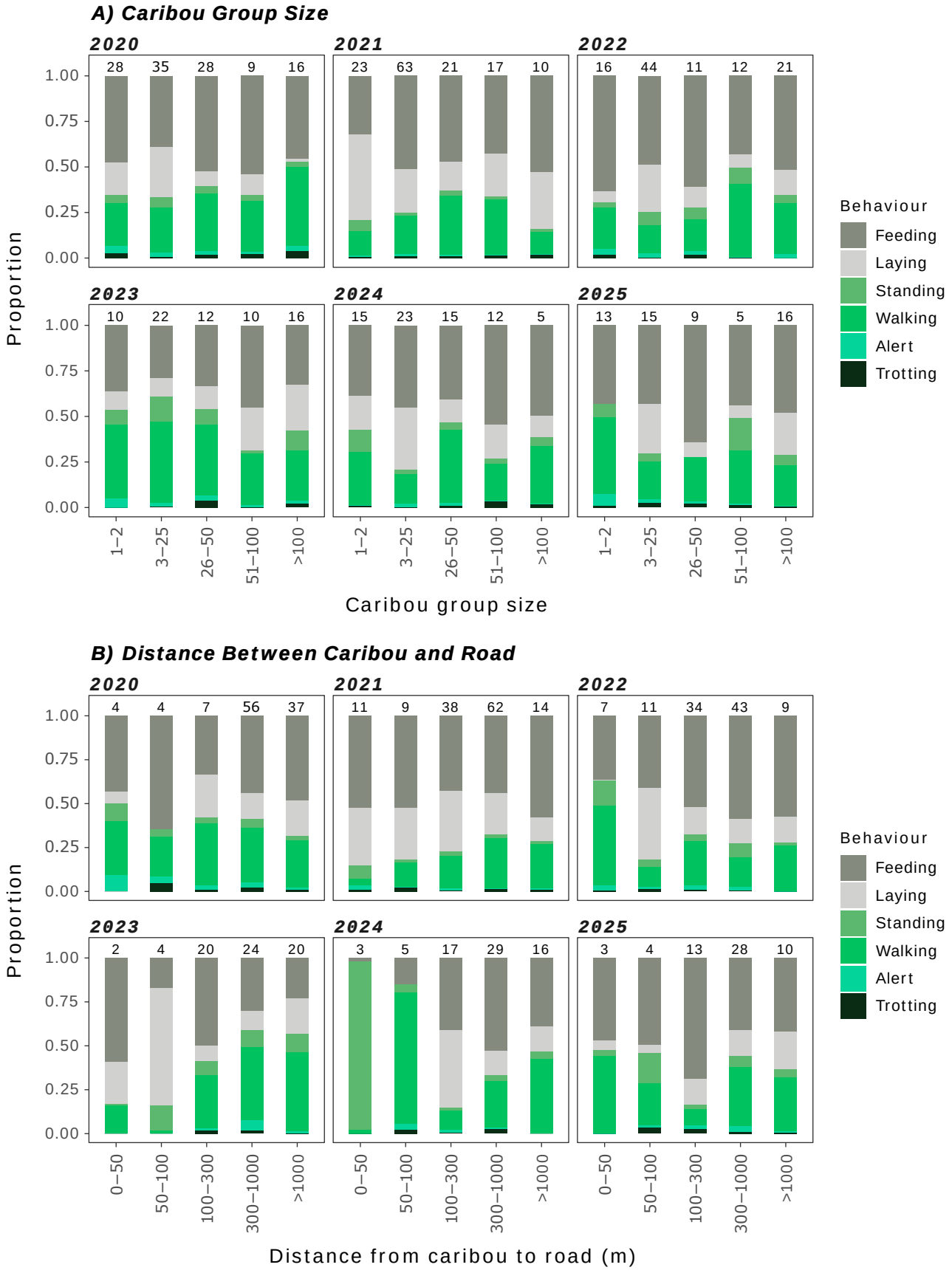


FIGURE 6.3-3 PROPORTION OF ALERT OR RUNNING CARIBOU BY TEMPERATURE, WIND SPEED AND DATE

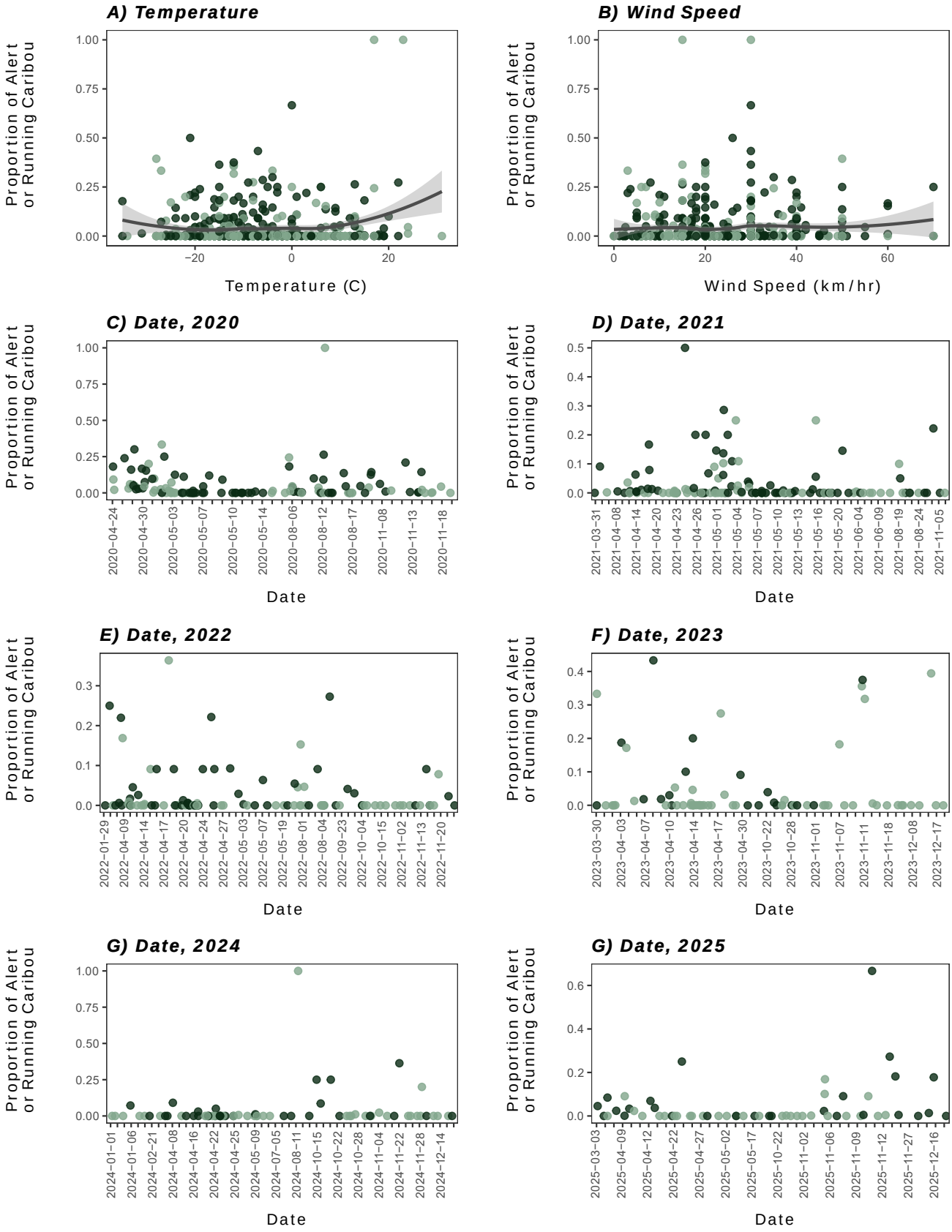
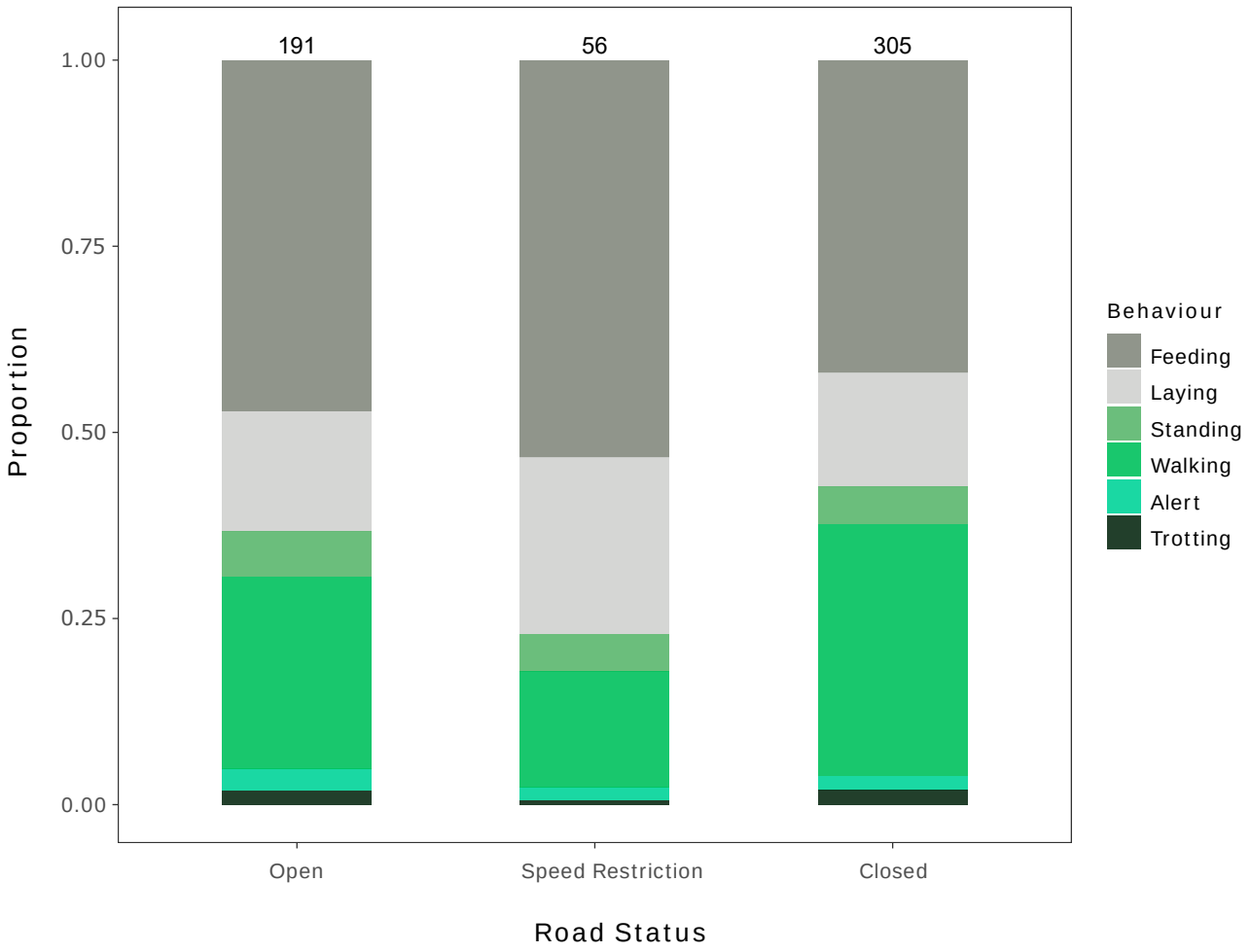


FIGURE 6.3-4 AVERAGE PROPORTION OF EACH BEHAVIOUR TYPE BY ROAD STATUS



Additionally, it should be noted that convoy surveys were included in the study (see Figure 6.3-4) and that these surveys always occurred while the road was closed. Convoy surveys, however, only accounted for 12% (37 from 2021 to 2025) of surveys completed during road closures and cannot entirely explain the differences depicted on Figure 6.3-4. This relationship is further explored in the statistical analysis results in Section 6.4.

6.3.5 SEASON AND SIDE OF THE ROAD (UPSTREAM/DOWNSTREAM)

The movement pattern for caribou in the area around the Complex is variable based on the season. During spring migration, the dominant direction of travel is from west to east, whereas in summer and during the fall migration, the dominant direction is from east to west. It was hypothesized that caribou behaviour may vary depending on whether the caribou had already crossed the road ("downstream" of the road) or whether they were anticipating crossing the road ("upstream" of the road). There does not appear to be observable differences in the proportion of response behaviour between upstream and downstream caribou groups. It does appear that the walking behaviour occurs at a higher rate on the upstream side of the road during spring and fall migration. These trends are further explored in the statistical analysis.

It is possible that caribou are hesitating to cross the Road but that once they cross the Road, they move away from the Road quickly. If this prediction is true, caribou would be observed close to the Road on the upstream side, and there would be fewer groups on the downstream side or downstream - side groups would be further from the Road, compared to the upstream groups. The results, however, show that groups of caribou were observed on both sides of the road (Figure 6.3-5). During the spring and fall migration, there was a greater number of groups on the upstream side of the road (west side in the spring and east side in the fall; Figure 6.3-5). The results suggest that caribou may tend to gather prior to crossing the road; however, this was not as evident as in the spring as in the fall. In comparison, during the summer, relatively equal numbers of caribou groups were observed on each side the road.

6.3.6 NUMBER OF DISTURBANCES

When larger proportions of individuals within a group responded to disturbance events, it took longer for the group as a whole to return to their baseline (pre-disturbance) behaviour when compared to groups with smaller proportions of responding individuals (Figure 6.3-6a). It appears that surveys with multiple disturbances did not consistently produce either a larger or longer response. Surveys with multiple disturbances varied from long-lasting full-group disturbances to shorter and partial -group responses.

The proportion of caribou displaying response behaviour when exposed to zero, one, or multiple disturbances is shown in the density plot on Figure 6.3-6b. The results suggest that the mean proportion of caribou displaying alert or running behaviour was low, with most observations recording no response even with multiple disturbances occurring during the survey. Additionally, there was no difference in the proportion of caribou displaying response behaviours between those not exposed to, exposed to a single, or exposed to multiple disturbances. Figure 6.3-6b shows an average proportion of response behaviours across the entire 30-minute survey; therefore, in some instances, the proportion of response behaviours may have been obscured by the large number of intervals with no response behaviour.

FIGURE 6.3-5 AVERAGE PROPORTION OF EACH BEHAVIOUR TYPE OBSERVED ON EAST AND WEST SIDE OF THE ROAD

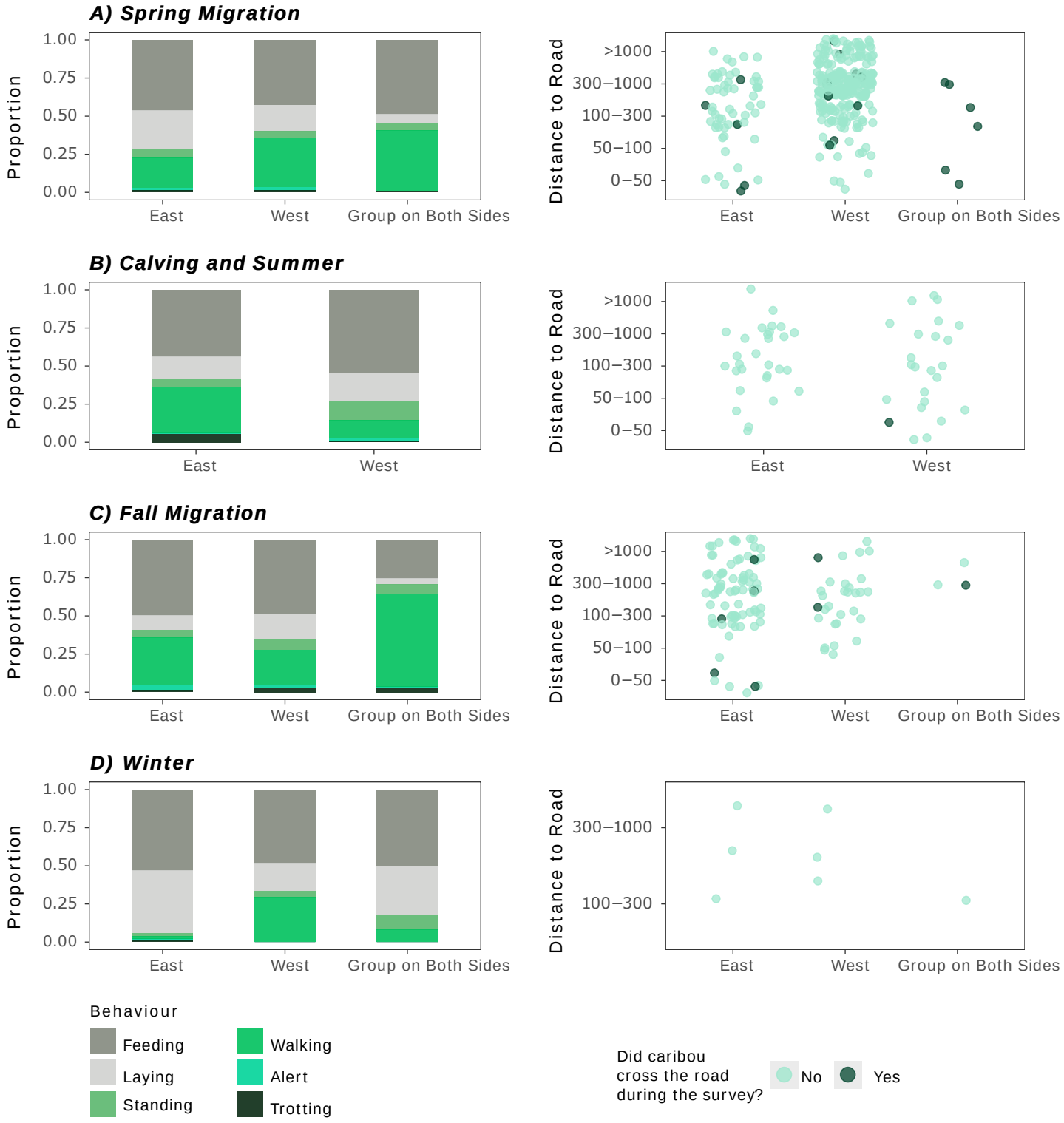
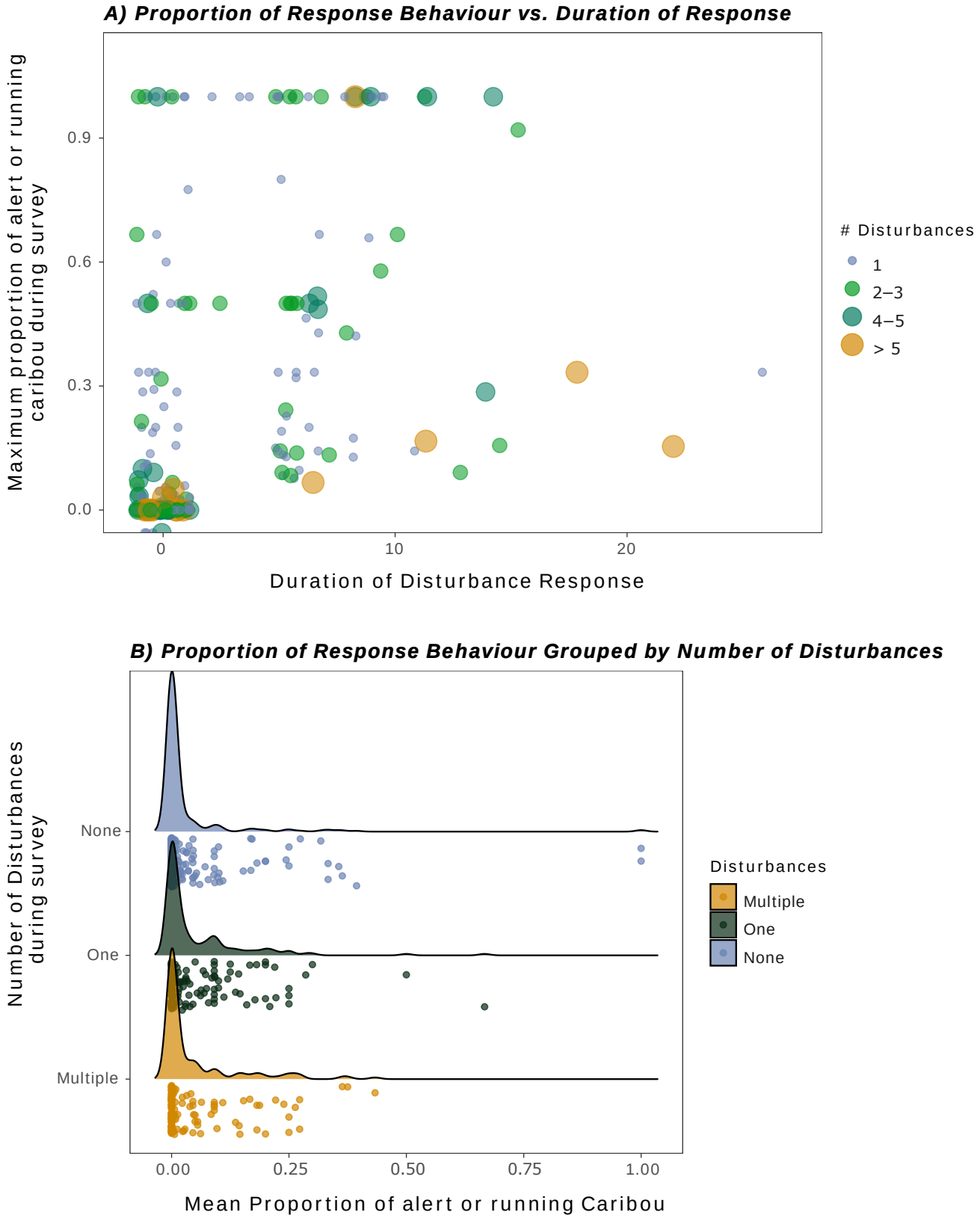


FIGURE 6.3-6 COMPARISON OF RESPONSE BEHAVIOURS BY NUMBER OF DISTURBANCES



6.3.7 RESPONSE TO DISTURBANCES

Although summarizing caribou behaviour survey data over the entire 30-minute survey allows for broad comparisons to be made, it may also allow for response behaviour to be obscured in an otherwise uneventful survey. To examine the response to disturbances within a survey, the proportion of response behaviours was plotted per 3-minute interval in each survey, as shown for a subset of surveys on Figure 6.3-7 (see Appendix E for all plots of all surveys). On Figure 6.3-7, the response behaviours of "alert" and "trotting or running" are combined to depict the total proportion of caribou exhibiting behaviour responses in any given time interval and plotted over time within the 30-minute survey. Disturbance events are denoted by a grey vertical bar, and spikes in response behaviours during or immediately following a disturbance suggest caribou are responding to the disturbance. Figure 6.3-7 suggests that when the road is open, caribou typically exhibited minimal response to disturbance, with alert or running behaviours occurring infrequently and, when present, limited to short lived spikes with rapid return to baseline behaviour.

6.3.8 DIRECTION OF CARIBOU TRAVEL

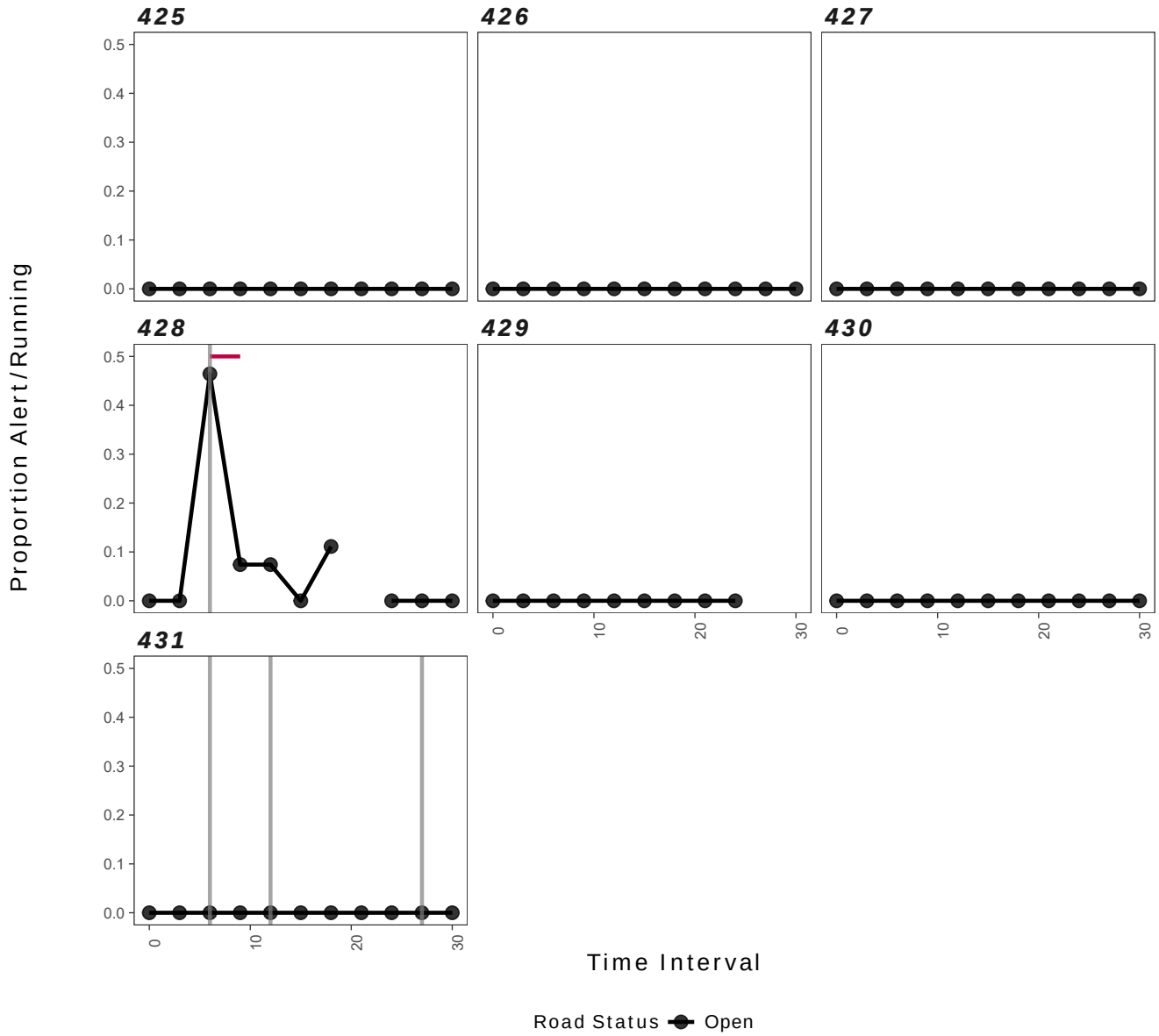
In response to the 2021 caribou behaviour analysis, the TAG suggested incorporating the direction caribou travelled in relation to the Road (i.e., if caribou were walking parallel or perpendicular to the Road). This is of particular interest as walking parallel to a perceived potential threat is a known response behaviour in some cervid species. Including this variable in combination with whether caribou were upstream or downstream of the dominant direction of travel was suggested to help determine if caribou were walking in response to a disturbance or not. In response to this suggestion, a field for direction of travel was added for the 2022 survey season. Note that this suggestion was made after spring migration in 2022, so data are only available for surveys in summer and fall of 2022, resulting in 41 entries for direction of travel in 2022, and all survey entries annually in 2023, 2024, and 2025 (198 surveys in total). Figure 6.3-8 shows boxplots of the mean and distribution of travel direction travel observed during each survey in relation to the side of the road and whether a disturbance occurred during the survey.

In 2025, caribou were most frequently observed stationary (40%; 23 groups), followed by moving parallel (36%; 21 groups), and perpendicular (24%; 14 groups) to the Road (Appendix D). This pattern is consistent with observations from 2022 to 2024 (Appendix D). Across all years (2022 to 2025), stationary behaviour was also most common (40%; 95 groups). When moving, caribou were more often recorded moving parallel to the Road (34%; 81 groups) than perpendicular (18%; 44 groups).

6.3.9 CONVOY DURATION AND SIZE

In response to the 2023 caribou behaviour analysis, the TAG suggested incorporating the number of vehicles in convoys and the duration of these conveys driving through while the Road is closed. This is of interest, as longer lasting disturbances or convoys with a larger number of vehicles may influence the caribou's response to the disturbance. As a result, convoy size data was collected in 2025, though timing of each convoy proved difficult due to logistical constraints. All convoys that were surveyed (n = 9) in 2025 are recorded in Table 6.3-1. Convoy variables, including convoy size and duration (where able to be collected), will be included in future analyses when increased data points are available to allow for sufficient modelling.

FIGURE 6.3-7 PROPORTION OF RESPONSE BEHAVIOUR DURING EACH SURVEY—EXAMPLE SUBSET



Note: See Appendix C for all surveys from 2020 - 2025.

FIGURE 6.3-8 AVERAGE PROPORTION OF WALKING CARIBOU BY DIRECTION, SIDE OF THE ROAD, AND DISTURBANCES

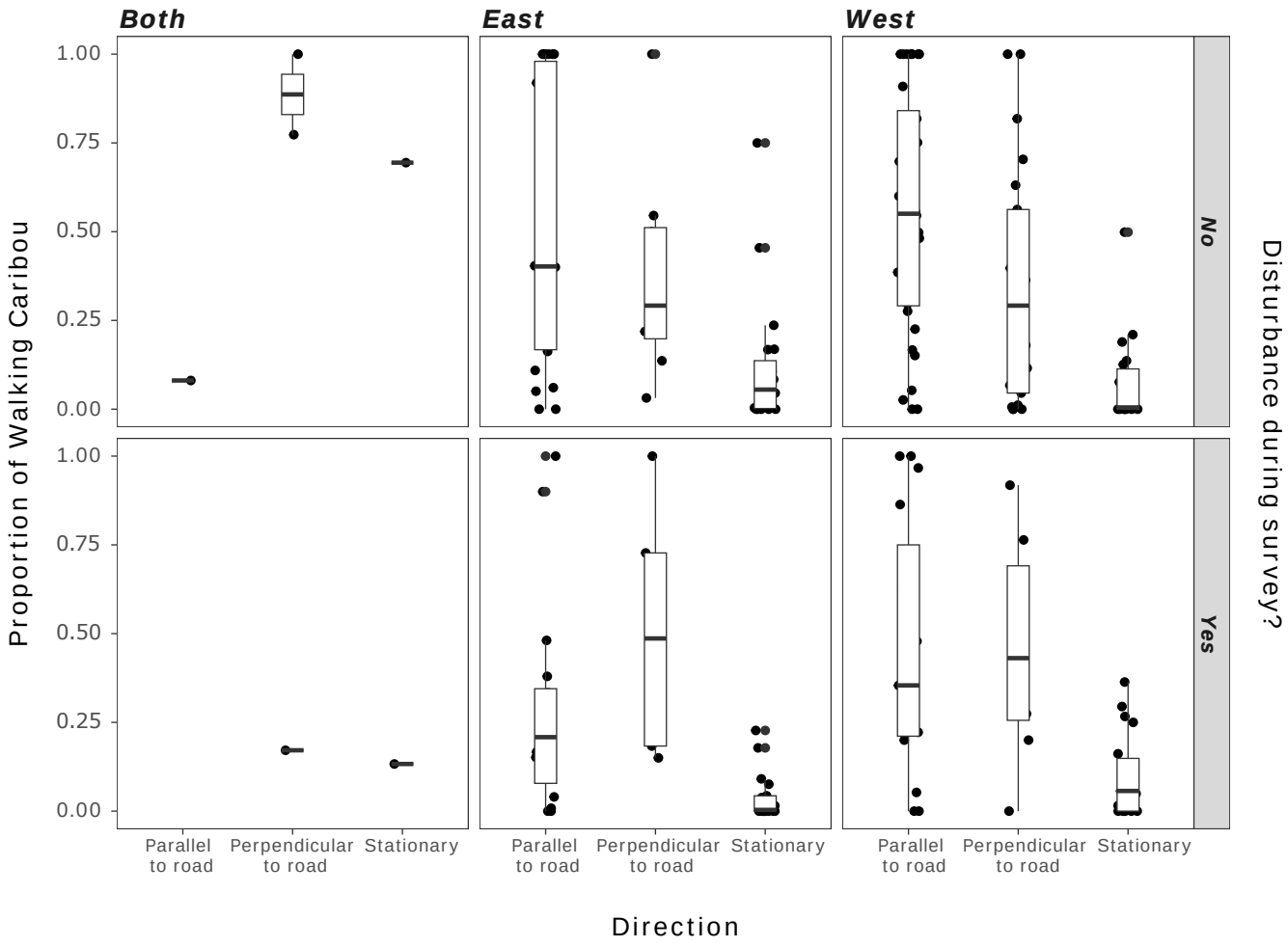


TABLE 6.3-1 VEHICLE COMPOSITION OF CONVOYS SURVEYED IN 2025

Date	Road	Direction of Travel	Light	Medium	Heavy	Total
AWAR						
22 Apr 2025	AWAR	North	3	0	0	3
27 Nov 2025	AWAR	North	3	0	0	3
WTHR						
12 Apr 2025	WTHR	South	3	1	0	4
14 Apr 2025	WTHR	South	4	1	0	5
28 Apr 2025	WTHR	North	4	0	0	4
6 May 2025	WTHR	South	4	7	0	11
31 Oct 2025	WTHR	North	-	-	-	-
15 Dec 2025	WTHR	North	4	1	0	5
16 Dec 2025	WTHR	North	4	0	0	4

Notes:
AWAR = All-Weather Access Road; WTHR = Whale Tail Haul Road; - represents data not available for this survey

6.4 STATISTICAL ANALYSIS RESULTS

6.4.1 MODEL FORMULATION

Initial results for the response behaviour model indicates that the distance of caribou to the Road was not a good predictor for response behaviour, regardless of how models were parameterized. Therefore, further models did not include this variable. The final models had many parameters, and it was difficult to attain model convergence. As a result, model variables that had little or no explanatory power and were not variables of interest were excluded from the models. The final model for proportion of response contained caribou group size, whether a disturbance occurred, and temperature. The final walking behaviour included caribou group size, whether a disturbance occurred, Road status, and the interaction between season and side of Road.

The 2025 response-behaviour model excluded the Road closure, season, and side-of-road covariates, because these variables did not show meaningful predictive ability for explaining variation in response duration. These variables were retained in the 2024 analysis to compare to the 2023 dataset; however, variables that no longer contributed substantively to model performance or interpretability were removed from the final 2025 model specification. The final model that used response behaviour as the dependent variable is presented in Table 6.4-1, the model that used walking behaviour as the dependent variable is displayed in Table 6.4-2, and the model that used duration of response as the dependent variable in Table 6.4-3.

TABLE 6.4-1 SUMMARY OF MODEL COEFFICIENTS AND SIGNIFICANCE LEVELS FOR THE RESPONSE BEHAVIOUR MODEL

Effect Type	Variable	Estimate	Standard Error	*p*-value	Significance
Fixed	Intercept	0.002	0.001		
	Caribou group size			<0.001	***
	1–2	Reference	Reference		
	3–25	0.081	0.041		
	26–50	0.04	0.023		
	51–100	0.011	0.007		
	>100	0.014	0.008		
	Disturbance during interval	7.103	0.34	<0.001	***
	Temperature	1.032	0.016	0.04	**
Random	Survey ID	3.261			

Notes:
> = greater than; < = smaller than; *p*-value = probability value
Highly statistically significant *p*-values <0.001 are indicated with two asterisks. Statistically significant values <0.05 and >0.001 are indicated by a single asterisk. Grey shaded cells indicate values that are not applicable or not estimated.

TABLE 6.4-2 SUMMARY OF MODEL COEFFICIENTS AND SIGNIFICANCE LEVELS FOR THE RESPONSE AND WALKING BEHAVIOUR MODEL

Effect Type	Variable	Estimate	Standard Error	*p*-value	Significance
Fixed	Intercept	0.759	0.574		
	Caribou group size			<0.001	***
	1–2	Reference	Reference		
	3–25	0.058	0.028		
	26–50	0.029	0.017		
	51–100	0.015	0.009		
	>100	0.004	0.003		
	Disturbance during interval	1.668	0.053	<0.001	***
	Road status (open)	0.378	0.134	0.007	***
	Season			–	–
	Summer and calving	Reference	Reference		
	Fall migration	1.261	0.952		

Effect Type	Variable	Estimate	Standard Error	*p*-value	Significance
	Spring migration	0.196	0.16		
Fixed *(cont'd)*	Winter	0.101	0.244		
	Side of road			-	-
	East	Reference	Reference		
	West	0.106	0.105		
	Interaction (summer and calving × west)	Reference	Reference	0.004	**
	Interaction (spring migration × west)	54.017	62.753		
	Interaction (fall migration × west)	4.746	5.821		
	Interaction (winter × west)	7.989	24.161		
Random	SD for random effect	3.303			

Notes:
< = smaller than; *p*-value = probability value; Road = All-Weather Access Road and Whale Tail Haul Road; SD = standard deviation
Highly statistically significant *p*-values <0.001 are indicated with three asterisks. Statistically significant values <0.05 and >0.001 are indicated by a single asterisk. No data values are indicated by a dash (–). Grey shaded cells indicate values that are not applicable or not estimated.

TABLE 6.4-3 SUMMARY OF MODEL COEFFICIENTS AND SIGNIFICANCE LEVELS FOR DURATION OF RESPONSE MODEL

Variable	Hazard Ratio	95% Confidence Interval	*p*-value	Significance
Number of Disturbances[a]	0.91	0.84–0.99	0.018	***
Caribou Group Size			0.181	**
Caribou Group Size 1–2	Reference	Reference		
Caribou Group Size 3–25	0.77	0.56-1.07		
Caribou Group Size 26–50	0.72	0.48-1.09		
Caribou Group Size 51–100	0.78	0.48-1.24		
Caribou Group Size >100	0.60	0.39-0.91		

Notes:
> = greater than; % = percent; < = smaller than; *p*-value = probability value
Highly statistically significant *p*-values <0.001 are indicated with three asterisks. Statistically significant values <0.05 and >0.001 are indicated by a single asterisk. Grey shaded cells indicate values that are not applicable or not estimated.
[a] Number of 3-minute intervals during which a disturbance occurred. The same source of disturbance may occur over several intervals.

The statistics presented in Tables 6.4-1 and 6.4-2 include the type of term in the model (fixed versus random effects) and the variable estimate (odds ratio), which can be interpreted as the expected effect on the dependent variable as the independent variable changes. Significant probability values (*p*-values; <0.05) for variables with more than two categories were followed up with pairwise post-hoc tests to determine which groups were different. A *p*-value of less than 0.05 indicates that the variable is an important determinant of the response, as it indicates that there was a less than 5% probability that we would see an association as strong as we would if there was no relationship.

6.4.2 EFFECT OF DISTURBANCES

Both the response model and walking model indicate that whether a disturbance occurred during an interval was a significant predictor of the proportion of animals that exhibited a response behaviour (response behaviour model estimate = 7.103; walking model estimate = 1.668; both p <0.001). In the model for response behaviour alone, the odds ratio is 7.1, which indicates that the odds of whether a response behaviour will occur in intervals containing a disturbance—averaged across group size and temperature—are 7.1 times higher than intervals without a disturbance (see Table 6.4-1). In the model where walking behaviour was included, there is an odds ratio of 1.67, which indicates that the odds are 1.67 times higher that this behaviour will be exhibited in intervals where a disturbance has occurred (see Table 6.4-2). This indicates that walking may be less associated with disturbance than the other response behaviours.

6.4.3 EFFECT OF GROUP SIZE

The model in Table 6.2-1 indicates that caribou group size was significantly associated with the proportion of caribou exhibiting response behaviour. Post-hoc pairwise test results are provided on Figures 6.4-1 and 6.4-2: the shaded grey bars indicate the 95% confidence intervals around the estimates of the average proportion of caribou exhibiting response behaviour, the points indicate the means (averaged over whether a disturbance occurred), and the green arrows indicate the pairwise comparisons among groups. The areas where these arrows do not overlap, indicate a significantly different response between the groups.

For the response behaviour model, the smallest group size (one to two individuals) had the largest proportion of response behaviour to disturbances, showing a higher likelihood of responding to a disturbance (Figure 6.4-1). Increasing group size had smaller estimated effects, indicating that the likelihood of responding generally decreased as group size increased.

All other pairwise comparisons were not significant. Similar to the response model, the smaller group sizes had the largest proportion of response and walking behaviour in the walking model, and the estimated effects became smaller as group size increased (see Table 6.4-2; Figure 6.4-2). The proportion of response and walking behaviour continued to decrease as the group size increased.

FIGURE 6.4-1 PAIRWISE COMPARISONS OF AVERAGE PROPORTION OF CARIBOU EXHIBITING RESPONSE BEHAVIOUR AMONG CATEGORIES OF CARIBOU GROUP SIZE

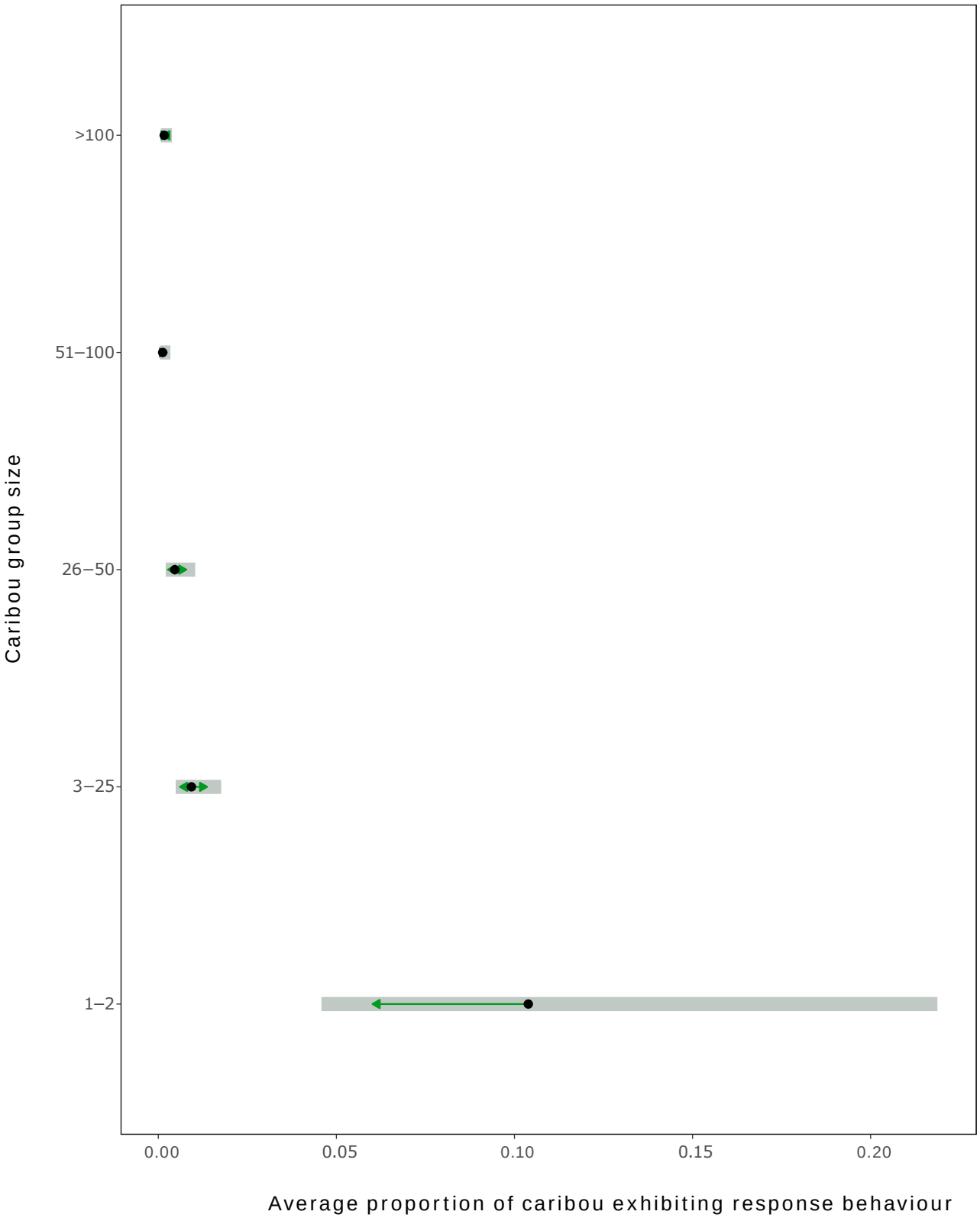
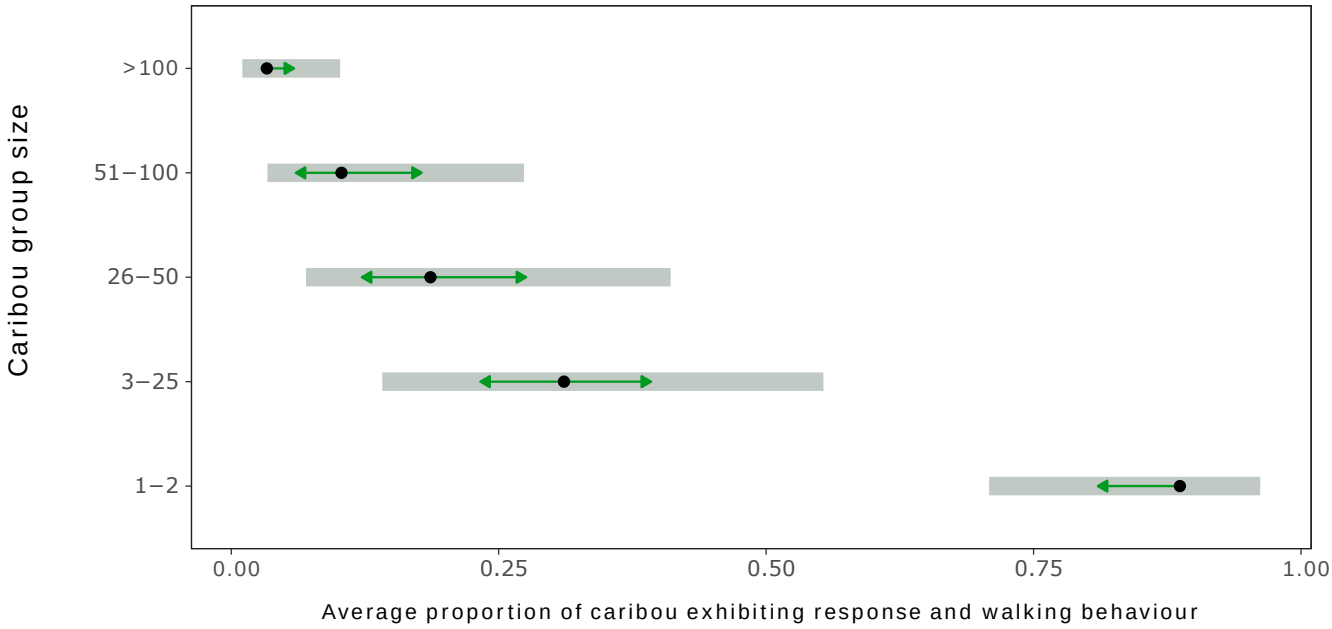
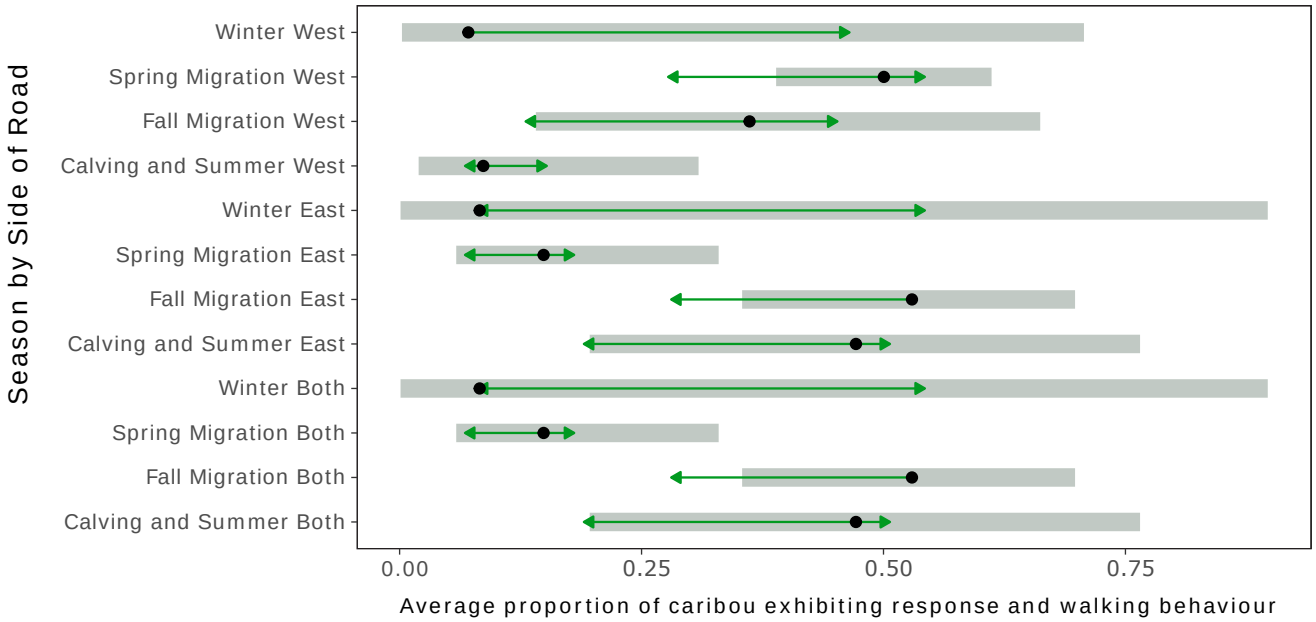


FIGURE 6.4-2 PAIRWISE COMPARISONS OF AVERAGE PROPORTION OF CARIBOU EXHIBITING RESPONSE AND WALKING BEHAVIOUR AMONG CATEGORIES OF CARIBOU GROUP SIZE AND ROAD STATUS





6.4.4 EFFECT OF ROAD CLOSURE STATUS

Road closure was a significant predictor in the walking model, where response and walking behaviours were combined (see Table 6.4-2). In the walking model, the proportion of caribou showing a walking or response behaviour was higher when the Road was closed (p = 0.007). However, exploratory analysis suggests that caribou responded similarly to disturbances regardless of whether the Road was open or closed (see Figure 6.3-4). This may be because the analysis included convoy surveys, which occurred during Road closures and had the potential to bias the results. Typically, there are fewer disturbances during Road closures, which may also reflect the timing of closures coinciding with periods when caribou are most abundant in the area, such as during migration, as indicated by walking behaviour.

As mentioned in Section 6.4-1, statistical testing indicated that road status did not meaningfully improve the response behaviour model and was removed during model selection because it was not a strong predictor of overall response behaviour.

6.4.5 EFFECT OF SEASON AND SIDE OF THE ROAD (UPSTREAM/DOWNSTREAM)

Season and side of the Road variables were significant in the walking model, but were not included in the final response behaviour model following model selection (see Table 6.4-2). Walking model results indicate that during spring migration, caribou are walking less on the east side of the Road compared to the west side of the Road (pairwise post-hoc p-value = 0.004). Since the west side is upstream of the typical direction of movement in the spring, and downstream in the fall, another way to interpret this result is that caribou tend to walk more on the upstream side of the Road during the spring migration.

Pairwise comparisons found that the average proportion of caribou exhibiting response and walking behaviour was significantly higher on the upstream (west) side of the Road during spring migration (see Figure 6.4-2b). In contrast, during the summer calving period, the average proportion of caribou exhibiting response and walking behaviour was significantly higher on the upstream (east) side of the Road compared to the downstream side of the road in the same season (see Figure 6.4-2b). The pairwise analysis indicated that there was no significant difference in proportion between the upstream (east) side and downstream (east) side during fall migration. This difference in walking behaviour during fall may also be attributed to increased movement during caribou migration periods.

6.4.6 EFFECT OF TEMPERATURE

The final response model indicated that temperature is a small but statistically significant predictor of the proportion of caribou showing response behaviour (estimate = 1.032; p = 0.04; see Table 6.4-2). This result indicates that warmer temperatures were associated with a slightly higher likelihood that caribou would show any form of behavioural response. Exploratory figures show that the proportion of caribou showing response behaviour remains consistent until approximately 10°C, at which point it increases (see Figure 6.3-3a). Increase in caribou response behaviour above 10°C may be driven by two groups displaying 100% response behaviour at approximately 20°C. It should be noted that this increased response may also be related to increased insect activity, which causes caribou to move at a higher rate to avoid insects (Mörschel and Klein 1997).

6.4.7 DURATION OF RESPONSE

Table 6.3-4 provides the model summary for the duration of response model. The median number of survey intervals with a disturbance was 0, with a mean of 1, and a maximum of 9. The final model included the number of disturbances that occurred during the survey and the group size. The estimated term (the hazard ratio) for the number of disturbances being less than one indicates a longer duration of response for increasing numbers of disturbances. The model also indicates that larger groups of animals took significantly longer to return to normal, compared to the smallest group size (one to two animals).

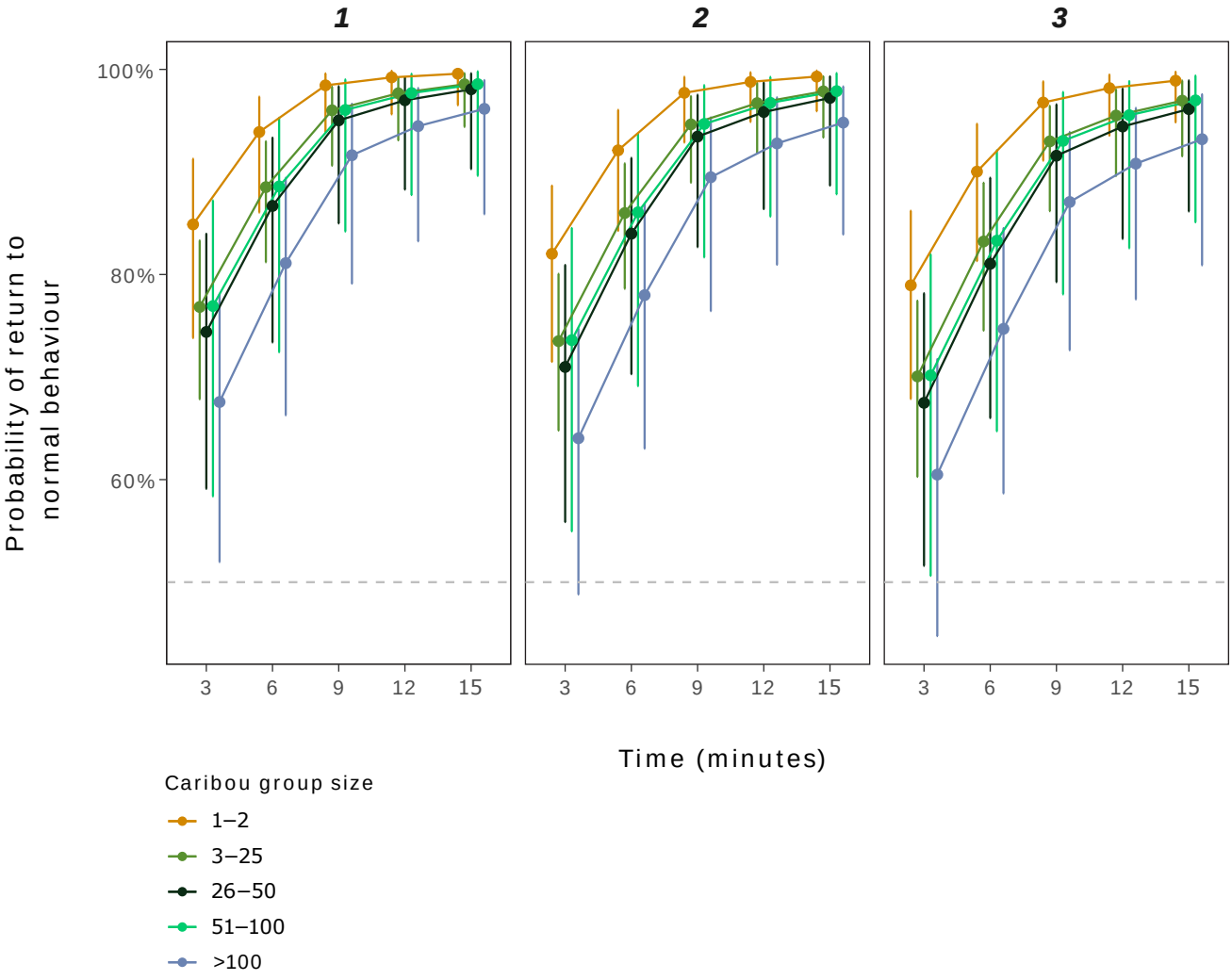
Cox's proportional hazards modelling using all 5 years of data indicates that following a single disturbance event, the probability of returning to normal behaviour within 6 minutes is 90% and 99% after 15 minutes (Table 6.4-4). The probability of returning to baseline behaviour within 6 minutes is lower for groups larger than 100 individuals, and in surveys with more than one disturbance—83% for intervals with 2 to 3 disturbances and 49% for groups with >100 individuals (Table 6.4-4; Figure 6.4-3).

TABLE 6.4-4 PROBABILITY OF RETURNING TO NORMAL BEHAVIOUR WITHIN A CERTAIN TIME BY GROUP SIZE AND NUMBER OF DISTURBANCES

Variable	Time to Return to Normal Behaviour			
	3 Minutes	6 Minutes	9 Minutes	15 Minutes
Caribou Group Size				
1–2	82% (70%, 90%)	87% (75%, 93%)	98% (87%, 100%)	-
3–25	76% (66%, 83%)	86% (78%, 91%)	91% (82%, 95%)	97% (89%, 99%)
26–50	65% (46%, 77%)	86% (69%, 94%)	97% (81%, 100%)	97% (81%, 100%)
51–100	73% (49%, 86%)	92% (71%, 98%)	96% (74%, 99%)	-
>100	64% (45%, 76%)	79% (62%, 89%)	90% (72%, 96%)	93% (75%, 98%)
Number of Survey Intervals with a Disturbance				
1	75% (67%, 81%)	90% (83%, 94%)	98% (93%, 100%)	99% (94%, 100%)
2–3	74% (62%, 82%)	83% (73%, 90%)	92% (81%, 96%)	97% (83%, 99%)
>3	70% (52%, 81%)	79% (63%, 88%)	86% (71%, 93%)	93% (79%, 98%)

Notes:
> = greater than; % = percent
Numbers represent the estimated proportion of groups returning to baseline behaviour within the time interval and the 95% confidence intervals.

FIGURE 6.4-3 CUMULATIVE PROBABILITY OF RETURN TO NORMAL BEHAVIOUR BY GROUP SIZE AND NUMBER OF DISTURBANCES



6.4.8 STATISTICAL ANALYSIS SUMMARY

The results of the statistical analysis provide support for the key hypothesis that caribou tend to respond to disturbances; however, they also indicate that distance to the Road was not a significant predictor of response. The proportion of caribou responding was linked to disturbance occurring within an interval for both walking and response behaviours, with caribou significantly more likely to be walking on the upstream side of the Road. The results indicate that the walking behaviour should not be excluded from the analysis, as the inclusion of a separate model including walking behaviour allows for the detection of trends that are not apparent with the response behaviour-only model.

These results should be interpreted with caution due to the high number of variables and the variability in the behaviours observed. Nevertheless, it should be noted that the results from this analysis are highly similar to results from previous years, indicating that the effects remain stable from year to year. These results are also consistent with other surveys recorded on barren-ground caribou during the post-calving and early summer periods, which indicate that caribou behavioural responses to all-season haul roads tend to taper off beyond approximately 500 m (Curatolo and Murphy 1986; Dyer et al. 2001; Johnson and Lawhead 1989). However, zone-of-influence estimates are highly variable in the literature, and this method of data collection is not designed to estimate the zone of influence, particularly given the observability bias noted in Section 6.3-1. In addition, caribou responses to roads and infrastructure have previously been linked to increased harvest of caribou from roadways (Plante et al. 2018; Russell and Gunn 2019), a factor which was not included in this analysis.

7. SUMMARY

The caribou behaviour monitoring data collected in 2025 were combined with previous survey data (2020 to 2024) to determine factors that impact caribou behaviour near the Complex and to document caribou response to stressors. All results outlined in this report use all 6 years of data, unless otherwise stated.

The number of surveys completed in 2025 was lower than in 2024 (58 surveys completed in 2025 and 70 surveys completed in 2024), with surveys consistently completed when caribou were in the mine area around the Complex. Caribou were not present for surveys to be completed in all seasons of 2025, with no surveys being completed in the summer season. No notable deficiencies were noted in terms of the survey effort in 2025. Furthermore, 2025 surveys were well distributed across variables of interest, including group size, presence of disturbances, season, and road condition. Groups of caribou were observed on both the east and west sides of the road in all seasons surveyed, but groups were more commonly observed on the west side during spring migration and on the east side during fall migration (i.e., upstream of the dominant direction of travel). This finding is consistent with previous years' results.

In 2025, caribou predominantly exhibited non-response behaviours during surveys; these were standing, laying, feeding, and walking. Across all 6 years of data, 49% of surveys contained a disturbance event. Following a disturbance event, the proportion of response behaviours in a group of caribou was significantly higher. Groups generally returned to baseline behaviours within 6 minutes after a disturbance. Both the number of disturbances experienced, and the caribou group size influenced the amount of time it took for caribou to return to baseline behaviour. Cox's proportional hazards modelling suggests that following a single disturbance, 90% of groups would return to baseline behaviour after 6 minutes and 98% of groups would return to baseline behaviour after 9 minutes.

Results from GLMMs and exploratory analyses indicated that group size and the distance of caribou to the Road were not correlated with the number of road crossings observed. In addition, the distance of caribou to the Road and the road status were not significant predictors of the proportion of caribou that would display response behaviour. Instead, the proportion of caribou exhibiting response behaviours was statistically related to differences in caribou group size, the occurrence of a disturbance event, and the temperature.

During the survey, the proportion of caribou displaying walking behaviour was influenced by a disturbance over an interval similar to what was seen in the response behaviour model. This reinforced the finding from previous annual analyses that walking may be a moderated response to disturbance for caribou. A positive correlation was found between the Road being closed and caribou displaying walking behaviour, which may reflect the fact that the Road is commonly closed when caribou are moving through the area (rather than foraging or resting). Additionally, it was found that caribou were more likely to be walking on the upstream side of the Road during the spring migration.

Based on commitments in the TEMP, the overall objective of the Caribou Behaviour Monitoring Program was to determine if caribou activity budgets changed with distance from the Complex, and to document caribou response to stressors. The primary hypothesis of this study was that caribou closer to the road would demonstrate a stronger response to vehicle disturbances. Overall, the results of the statistical analysis provided mixed support for this hypothesis, as caribou tended to respond to disturbances. However, response behaviour did not vary with distance from the Road. The analysis also found that caribou typically returned to baseline levels within approximately 6 minutes after their response to the disturbance (for one disturbance). This indicates that caribou behaviour returns to baseline relatively quickly following a disturbance. There was no clear shift in response behaviour depending on time of the year.

The updates applied to the survey protocol in previous years were helpful to improve the overall quality of the data and the precision of the analyses. Notably, even with these updates, the trends in the results were highly consistent between the 6 years of data, indicating that observed behavioural patterns have been stable over time.

Conclusion

Across six years of behavioural monitoring at the Meadowbank Complex, results consistently show that while caribou do respond to discrete disturbance events, these responses are generally short-lived, with most groups returning to baseline behaviour within roughly six minutes after a single disturbance. Behavioural patterns—including the distribution of groups relative to the Road, the predominance of non-response behaviours, and the stability of activity budgets across seasons—have remained consistent over time. Crucially, neither distance to the Road nor road status meaningfully predicted the magnitude of behavioural response, providing mixed support for the hypothesis that proximity increases sensitivity to disturbance. Walking behaviour was observed to increase when the Road is closed to mine traffic, though disentangling the inherent link between Road status and presence of caribou migrating through the Complex area is difficult as a result of implementation of mitigation measures to reduce potential impacts on caribou movement. Instead, group size, temperature, and the occurrence of a disturbance were the primary drivers of variation in response behaviours. Overall, the multi-year dataset indicates that caribou near the Complex exhibit predictable, resilient behavioural responses, with limited evidence that mine roads materially alter movement or behaviour beyond short-duration disturbance effects.

8. REFERENCES

Agnico Eagle (Agnico Eagle Mines Limited). 2025. *Agnico Eagle Meadowbank Division Terrestrial Ecosystem Management Plan (TEMP), Version 9*.

Burnham, K.P., and D.R. Anderson. 2004. "Multimodel Inference: Understanding AIC and BIC in Model Selection." *Sociological Methods & Research* 33: 261–304.

Curatolo, J.A., and S.M. Murphy. 1986. "The Effects of Pipelines, Roads, and Traffic on the Movements of Caribou, *Rangifer tarandus*." *The Canadian Field-Naturalist* 100 (2): 218–224.

Dyer, S., J. O'Neill, S. Wasel, and S. Boutin. 2001. "Avoidance of Industrial Development by Woodland Caribou." *The Journal of Wildlife Management* 65 (3): 531–542. Accessed January 2026. Retrieved from: https://doi.org/10.2307/3803106.

Government of Nunavut Department of Environment. 2021. *Review of Caribou Group Size Data for the Meadowbank All-Weather-Access-Road (AWAR) and Whale Tail Haul Road (HR): Progress Report to the TAG*. Presentation delivered to the Terrestrial Advisory Group in February 2021.

Government of Northwest Territories Department of Environment and Natural Resources. 2017. "Caribou Behaviour Monitoring Field Protocols." Unpublished document. Yellowknife, NT.

Johnson, C.B., and B.E. Lawhead. 1989. *Distribution, Movements, and Behavior of Caribou in the Kuparuk Oilfield, Summer 1988.* Prepared by Alaska Biological Research, Inc. for ARCO Alaska, Inc. and the Kuparuk River Unit. Anchorage, AK.

Mörschel, F.M., and D.R. Klein. 1997. "Effects of Weather and Parasitic Insects on Behavior and Group Dynamics of Caribou of the Delta Herd, Alaska." *Canadian Journal of Zoology* 75 (10): 1659–1670.

Nagy, J.A., and M.W. Campbell. 2012. *Herd Structure, Movements, Calving Grounds, Activity Periods, Home Range Similarity, and Behaviours of Migratory and Tundra-Wintering Barren--Ground Caribou on Mainland Nunavut and Eastern Mainland Northwest Territories, Canada.* Technical Report Series 2012—No. 01-12. Nunavut Department of Environment, Wildlife Research Section.

Plante, S., C. Dussault, J.H. Richard, and S. Cote. 2018. "Human Disturbance Effects and Cumulative Habitat Loss in Endangered Migratory Caribou." *Biological Conservation* 224: 129–143.

R Core Team. 2024. *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing. Vienna, Austria. Accessed January 2026. Retrieved from: https://www.R-project.org/.

Russell, D., and A. Gunn. 2019. *Vulnerability Analysis of the Porcupine Caribou Herd to Potential Development of the 1002 Lands in the Arctic National Wildlife Refuge, Alaska*. Prepared for Environment Yukon, Canadian Wildlife Service, and GNWT Department of Environment and Natural Resources.

APPENDIX A DETAILED METHODS FOR CARIBOU BEHAVIOUR SURVEYS



AGNICO EAGLE

Meadowbank Gold Mine

Caribou Behaviour Monitoring

February 2022

Project No.: 0656774

The business of sustainability

ERM

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APPENDIX A MEADOWBANK GOLD MINE: CARIBOU BEHAVIOUR MONITORING DATA SHEET

1. INTRODUCTION

Agnico Eagle Mines Ltd. (Agnico Eagle) would like to determine whether caribou behaviour changes in response to mine activities. The purpose of caribou behaviour surveys is to provide information to characterize the effects of the physical road and mine-related activities on caribou behaviour, including the All Weather Access Road (AWAR) and Haul Road.

The planned monitoring program is designed to collect data on caribou behaviour using standardized, scientifically-defensible methods. The data will be used to monitor Project effects.

1.1 Objectives

Following discussions with the Kivalliq Inuit Association and Government of Nunavut during the spring of 2021, the objectives of the behaviour monitoring program for caribou have been updated to the following:

- Evaluate the baseline behaviour of caribou (behaviour in the absence of disturbance);
- Evaluate the response of caribou to disturbances;
- Compare the behaviour of caribou between the following categories, if there is sufficient data:
    1) in large vs. small groups,
    2) near vs. far from the road,
    3) when the road is open vs. closed,
    4) east vs. west of the road, (upstream and downstream), and
    5) spring migration vs. summer and fall periods.

2. STUDY AREA

The study area for behaviour monitoring is anywhere that caribou may interact with the mine, including the All Weather Access Road (AWAR), the Meadowbank Mine site, Whale Tail site and the Haul Road connecting Meadowbank to Whale Tail.

3. STANDARD OPERATING PROCEDURES

The purpose of caribou behaviour surveys is to provide information to characterize the effects of the physical road and mine-related activities on caribou behaviour, including the All Weather Access Road (AWAR) and Haul Road. The overall method for the surveys is to identify caribou groups visible from the road, to select some groups for observation, and to record the behaviour of individuals in groups of different sizes including their behaviour without any disturbance and responses to both mine-related activities and natural factors.

Notes to guide the work include:

- Systematic surveys will be conducted along all Project roads during spring, summer and fall periods.
- The survey team will consist of a driver/observer and a second observer when available.

Surveys should be performed:

- During spring, summer and fall when caribou may be in the Project area,
- Of caribou at various distances from the road and group sizes, and
- If surveying effects of a convoy, conduct two surveys, one at least an hour before convoy deployment so that a pre-disturbance measurement can be made, and a second survey during the convoy passing by caribou.

3.1 General Field Data

For each survey day, the appropriate general field data will be recorded onto field data sheets supplied in Appendix A and B. A new data sheet will be used for each survey, including additional sheets as necessary to record all observations. General information includes:

- Survey date and start and end times.
- Field personnel (full names on the data sheet header and initials thereafter).
- Weather conditions during and prior to sampling (e.g., snow in the last 24 hours, current wind conditions).
- Site description: provide location and description (GPS coordinates, road name and distance marker).
- Photographs or video (if possible):
    - Take a photo of the caribou every time an observation is recorded so that the observations can be verified by a biologist.
    - For any photographs taken, record the picture IDs in the comments field on the field data sheet.
    - Write descriptions of any photos taken for specific reasons.
- General observations/notes of the environment/sampling procedures.
- Any deviation from the SOPs outlined below.

Note: When in doubt take pictures and make field notes explaining the situation, your response or consequent changes in methods. It is better to have more data/notes than not enough when interpreting the results later on.

3.2 General Equipment List

- A GPS unit with waypoints of road km markings.
- Field data sheets (Appendix A and B), clipboard, pencils, or iPad with data form.
- A timer capable of alarm setting for repeat time intervals (i.e., can be set to go off every three minutes, like a smart phone).
- Binoculars or spotting scope.
- Compass (or use compass function on GPS unit).
- Portable weather station (temperature and wind speed).
- Camera.
- Rangefinder.

3.3 Field Methods

3.3.1 Group Selection

The survey day will begin with a reconnaissance survey to determine how many caribou groups are present near the road, how large they are, and where they are. This will be accomplished by driving from the mine site along the road and noting relevant information about the groups and their sizes along the way (using the standard, tablet-based road survey form). Observers will preferentially choose groups to survey to across group sizes and distances from the road. Ideally, caribou would be sampled in an even distribution across these variables and along the AWAR and Haul Road. However, the nature of caribou and field sampling mean that observers may need to survey what caribou are available, rather than what is “ideal”.

Allow approximately one hour to survey each group. If the length of the survey day permits all groups to be surveyed then they should all be surveyed. If there are more groups to survey than the time in the day, then do the following:

1. Look at how many of each group size (bullet list below) have been surveyed to date. If one of them is under-represented and there is a group of that size on the road, then go survey that group. If there is more than one group of that size, choose it randomly using the procedure in step 4.
    - 1 or 2 caribou
    - 3 to 25 caribou
    - 26 to 50 caribou
    - >50 caribou
2. During 2020, few groups of caribou within 300 m of the road were observed or sampled. Preferentially choose groups of caribou within 300 m of the road, with a soft target of approximately 1/3 of samples in this area.
3. If any Project-tolerant caribou are observed (e.g., caribou observed near the road or mine site for more than 72 hours in summer and 48 hours in other seasons; TEMP 2020), then select these animals for sampling. In Appendix A data sheet, record that the group is Project tolerant in the notes field.
4. If there are multiple groups available, choose groups to fill in an even distribution of group sizes and distances from roads.

Record all caribou groups observed during the reconnaissance survey in the standard, tablet-based survey form and submit that data along with the results of behaviour monitoring.

3.3.2 Selection of an Observation Site

Find a safe parking location and follow site safety protocols. The observation location may be the vehicle itself or a safe location off the road. If observers exit the vehicle, the observation location should be chosen where observer activity is not likely to influence caribou behaviour and where the observer can remain comfortable for a period of approximately 45 minutes without needing to move. Ideally, the vehicle should be stopped a minimum of ~250-300 m from the caribou – adapt this distance as needed. If the animals are staring at the truck or moving away, then the truck is too close.

3.3.3 Data Recording

Allow 15 minutes between arrival and the time at which behavioural observations begin. This is to allow animals to return to behaviour that may have been interrupted by the arrival of observers. In the time before recording behaviour, fill in the top portion of the form with location, weather, and group size information.

After 15 minutes, begin recording data in the form in Appendix A. The start time to record is the time that observations begin.

3.3.3.1 Location

Location: Collect a waypoint of the location from which the observations will be made. Note the waypoint number and the UTM coordinates on the data sheet.

Road Status: If observing caribou on a road, record whether the AWAR or Haul Road are open or closed.

Distance from observer to caribou: Estimate the distance to the group using a laser rangefinder and, using a compass or the GPS unit compass feature, record the bearing (0° to 360°) to the group being observed. If the group of caribou is large and spread over a considerable distance from the road, estimate the distance to nearby caribou and the caribou furthest away that will be sampled. If some caribou in the group are too far away to sample, then do not include them in the distance estimate.

Distance from road to caribou: If caribou are closer to the road than to the observer, as is the case when the observer vehicle is stopped at a distance, visually estimate the distance from the road to the group.

East vs. West: Note if the group is on the east or west side of the road. At the end of the 30 minute observation period return to the top of the form and record (Y or N) if the group crossed the road during the survey period. If monitoring at the mine site or Whale Tail, leave this section blank.

Direction of Travel: Note if caribou are moving parallel to the road, perpendicular to the road, or are stationary.

3.3.3.2 Weather Conditions

Use the portable weather station to record:

- Air temperature;
- Wind speed;
- Wind direction;
- Precipitation; and
- Humidity (if the weather station has this function).

3.3.3.3 Road Structure

At the location of the caribou group, record the road characteristics:

- Height of the road above the tundra (m);
- Slope of the road side (with of the slope in m);
- Approximate height of snow bank (m); and
- Any structures, such as bridges, present.

3.3.3.4 Caribou Behaviour

Individuals in the group being observed will be categorized when the survey starts and at three minute intervals. Standardized behaviour categories will be used (Section 3.3.4). The standardization of behaviour is necessary for clarity and data analysis. If the observed behaviour does not fit within any of the categories then observers have the option of noting other behaviour in the comments field. However, this should be used only rarely as most behaviour should fit in the primary categories listed below.
If noting a new/different behaviour, please take a photo or video of the caribou.

The data to record at each three-minute interval are the numbers of individuals in the group exhibiting each behaviour at that time. Do not attempt to characterize the behaviour that occurred during the interval. If the group is too large to be counted in each interval, choose an identifiable subset of the group, count the individuals exhibiting each behaviour at each time interval, and add a comment that a subset of the group was sampled. For clarity, observers should record zero values for behaviours not observed.

Indicate the total group size at the top of the data form, not the size of the subset whose behaviour was recorded. Count the number of caribou up to 100 animals, and then record group size in categories above 100; 100-200 animals, etc. (see Appendix A).

Practically, the easiest way to do this is to have the observer scan across the group of caribou from Left to Right, calling out the behaviour of each animal, while the recorder adds tick marks to the data sheet. When complete, count up the tick marks.

Sex: Note the sex of the group. This can be difficult in large groups, so record in the following categories: mostly males, mostly females, mostly females with calves, juveniles, or mixed group.

3.3.3.5 Disturbance Events

Caribou behaviour is expected to vary in response to some disturbance events. The bottom of the data form should be used to record any potential disturbance events evident to the observer regardless of whether caribou respond to them. The main categories of events are included in the data sheet:

- Light truck;
- Haul truck;
- Road maintenance vehicle (e.g., grader);
- ATV or skidoo;
- Aircraft; and
- Predator (note species).

Record the number and approximate speed of the vehicle (regular driving speed, or moving slowly, ~10 km/h, past caribou).

Record the time of the disturbance event (0:00 to 30:00 of the survey), indicate which type of disturbance was observed in the appropriate column. Record any additional comments and records of photographs taken in the final column.

Record whether the vehicle stopped when approaching caribou or continued to drive slowly. If possible, coordinate with passing vehicles on the road to have some vehicles stop for 10 minutes, and others drive by slowly.

3.3.4 Behaviour Classification

With the exception of Alert behaviour, the primary behaviour categories and their definitions follow classifications from the Government of Northwest Territories (GNWT 2017). The categories appear as columns on the data form, with descriptions on the form. The behaviour categories are:

- **Feeding** – standing or walking posture, with the muzzle touching or nearly touching the ground; can be ingesting food or not; head down or moving from side to side.
- **Lying down** – bedded on the ground, either upright or lying on its side, in a resting or ruminating position.
- **Standing** – stationary in an upright, standing posture with head elevated above the ground, and usually above the knees; if cow is nursing, if possible record the time spend nursing.
- **Alert** – head up scanning horizon or focused on a source of disturbance (e.g., vehicle, predator, human).
- **Walking** – similar to standing posture but moving at a slow gait (<5 km/h).
- **Trotting/running** – similar to standing posture but moving rapidly in symmetrical or asymmetrical gait.

Other behaviours that may be observed (record in comments field on form) are:

- **Nursing** – calf is suckling cow.
- **Sparring** – two males in contact.
- **Insect response behavior** – twitching, stamping, tossing head.

In the comments, record if any animals are moving towards the road, parallel or away from the road.

4. DATA MANAGEMENT

Please scan all data sheets at the end of the day. Data from behaviour surveys should be entered into Excel. Data from group selection surveys (standard tablet data form) and behaviour surveys should be delivered at the end of each month to ERM for QA/QC.

5. CLOSURE

This SOP has been produced for Agnico Eagle Meadowbank Division by ERM Canada. Please contact the authors with any questions.

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6. REFERENCES

GNWT-ENR. 2017. *Caribou behaviour monitoring field protocols.* Government of the Northwest Territories Environment and Natural Resources, 10 page unpublished document. Yellowknife, NT.

TEMP. 2020. Meadowbank Division. Terrestrial Ecosystem Management Plan. Version 8, April 2020

Meadowbank Gold Mine: Caribou Behaviour Monitoring Data Sheet

Date:	Time (24 hr [00:00 to 24:00]) Start:		End:
Observers:			
Location Waypoint number:	UTM Easting:	UTM Northing:	Road name and distance marker:
Distance from caribou to observer location (use rangefinder):	Bearing:		Distance from caribou to road (if different):
Is group location East or West of the Road at start of survey? Circle one: **E W**	Did the group cross the road during the survey? Circle one: **Y N**		
Caribou group size: Exact count (up to 100): _____ Estimated size for larger groups. Circle one: **101-200 201-500 501-1000 >1000**			
Record sex of group (mostly males, females, females with calves, mostly juveniles, or mixed group):			
Record direction of travel as parallel, perpendicular, or stationary relative to road:			

Temperature: ___°C Wind speed: _____km/h Wind direction:_____° Humidity:_____% Days since last snow or wind event: _____

Weather observations:

Road: Open? Closed? Road Height: Road Side Width: Structures/snowbank Present:

Observation time from start of survey	Number of animals exhibiting each behaviour type						Comments and photo numbers (Note if any caribou crossed road or travelled along road)
	Feeding	Lying Down	Standing	Walking	Alert	Trotting or running	
0 minutes							
3 minutes							
6 minutes							
9 minutes							
12 minutes							
15 minutes							
18 minutes							
21 minutes							
24 minutes							
27 minutes							
30 minutes							

Observed disturbance events

(record time from start of survey and check type of disturbance. Record whether vehicle stopped (s) or drove slowly (d) past caribou)

Time from start of survey	Light truck	Haul Truck	Road maintenance vehicle (e.g., grader)	ATV	Aircraft	Predator (note species)	Comments and photo numbers. Note other disturbances here

Categories and Definitions of Behaviour[1]:

- **Feeding** – standing or walking posture, with the muzzle touching or nearly touching the ground; can be ingesting food or not; head down or moving from side to side.
- **Lying down** – bedded on the ground, either upright or lying on its side, in a resting or ruminating position.
- **Standing** – stationary in an upright, standing posture with head elevated above the ground, and usually above the knees; if cow is nursing, if possible record the time spend nursing.
- **Alert** – head up scanning horizon or focused on a source of disturbance (e.g., vehicle, predator, human).
- **Walking** – similar to standing posture but moving at a slow gait (<5 km/h).
- **Trotting/running** – similar to standing posture but moving rapidly in symmetrical or asymmetrical gait.

Other behaviours that may be observed (record in comments field on form) are:

- **Nursing** – calf is suckling cow.
- **Sparring** – two males in contact.
- **Insect response behavior** – twitching, stamping, tossing head.

[1] Primary source: GNWT-ENR 2017 caribou behaviour monitoring field protocols, courtesy of GNWT Yellowknife, NT.

APPENDIX B MEADOWBANK COMPLEX CARIBOU BEHAVIOUR SURVEY DATA SUMMARY, 2020 TO 2025

APPENDIX B: MEADOWBANK COMPLEX CARIBOU BEHAVIOUR SURVEY DATA SUMMARY, 2020 TO 2025

Caribou Group Size	Total Surveys (All Years)	2020			2021		
		Total #	Surveys with Disturbance	Surveys with Road Crossing	Total #	Surveys with Disturbance	Surveys with Road Crossing
1-2	67	28	15	1	23	15	0
3-25	142	35	22	1	63	35	2
26-50	60	28	13	2	21	9	0
51-100	38	9	5	0	17	9	0
>100	47	16	13	1	10	6	4
Total	354	116	68	5	134	74	6

Caribou Group Size	Total Surveys (All Years)	2022			2023		
		Total #	Surveys with Disturbance	Surveys with Road Crossing	Total #	Surveys with Disturbance	Surveys with Road Crossing
1-2	67	16	10	1	10	5	1
3-25	142	44	28	3	22	6	1
26-50	60	11	4	0	12	2	2
51-100	38	12	3	1	10	0	0
>100	47	21	5	2	16	6	1
Total	354	104	50	7	70	19	5

Caribou Group Size	Total Surveys (All Years)	2024			2025		
		Total #	Surveys with Disturbance	Surveys with Road Crossing	Total #	Surveys with Disturbance	Surveys with Road Crossing
1-2	67	15	9	1	13	8	2
3-25	142	23	13	0	15	13	1
26-50	60	15	4	0	9	5	0
51-100	38	12	5	1	5	4	0
>100	47	5	2	1	16	7	3
Total	354	70	33	3	58	28	5

APPENDIX C SUMMARY OF SPATIAL DISTRIBUTION OF SURVEY DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

APPENDIX C: SUMMARY OF SPATIAL DISTRIBUTION OF SURVEY DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Season	2020		2021		2022	
	Surveys of Caribou on East Side of the Mine Infrastructure	Surveys of Caribou on West Side of the Mine Infrastructure	Surveys of Caribou on East Side of the Mine Infrastructure	Surveys of Caribou on West Side of the Mine Infrastructure	Surveys of Caribou on East Side of the Mine Infrastructure	Surveys of Caribou on West Side of the Mine Infrastructure
Spring Migration	12	46	23	89	13	47
Calving/Summer	11	7	3	12	15	12
Fall Migration	10	3	1	4	16	6
Total	**33**	**56**	**27**	**105**	**45**	**56**

Season	2023		2024		2025		
	Surveys of Caribou on East Side of the Mine Infrastructure	Surveys of Caribou on West Side of the Mine Infrastructure	Surveys of Caribou on East Side of the Mine Infrastructure	Surveys of Caribou on West Side of the Mine Infrastructure	Surveys of Caribou on East Side of the Mine Infrastructure	Surveys of Caribou on West Side of the Mine Infrastructure	Surveys of Caribou on Both Sides of the Mine Infrastructure
Spring Migration	4	34	6	25	-	26	2
Calving/Summer	1	0	2	3	-	-	-
Fall Migration	21	10	20	5	21	6	
Total	**26**	**44**	**30**	**37**	**21**	**32**	**2**

APPENDIX D DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	P.R	BEH1	73	West	No	6	-12	15	18	NA
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	P.R	BEH4	356	West	Yes	130	-19	3.6	320	33.4
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	C.G.P	NA	NA	East	No	~150	9	18	NW	59
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	K.P	NA	NA	East	No	2	7	25	NE	NA
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	C.G.P	NA	NA	East	No	58	8.7	34	NE	65
2020-08-22	11:34	12:04	AWAR KM 28	100-300	C.G.P	NA	NA	East	No	45	9	18	NW	59
2020-08-17	9:35	9:48	AWAR KM 38	>1000	K.P	NA	NA	West	No	1	7	25	NE	NA
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	C.G.P	NA	NA	East	No	101-200	8.7	34	NW	65
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	P.R	BEH2	212	West	No	16	-12	10	196	23
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	K.P	NA	NA	NA	No	1	17	15	NE	58
2020-08-12	12:03	12:33	AWAR KM 70	>1000	K.P	NA	NA	NA	No	212	14	15	NE	NA
2020-08-17	7:55	8:25	AWAR KM 71	>1000	K.P	NA	NA	West	No	2	6	25	NE	NA
2020-08-12	11:03	11:20	AWAR KM 77	>1000	K.P	NA	NA	NA	Yes	41	14	15	NW	58
2020-08-12	9:42	10:11	AWAR KM 82	>1000	K.P	NA	NA	NA	No	2	13	15	NW	58
2020-08-12	10:13	10:43	AWAR KM 82	NA	K.P	NA	NA	NA	No	36	13	15	NE	58
2020-08-15	14:45	15:15	AWAR KM 84	>1000	K.P	NA	NA	West	No	2	19	21	SE	NA
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	D.M	NA	90	East	No	2	-5	24	NW	NA
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	K.P	NA	NA	East	No	1	17	10	SE	58
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	K.P	NA	NA	West	No	1	18	15	SE	NA
2020-08-12	8:53	9:13	AWAR KM 87	>1000	K.P	NA	NA	NA	No	2	12	9.5	NW	NA
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	K.P	NA	NA	West	No	1	17	22	SE	NA
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	P.R	BEH3	22	West	No	4	-14	10	230	27
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	D.M	NA	90	West	No	~67	-5	24	NW	NA
2020-08-06	7:10	7:40	AQ KM 175	0-50	K.P	NA	NA	West	No	1	15	30	SE	NA
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	K.P	NA	NA	East	No	1	5	NA	NA	NA
2020-05-18	9:15	9:45	End of landing strip	300-1000	J.B	NA	0	East	No	35	-9	32	SW	NA
2020-05-06	13:20	13:50	AQ KM 111	>1000	J.B	NA	NA	East	No	22	-12	24	N	71
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	K.P	NA	NA	East	No	2	9	55	NW	NA
2020-05-03	11:45	12:15	AQ KM 115.5	NA	K.P	NA	NA	West	No	10	-8	35	NNE	82
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	K.P	NA	NA	West	No	32	-10.5	42	S	NA
2020-05-06	13:59	14:19	AQ KM 116	>1000	J.B	NA	NA	West	No	12	-16	24	N	71
2020-05-04	12:10	12:40	AQ KM 168	>1000	K.P	NA	NA	NA	No	10	NA	55	N	99
2020-05-02	11:20	11:41	AQ KM 117	>1000	K.P	NA	NA	West	No	9	-6	2	NA	NA
2020-05-06	14:35	15:05	AQ KM 119	300-1000	J.B	NA	NA	NA	No	7	-12	24	N	71
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	K.P	NA	NA	West	No	35	NA	NA	N	NA
2020-05-10	12:50	13:20	AQ KM 119	300-1000	J.B	NA	NA	East	No	7	-12	35	N	52
2020-05-08	10:30	11:00	AQ KM 117	300-1000	J.B	NA	NA	West	No	13	-8	5	N	55
2020-04-29	15:00	15:30	AQ KM 121	>1000	K.P	NA	NA	West	No	28	-12.5	32	S	NA
2020-05-10	13:45	14:15	AQ KM 121	50-100	J.B	NA	NA	East	No	1	-12	33	N	55
2020-05-09	12:50	13:20	AQ KM 117	300-1000	J.B	NA	NA	East	No	1	-15	30	N	60
2020-05-12	11:50	12:20	AQ KM 124	300-1000	J.B	NA	NA	East	No	1	-8	10	NE	65
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	K.P	NA	NA	West	No	35	-14.5	16	NE	NA
2020-05-02	10:30	10:45	AQ KM 124	0-50	K.P	NA	NA	East	No	1	-7	1.2	NA	NA
2020-05-12	14:50	15:20	AQ KM 125	300-1000	J.B	NA	NA	West	No	35	-10	25	NE	65

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	1	Sunny, few clouds	45	60	Snow bank
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	0	Cloudy	50	110	NA
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	NA	NA	NA	NA	NA
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	1	Overcast, light rain	600	700	None
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	NA	NA	NA	NA	NA
2020-08-22	11:34	12:04	AWAR KM 28	100-300	NA	NA	NA	NA	NA
2020-08-17	9:35	9:48	AWAR KM 38	>1000	1	Overcast, drizzle	150	800	Tower and generator
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	NA	NA	NA	NA	NA
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	1	Sunny, clouds	57	70	NA
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	NA	NA	NA	NA	NA
2020-08-12	12:03	12:33	AWAR KM 70	>1000	NA	Overcast	0-100	600	Quarry
2020-08-17	7:55	8:25	AWAR KM 71	>1000	1	Overcast	400	600	None
2020-08-12	11:03	11:20	AWAR KM 77	>1000	NA	Overcast	100	600	None
2020-08-12	9:42	10:11	AWAR KM 82	>1000	NA	Sunny, partly cloudy	500	600	Bridge
2020-08-12	10:13	10:43	AWAR KM 82	NA	NA	NA	700	500	Bridge
2020-08-15	14:45	15:15	AWAR KM 84	>1000	NA	NA	20	500	Bridge at KM 82 and seacan
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	2	NA	NA	NA	None
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	NA	NA	100	600	None
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	NA	NA	100	800	None
2020-08-12	8:53	9:13	AWAR KM 87	>1000	NA	Overcast	>100	600	None
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	1	NA	100	500-600	None
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	0	Light snow	40	60	Snow bank
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	2	Cloudy	NA	NA	None
2020-08-06	7:10	7:40	AQ KM 175	0-50	NA	NA	600-700	NA	Air strip
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	1	Slight rain, overcast	NA	NA	NA
2020-05-18	9:15	9:45	End of landing strip	300-1000	NA	NA	NA	NA	NA
2020-05-06	13:20	13:50	AQ KM 111	>1000	1	Sunny	200-300 east	NA	None
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	0	NA	200	1400	Waste dump 2 km south
2020-05-03	11:45	12:15	AQ KM 115.5	NA	NA	Drifting snow, overcast	0	NA	Vault bit; baby phase pit in 100 m (w)
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	1	Blowing snow near the ground	200	NA	Seacans at vault laydown 2 km away
2020-05-06	13:59	14:19	AQ KM 116	>1000	1	Sunny	100-200	NA	None
2020-05-04	12:10	12:40	AQ KM 168	>1000	NA	Windy, drifting snow and sunny at the end	200	200 west, 100 east	Vault waste dump 2 km away
2020-05-02	11:20	11:41	AQ KM 117	>1000	1	Sunny	500 west, 0 east	NA	None; vault laydown in the distance
2020-05-06	14:35	15:05	AQ KM 119	300-1000	1	Sunny	500 west, 100 east	NA	Bridge
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	1	Sunny, drifting snow	NA	NA	NA
2020-05-10	12:50	13:20	AQ KM 119	300-1000	NA	Partly cloudy	0	NA	None
2020-05-08	10:30	11:00	AQ KM 117	300-1000	3	Partly cloudy, dusty due to haul trucks	0	NA	None
2020-04-29	15:00	15:30	AQ KM 121	>1000	NA	Blowing snow on the road	50	NA	NA
2020-05-10	13:45	14:15	AQ KM 121	50-100	NA	Partly cloudy	500	NA	NA
2020-05-09	12:50	13:20	AQ KM 117	300-1000	4	Sunny	0	NA	None
2020-05-12	11:50	12:20	AQ KM 124	300-1000	NA	NA	0	NA	None
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	1	NA	100 west, 0 east	NA	None
2020-05-02	10:30	10:45	AQ KM 124	0-50	2	Sunny, warm	150	NA	None
2020-05-12	14:50	15:20	AQ KM 125	300-1000	NA	NA	0	NA	None

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	0	0	0	6	0	6	0	0	0	6	6	0
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	0	0	12	30	30	36	5	0	0	40	1	1
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	150	0	0	0	0	0	0	0	0	150	0	0
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	0	2	0	0	0	0	0	2	0	0	0	0
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	0	0	0	58	0	0	16	0	0	42	0	0
2020-08-22	11:34	12:04	AWAR KM 28	100-300	45	0	0	0	0	0	35	0	0	0	10	0
2020-08-17	9:35	9:48	AWAR KM 38	>1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	0	0	0	112	0	0	0	0	0	112	0	0
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	8	0	6	16	4	1	16	0	9	16	8	0
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	0	0	0	0	0	1	0	0	0	0	0	1
2020-08-12	12:03	12:33	AWAR KM 70	>1000	28	0	0	13	0	0	23	0	0	22	3	4
2020-08-17	7:55	8:25	AWAR KM 71	>1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-08-12	11:03	11:20	AWAR KM 77	>1000	35	0	0	6	0	0	26	0	0	15	0	0
2020-08-12	9:42	10:11	AWAR KM 82	>1000	0	0	0	1	0	0	0	0	0	1	0	0
2020-08-12	10:13	10:43	AWAR KM 82	NA	0	0	0	35	1	0	0	0	0	0	0	0
2020-08-15	14:45	15:15	AWAR KM 84	>1000	2	0	0	0	0	0	2	0	0	0	0	0
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	1	1	0	0	0	0	1	1	0	0	0	0
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	1	0	0	0	0	0	0	0	0	1	0	0
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-08-12	8:53	9:13	AWAR KM 87	>1000	2	0	0	0	0	0	2	0	0	0	0	0
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	4	0	3	4	0	0	4	0	2	4	0	0
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	42	20	0	3	2	0	40	22	0	3	0	0
2020-08-06	7:10	7:40	AQ KM 175	0-50	1	0	0	0	0	0	1	0	0	0	0	0
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	0	0	0	1	0	0	0	0	0	1	0	0
2020-05-18	9:15	9:45	End of landing strip	300-1000	15	17	1	2	0	0	17	8	10	0	0	0
2020-05-06	13:20	13:50	AQ KM 111	>1000	0	22	0	0	0	0	0	22	0	0	0	0
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	1	0	0	1	0	0	1	0	0	0	1	0
2020-05-03	11:45	12:15	AQ KM 115.5	NA	8	0	2	0	0	0	10	0	0	0	0	0
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	22	0	2	6	2	0	21	0	3	8	0	0
2020-05-06	13:59	14:19	AQ KM 116	>1000	0	0	0	12	0	0	0	0	0	12	0	0
2020-05-04	12:10	12:40	AQ KM 168	>1000	0	10	0	0	0	0	0	10	0	0	0	0
2020-05-02	11:20	11:41	AQ KM 117	>1000	0	0	1	8	0	0	0	0	0	8	0	1
2020-05-06	14:35	15:05	AQ KM 119	300-1000	1	0	0	6	0	0	5	0	0	2	0	0
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	1	30	0	0	1	0	0	28	4	0	0	0
2020-05-10	12:50	13:20	AQ KM 119	300-1000	0	7	0	0	0	0	0	7	0	0	0	0
2020-05-08	10:30	11:00	AQ KM 117	300-1000	5	0	0	13	0	0	11	0	0	1	1	0
2020-04-29	15:00	15:30	AQ KM 121	>1000	11	6	0	6	2	0	20	2	0	5	0	0
2020-05-10	13:45	14:15	AQ KM 121	50-100	1	0	0	0	0	0	1	0	0	0	0	0
2020-05-09	12:50	13:20	AQ KM 117	300-1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-05-12	11:50	12:20	AQ KM 124	300-1000	10	0	0	0	0	0	9	0	0	1	0	0
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	7	0	0	3	0	0	7	0	0	4	0	0
2020-05-02	10:30	10:45	AQ KM 124	0-50	0	0	1	0	0	0	0	0	0	1	0	0
2020-05-12	14:50	15:20	AQ KM 125	300-1000	34	0	1	0	0	0	35	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	6	0	0	6	1	0	5	0	0	6	6	6
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	32	0	0	40	0	0	40	0	2	40	5	0
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	0	0	0	0	0	0	0	0	0	150	0	0
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	0	2	0	0	0	0	0	2	0	0	0	0
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	16	0	0	42	0	0	0	0	0	58	0	0
2020-08-22	11:34	12:04	AWAR KM 28	100-300	0	0	0	45	0	0	45	0	0	0	0	0
2020-08-17	9:35	9:48	AWAR KM 38	>1000	0	0	0	1	0	0	0	0	0	1	0	0
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	0	0	0	112	0	0	112	0	0	0	0	0
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	12	0	2	12	0	0	7	0	1	7	1	0
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	0	0	0	0	0	1	NA	NA	NA	NA	NA	NA
2020-08-12	12:03	12:33	AWAR KM 70	>1000	0	0	0	23	0	2	30	0	6	100	0	0
2020-08-17	7:55	8:25	AWAR KM 71	>1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-08-12	11:03	11:20	AWAR KM 77	>1000	31	0	0	8	3	0	29	0	0	12	0	0
2020-08-12	9:42	10:11	AWAR KM 82	>1000	0	0	0	1	0	0	1	0	0	0	0	0
2020-08-12	10:13	10:43	AWAR KM 82	NA	0	0	0	0	18	0	6	0	0	0	10	3
2020-08-15	14:45	15:15	AWAR KM 84	>1000	2	0	0	0	0	0	1	0	0	1	0	0
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	1	1	0	0	0	0	1	1	0	0	0	0
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-08-12	8:53	9:13	AWAR KM 87	>1000	0	0	0	2	0	0	2	0	0	0	0	0
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	0	0	0	1	0	0	0	0	0	1	0	0
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	4	0	4	4	0	0	4	0	3	4	0	0
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	37	26	0	2	0	0	36	27	0	2	2	0
2020-08-06	7:10	7:40	AQ KM 175	0-50	1	0	0	0	0	0	1	0	0	0	0	0
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	1	0	0	0	0	0	0	0	0	1	0	0
2020-05-18	9:15	9:45	End of landing strip	300-1000	16	17	2	0	0	0	12	20	0	3	0	0
2020-05-06	13:20	13:50	AQ KM 111	>1000	0	22	0	0	0	0	0	22	0	0	0	0
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	2	0	0	0	0	0	1	0	0	1	0	0
2020-05-03	11:45	12:15	AQ KM 115.5	NA	10	0	0	0	0	0	9	1	0	0	0	0
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	25	0	2	4	1	0	25	0	1	6	0	0
2020-05-06	13:59	14:19	AQ KM 116	>1000	0	0	0	12	0	0	0	0	0	12	0	0
2020-05-04	12:10	12:40	AQ KM 168	>1000	0	10	0	0	0	0	0	10	0	0	0	0
2020-05-02	11:20	11:41	AQ KM 117	>1000	0	0	0	9	0	0	0	0	0	9	0	0
2020-05-06	14:35	15:05	AQ KM 119	300-1000	1	0	0	3	0	0	0	0	0	5	0	0
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	2	31	0	1	1	0	1	0	0	1	3	0
2020-05-10	12:50	13:20	AQ KM 119	300-1000	0	7	0	0	0	0	0	7	0	0	0	0
2020-05-08	10:30	11:00	AQ KM 117	300-1000	1	0	0	3	0	0	0	0	0	0	0	0
2020-04-29	15:00	15:30	AQ KM 121	>1000	15	6	0	5	1	0	17	8	0	3	0	0
2020-05-10	13:45	14:15	AQ KM 121	50-100	0	0	0	1	0	0	0	0	0	1	0	0
2020-05-09	12:50	13:20	AQ KM 117	300-1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-05-12	11:50	12:20	AQ KM 124	300-1000	5	0	0	5	0	0	10	0	0	0	0	0
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	9	0	0	3	0	0	12	0	1	4	0	0
2020-05-02	10:30	10:45	AQ KM 124	0-50	1	0	0	0	0	0	0	0	0	1	0	0
2020-05-12	14:50	15:20	AQ KM 125	300-1000	20	0	0	0	0	0	6	0	0	1	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	6	0	0	0	2	0	6	0	0	6	0
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	5	0	1	40	0	0	16	0	0	40	4
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	0	0	0	150	0	0	0	0	0	150	0
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	0	2	0	0	0	0	0	2	0	0	0
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	0	0	0	58	0	0	0	0	0	58	0
2020-08-22	11:34	12:04	AWAR KM 28	100-300	0	0	0	45	0	0	0	0	0	45	0
2020-08-17	9:35	9:48	AWAR KM 38	>1000	0	0	0	1	0	0	NA	NA	NA	NA	NA
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	112	0	0	0	0	0	112	0	0	0	0
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	12:03	12:33	AWAR KM 70	>1000	20	0	0	130	0	8	43	0	0	150	2
2020-08-17	7:55	8:25	AWAR KM 71	>1000	1	0	0	0	0	0	1	0	0	0	0
2020-08-12	11:03	11:20	AWAR KM 77	>1000	6	0	4	10	0	0	0	0	0	11	0
2020-08-12	9:42	10:11	AWAR KM 82	>1000	0	0	0	1	0	0	0	0	0	0	1
2020-08-12	10:13	10:43	AWAR KM 82	NA	14	0	0	0	2	0	0	0	0	12	0
2020-08-15	14:45	15:15	AWAR KM 84	>1000	2	0	0	0	0	0	1	0	0	1	0
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	1	1	0	0	0	0	0	2	0	0	0
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	0	0	0	1	0	0	0	0	0	1	0
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	1	0	0	0	0	0	1	0	0	0	0
2020-08-12	8:53	9:13	AWAR KM 87	>1000	1	0	1	0	0	0	0	0	0	2	0
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	1	0	0	0	0	0	0	0	1	0	0
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	4	0	2	4	0	0	3	0	1	4	0
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	34	27	0	4	2	0	32	32	1	2	0
2020-08-06	7:10	7:40	AQ KM 175	0-50	0	0	0	0	1	0	1	0	0	0	0
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	0	0	0	1	0	0	0	0	0	0	0
2020-05-18	9:15	9:45	End of landing strip	300-1000	13	14	0	3	0	0	15	13	0	2	0
2020-05-06	13:20	13:50	AQ KM 111	>1000	0	22	0	0	0	0	0	22	0	0	0
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	2	0	0	0	0	0	0	0	0	2	0
2020-05-03	11:45	12:15	AQ KM 115.5	NA	6	1	2	1	0	0	8	2	0	0	0
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	27	0	0	5	0	0	26	0	2	4	0
2020-05-06	13:59	14:19	AQ KM 116	>1000	0	0	0	6	0	0	0	0	0	2	0
2020-05-04	12:10	12:40	AQ KM 168	>1000	0	10	0	0	0	0	0	10	0	0	0
2020-05-02	11:20	11:41	AQ KM 117	>1000	0	0	0	9	0	0	0	0	0	8	0
2020-05-06	14:35	15:05	AQ KM 119	300-1000	5	0	0	1	0	0	7	0	0	0	0
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	0	34	1	0	0	0	1	34	0	0	0
2020-05-10	12:50	13:20	AQ KM 119	300-1000	0	7	0	0	0	0	0	7	0	0	0
2020-05-08	10:30	11:00	AQ KM 117	300-1000	0	0	0	0	0	0	1	0	0	0	0
2020-04-29	15:00	15:30	AQ KM 121	>1000	19	5	0	2	2	0	18	5	0	4	1
2020-05-10	13:45	14:15	AQ KM 121	50-100	1	0	0	0	0	0	1	0	0	0	0
2020-05-09	12:50	13:20	AQ KM 117	300-1000	1	0	0	0	0	0	0	0	0	0	1
2020-05-12	11:50	12:20	AQ KM 124	300-1000	10	0	0	0	0	0	10	0	0	0	0
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	18	0	2	5	0	0	17	0	3	6	0
2020-05-02	10:30	10:45	AQ KM 124	0-50	0	0	0	1	0	0	0	0	0	1	0
2020-05-12	14:50	15:20	AQ KM 125	300-1000	10	0	0	0	0	0	5	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	0	6	0	4	6	0	0	5	0	4	6
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	2	27	0	7	40	3	1	40	0	6	40
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	0	0	0	0	150	0	0	0	0	0	0
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	0	0	2	0	0	0	0	0	2	0	0
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	0	0	0	0	58	0	0	0	0	0	58
2020-08-22	11:34	12:04	AWAR KM 28	100-300	0	0	0	0	0	0	0	NA	NA	NA	NA
2020-08-17	9:35	9:48	AWAR KM 38	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	0	112	0	0	0	0	0	62	0	0	60
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	12:03	12:33	AWAR KM 70	>1000	10	50	0	0	162	0	0	105	0	0	100
2020-08-17	7:55	8:25	AWAR KM 71	>1000	0	1	0	0	0	0	0	2	0	0	0
2020-08-12	11:03	11:20	AWAR KM 77	>1000	0	0	0	0	0	0	0	NA	NA	NA	NA
2020-08-12	9:42	10:11	AWAR KM 82	>1000	0	1	0	0	0	0	0	1	0	0	0
2020-08-12	10:13	10:43	AWAR KM 82	NA	0	0	6	2	3	1	0	0	0	0	6
2020-08-15	14:45	15:15	AWAR KM 84	>1000	0	0	0	0	2	0	0	2	0	0	0
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	0	0	2	0	0	0	0	0	2	0	0
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	0	0	0	0	1	0	0	0	0	0	2
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	0	0	0	0	1	0	0	1	0	0	0
2020-08-12	8:53	9:13	AWAR KM 87	>1000	0	2	0	0	0	0	0	0	0	0	0
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	0	1	0	0	0	0	0	0	0	1	0
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	0	2	0	1	4	0	0	4	0	4	4
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	0	25	34	0	4	2	0	28	33	0	4
2020-08-06	7:10	7:40	AQ KM 175	0-50	0	1	0	0	0	0	0	1	0	0	0
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-18	9:15	9:45	End of landing strip	300-1000	0	19	11	2	0	0	0	18	11	0	1
2020-05-06	13:20	13:50	AQ KM 111	>1000	0	0	22	0	0	0	0	0	21	1	0
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	0	1	0	0	1	0	0	2	0	0	0
2020-05-03	11:45	12:15	AQ KM 115.5	NA	0	7	2	1	0	0	0	8	2	0	0
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	0	20	5	0	5	2	0	18	4	2	7
2020-05-06	13:59	14:19	AQ KM 116	>1000	0	0	0	0	0	0	0	NA	NA	NA	NA
2020-05-04	12:10	12:40	AQ KM 168	>1000	0	0	9	1	0	0	0	0	10	0	0
2020-05-02	11:20	11:41	AQ KM 117	>1000	1	1	0	2	5	0	0	1	0	2	5
2020-05-06	14:35	15:05	AQ KM 119	300-1000	0	5	0	0	0	0	0	6	0	1	0
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	0	0	35	0	0	0	0	0	35	0	0
2020-05-10	12:50	13:20	AQ KM 119	300-1000	0	0	7	0	0	0	0	0	7	0	0
2020-05-08	10:30	11:00	AQ KM 117	300-1000	0	1	0	0	0	0	0	1	0	0	0
2020-04-29	15:00	15:30	AQ KM 121	>1000	0	13	10	0	3	2	0	11	11	1	2
2020-05-10	13:45	14:15	AQ KM 121	50-100	0	1	0	0	0	0	0	1	0	0	0
2020-05-09	12:50	13:20	AQ KM 117	300-1000	0	1	0	0	0	0	0	1	0	0	0
2020-05-12	11:50	12:20	AQ KM 124	300-1000	0	10	0	0	0	0	0	10	0	0	0
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	0	17	0	0	18	0	0	21	0	2	11
2020-05-02	10:30	10:45	AQ KM 124	0-50	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-12	14:50	15:20	AQ KM 125	300-1000	0	5	0	0	0	0	0	5	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	0	0	6	0	6	6	0	0	6	0	2
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	0	0	32	0	2	40	40	0	0	0	0
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	0	150	0	0	0	150	0	0	0	0	0
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	0	0	0	2	0	0	0	0	2	0	0
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	0	0	0	0	0	28	0	30	0	0	0
2020-08-22	11:34	12:04	AWAR KM 28	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-17	9:35	9:48	AWAR KM 38	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	0	0	0	0	0	112	0	0	0	0	0
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	12:03	12:33	AWAR KM 70	>1000	2	5	191	0	0	20	1	0	50	15	0
2020-08-17	7:55	8:25	AWAR KM 71	>1000	0	0	2	0	0	0	0	0	1	0	1
2020-08-12	11:03	11:20	AWAR KM 77	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	9:42	10:11	AWAR KM 82	>1000	0	0	0	2	0	0	0	0	0	2	0
2020-08-12	10:13	10:43	AWAR KM 82	NA	0	15	0	0	0	2	0	0	0	3	2
2020-08-15	14:45	15:15	AWAR KM 84	>1000	0	0	1	0	1	0	0	0	2	0	0
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	0	0	0	2	0	0	0	0	0	2	0
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	0	0	2	0	0	0	0	0	2	0	0
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	0	0	1	0	0	0	0	0	0	0	0
2020-08-12	8:53	9:13	AWAR KM 87	>1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	0	0	0	0	1	0	0	0	1	0	0
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	0	0	4	0	4	4	1	0	3	0	4
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	0	0	31	35	0	1	0	0	30	32	0
2020-08-06	7:10	7:40	AQ KM 175	0-50	0	0	0	0	0	0	1	0	1	0	0
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-18	9:15	9:45	End of landing strip	300-1000	0	0	17	15	1	1	0	0	15	11	3
2020-05-06	13:20	13:50	AQ KM 111	>1000	0	0	0	22	0	0	0	0	0	21	1
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	0	0	2	0	0	0	0	0	1	0	1
2020-05-03	11:45	12:15	AQ KM 115.5	NA	0	0	6	2	2	0	0	0	8	2	0
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	1	0	15	2	3	7	2	3	10	0	3
2020-05-06	13:59	14:19	AQ KM 116	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-04	12:10	12:40	AQ KM 168	>1000	0	0	0	10	0	0	0	0	0	10	0
2020-05-02	11:20	11:41	AQ KM 117	>1000	0	0	0	0	1	7	0	0	NA	NA	NA
2020-05-06	14:35	15:05	AQ KM 119	300-1000	0	0	4	0	0	3	0	0	0	0	0
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	0	0	0	35	0	0	0	0	0	35	0
2020-05-10	12:50	13:20	AQ KM 119	300-1000	0	0	0	7	0	0	0	0	0	7	0
2020-05-08	10:30	11:00	AQ KM 117	300-1000	0	0	0	0	1	0	0	0	0	0	0
2020-04-29	15:00	15:30	AQ KM 121	>1000	2	0	14	10	0	3	1	0	16	6	0
2020-05-10	13:45	14:15	AQ KM 121	50-100	0	0	1	0	0	0	0	0	0	0	0
2020-05-09	12:50	13:20	AQ KM 117	300-1000	0	0	1	0	0	0	0	0	1	0	0
2020-05-12	11:50	12:20	AQ KM 124	300-1000	0	0	9	0	0	1	0	0	9	0	0
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	1	0	13	0	1	12	0	0	6	0	0
2020-05-02	10:30	10:45	AQ KM 124	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-12	14:50	15:20	AQ KM 125	300-1000	0	0	5	0	0	0	0	0	5	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	4	2	0	5	0	3	5	0	0
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	7	40	40	39	0	0	39	39	39
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	0	0	0	NA	NA	NA	NA	NA	NA
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	0	0	0	1	0	0	1	0	0
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	57	0	0	0	0	0	57	0	0
2020-08-22	11:34	12:04	AWAR KM 28	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-17	9:35	9:48	AWAR KM 38	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	112	0	0	30	0	0	92	0	0
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	12:03	12:33	AWAR KM 70	>1000	144	0	3	44	4	0	160	3	1
2020-08-17	7:55	8:25	AWAR KM 71	>1000	0	0	0	0	0	0	2	0	0
2020-08-12	11:03	11:20	AWAR KM 77	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-12	9:42	10:11	AWAR KM 82	>1000	0	0	0	0	2	0	0	0	0
2020-08-12	10:13	10:43	AWAR KM 82	NA	0	0	0	0	3	0	3	0	0
2020-08-15	14:45	15:15	AWAR KM 84	>1000	0	0	0	1	0	0	1	0	0
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	0	0	0	0	2	0	0	0	0
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	0	0	0	1	0	0	1	0	0
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	1	0	0	1	0	0	0	0	0
2020-08-12	8:53	9:13	AWAR KM 87	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	0	0	0	0	0	1	0	0	0
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	4	2	0	1	0	4	4	0	0
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	4	1	0	30	31	0	4	1	0
2020-08-06	7:10	7:40	AQ KM 175	0-50	0	0	0	1	0	0	0	0	0
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-18	9:15	9:45	End of landing strip	300-1000	2	0	0	14	14	2	2	0	0
2020-05-06	13:20	13:50	AQ KM 111	>1000	0	0	0	0	22	0	0	0	0
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	0	0	0	2	0	0	0	0	0
2020-05-03	11:45	12:15	AQ KM 115.5	NA	0	0	0	8	2	0	0	0	0
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	14	0	5	6	0	2	0	1	0
2020-05-06	13:59	14:19	AQ KM 116	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-04	12:10	12:40	AQ KM 168	>1000	0	0	0	0	10	0	0	0	0
2020-05-02	11:20	11:41	AQ KM 117	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-06	14:35	15:05	AQ KM 119	300-1000	7	0	0	0	0	1	0	0	0
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	0	0	0	0	35	0	0	0	0
2020-05-10	12:50	13:20	AQ KM 119	300-1000	0	0	0	0	7	0	0	0	0
2020-05-08	10:30	11:00	AQ KM 117	300-1000	0	1	0	0	0	0	1	0	0
2020-04-29	15:00	15:30	AQ KM 121	>1000	4	2	0	13	12	0	2	1	0
2020-05-10	13:45	14:15	AQ KM 121	50-100	1	0	0	1	0	0	0	0	0
2020-05-09	12:50	13:20	AQ KM 117	300-1000	0	0	0	1	0	0	0	0	0
2020-05-12	11:50	12:20	AQ KM 124	300-1000	1	0	0	9	0	0	0	1	0
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	1	0	0	5	0	0	1	0	0
2020-05-02	10:30	10:45	AQ KM 124	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-12	14:50	15:20	AQ KM 125	300-1000	0	0	0	5	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	NA	NA	NA	NA	Haul truck	NA
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	NA	NA	NA	Haul truck	NA	NA
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	NA	NA	NA	NA	NA	NA
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	NA	NA	NA	NA	NA	NA
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	NA	Haul truck	NA	NA	Haul truck	Light truck
2020-08-22	11:34	12:04	AWAR KM 28	100-300	NA	NA	NA	NA	NA	NA
2020-08-17	9:35	9:48	AWAR KM 38	>1000	NA	NA	NA	NA	NA	NA
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	NA	NA	NA	NA	Haul truck	NA
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	NA	NA	NA	NA	NA	NA
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	NA	NA	NA	NA	NA	NA
2020-08-12	12:03	12:33	AWAR KM 70	>1000	NA	NA	NA	NA	NA	NA
2020-08-17	7:55	8:25	AWAR KM 71	>1000	NA	NA	NA	NA	NA	NA
2020-08-12	11:03	11:20	AWAR KM 77	>1000	NA	NA	NA	NA	NA	NA
2020-08-12	9:42	10:11	AWAR KM 82	>1000	NA	NA	NA	Grader	NA	NA
2020-08-12	10:13	10:43	AWAR KM 82	NA	NA	Grader	NA	NA	Road maintenance vehicle	NA
2020-08-15	14:45	15:15	AWAR KM 84	>1000	NA	NA	Tractor trailer	NA	Tractor trailer	NA
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	NA	NA	NA	NA	NA	NA
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	NA	NA	NA	Sand truck	NA	NA
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	NA	NA	NA	NA	NA	Tractor trailer
2020-08-12	8:53	9:13	AWAR KM 87	>1000	NA	NA	NA	NA	NA	NA
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	NA	NA	NA	Fuel tank	NA	NA
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	NA	NA	NA	NA	NA	NA
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	NA	NA	NA	NA	NA	NA
2020-08-06	7:10	7:40	AQ KM 175	0-50	NA	Haul truck	Convoy	Convoy	Light truck	NA
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	NA	NA	NA	NA	NA	NA
2020-05-18	9:15	9:45	End of landing strip	300-1000	NA	NA	NA	NA	NA	NA
2020-05-06	13:20	13:50	AQ KM 111	>1000	Haul truck	NA	Haul truck	NA	NA	Haul truck
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	NA	NA	NA	Tractor trailer	Light truck	Tractor trailer
2020-05-03	11:45	12:15	AQ KM 115.5	NA	NA	NA	NA	NA	NA	NA
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	NA	NA	NA	NA	NA	NA
2020-05-06	13:59	14:19	AQ KM 116	>1000	NA	NA	NA	NA	NA	NA
2020-05-04	12:10	12:40	AQ KM 168	>1000	NA	NA	NA	NA	NA	Road maintenance vehicle
2020-05-02	11:20	11:41	AQ KM 117	>1000	NA	NA	NA	NA	NA	NA
2020-05-06	14:35	15:05	AQ KM 119	300-1000	NA	NA	NA	NA	NA	Haul truck
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	NA	NA	NA	NA	NA	NA
2020-05-10	12:50	13:20	AQ KM 119	300-1000	NA	NA	NA	Haul truck	NA	NA
2020-05-08	10:30	11:00	AQ KM 117	300-1000	NA	NA	NA	NA	NA	NA
2020-04-29	15:00	15:30	AQ KM 121	>1000	NA	NA	NA	NA	NA	NA
2020-05-10	13:45	14:15	AQ KM 121	50-100	NA	NA	Haul truck	NA	NA	NA
2020-05-09	12:50	13:20	AQ KM 117	300-1000	NA	NA	NA	NA	NA	Convoy
2020-05-12	11:50	12:20	AQ KM 124	300-1000	Haul truck	NA	NA	NA	NA	Haul truck
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	NA	NA	NA	NA	NA	NA
2020-05-02	10:30	10:45	AQ KM 124	0-50	NA	NA	NA	NA	NA	NA
2020-05-12	14:50	15:20	AQ KM 125	300-1000	Haul truck	NA	NA	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2020-04-24	15:13	15:43	AWAR KM 7	300-1000	NA	NA	NA	NA	NA	2020	-96.0072	64.41057	NA
2020-04-25	14:25	14:55	AWAR KM 21	300-1000	NA	NA	Hunter	Hunter	NA	2020	-96.0993	64.48273	NA
2020-08-22	12:24	12:54	AWAR KM 29	300-1000	NA	ATV	NA	NA	NA	2020	-96.1604	64.52716	NA
2020-08-17	10:06	10:36	AWAR KM 31	300-1000	NA	Tractor trailer	NA	NA	NA	2020	-96.2032	64.55867	NA
2020-08-21	11:32	12:02	AWAR KM 29	300-1000	NA	NA	Hunter	NA	NA	2020	-96.2051	64.56257	NA
2020-08-22	11:34	12:04	AWAR KM 28	100-300	NA	NA	NA	NA	NA	2020	-96.2765	64.5994	NA
2020-08-17	9:35	9:48	AWAR KM 38	>1000	NA	NA	NA	NA	NA	2020	-96.2793	64.60143	NA
2020-08-21	14:37	15:07	AWAR KM 40	300-1000	Haul truck	NA	NA	NA	NA	2020	-96.2802	64.6192	NA
2020-04-24	17:03	17:15	AWAR KM 40	300-1000	NA	NA	NA	NA	NA	2020	-96.2914	64.62508	NA
2020-08-12	14:33	14:39	AWAR KM 57	300-1000	NA	NA	NA	NA	NA	2020	-96.3702	64.74715	NA
2020-08-12	12:03	12:33	AWAR KM 70	>1000	NA	NA	NA	NA	NA	2020	-96.3177	64.84207	NA
2020-08-17	7:55	8:25	AWAR KM 71	>1000	NA	NA	NA	NA	NA	2020	-96.3199	64.84493	NA
2020-08-12	11:03	11:20	AWAR KM 77	>1000	NA	NA	NA	NA	NA	2020	-96.3259	64.90232	NA
2020-08-12	9:42	10:11	AWAR KM 82	>1000	NA	NA	NA	NA	NA	2020	-96.3153	64.93307	NA
2020-08-12	10:13	10:43	AWAR KM 82	NA	NA	NA	NA	NA	NA	2020	-96.3153	64.93307	NA
2020-08-15	14:45	15:15	AWAR KM 84	>1000	Fuel tanker	NA	NA	NA	NA	2020	-96.3009	64.93489	NA
2020-05-17	10:00	10:30	AWAR KM 86	300-1000	NA	NA	NA	NA	NA	2020	-96.2528	64.94684	NA
2020-08-12	16:33	16:53	AWAR KM 87	300-1000	NA	NA	NA	NA	NA	2020	-96.2521	64.94812	NA
2020-08-15	16:30	17:00	AWAR KM 87	300-1000	NA	NA	Light truck	NA	NA	2020	-96.2521	64.94812	NA
2020-08-12	8:53	9:13	AWAR KM 87	>1000	NA	NA	NA	NA	NA	2020	-96.2206	64.9581	NA
2020-08-15	13:50	14:20	AWAR KM 91.5	300-1000	NA	NA	NA	NA	NA	2020	-96.2229	64.97976	NA
2020-04-24	19:27	19:57	AWAR KM 94	300-1000	NA	NA	NA	NA	NA	2020	-96.2131	65.0074	NA
2020-05-17	8:50	9:20	AWAR KM 96	300-1000	NA	NA	NA	NA	NA	2020	-96.1809	65.0181	NA
2020-08-06	7:10	7:40	AQ KM 175	0-50	NA	NA	NA	NA	NA	2020	-96.0639	65.02199	NA
2020-08-17	7:24	7:38	AWAR KM 79	300-1000	NA	NA	NA	NA	NA	2020	-96.0797	65.02625	NA
2020-05-18	9:15	9:45	End of landing strip	300-1000	NA	NA	NA	NA	NA	2020	-96.0865	65.02905	NA
2020-05-06	13:20	13:50	AQ KM 111	>1000	NA	NA	NA	NA	NA	2020	-96.0104	65.05011	NA
2020-08-16	14:43	15:13	Haul Rd KM 111	NA	NA	Tractor trailer	NA	Light truck	NA	2020	-96.0104	65.05011	NA
2020-05-03	11:45	12:15	AQ KM 115.5	NA	NA	NA	NA	NA	NA	2020	-96.009	65.07116	NA
2020-04-29	16:00	16:30	Vault laydown KM 114	300-1000	Light truck	NA	Light truck	NA	NA	2020	-96.021	65.07733	NA
2020-05-06	13:59	14:19	AQ KM 116	>1000	NA	NA	NA	NA	NA	2020	-96.0269	65.08244	NA
2020-05-04	12:10	12:40	AQ KM 168	>1000	Light truck	NA	Light truck	NA	NA	2020	-96.0304	65.08297	NA
2020-05-02	11:20	11:41	AQ KM 117	>1000	NA	NA	NA	NA	NA	2020	-96.0533	65.08344	NA
2020-05-06	14:35	15:05	AQ KM 119	300-1000	NA	NA	NA	Light truck	NA	2020	-96.0577	65.08898	NA
2020-04-29	8:55	9:25	AQ Hal Rd KM 120	300-1000	NA	NA	NA	NA	NA	2020	-96.0639	65.09274	NA
2020-05-10	12:50	13:20	AQ KM 119	300-1000	NA	Haul truck	NA	NA	NA	2020	-96.068	65.09919	NA
2020-05-08	10:30	11:00	AQ KM 117	300-1000	NA	NA	NA	NA	Haul truck	2020	-96.068	65.09922	NA
2020-04-29	15:00	15:30	AQ KM 121	>1000	NA	NA	NA	NA	NA	2020	-96.084	65.10558	NA
2020-05-10	13:45	14:15	AQ KM 121	50-100	NA	Haul truck	NA	Fuel truck	Haul truck	2020	-96.0942	65.11214	NA
2020-05-09	12:50	13:20	AQ KM 117	300-1000	NA	Haul truck	Haul truck	NA	NA	2020	-96.1065	65.12471	NA
2020-05-12	11:50	12:20	AQ KM 124	300-1000	Haul truck	NA	NA	NA	Haul truck	2020	-96.107	65.12486	NA
2020-05-01	11:40	12:10	AQ Rd KM 124	300-1000	NA	NA	NA	NA	NA	2020	-96.1072	65.12684	NA
2020-05-02	10:30	10:45	AQ KM 124	0-50	NA	NA	NA	NA	NA	2020	-96.1083	65.13228	NA
2020-05-12	14:50	15:20	AQ KM 125	300-1000	Haul truck	NA	NA	NA	NA	2020	-96.1051	65.14129	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	K.P	NA	NA	East	No	2	-14	17	NW	NA
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	K.P	NA	NA	West	No	32	-12	25	NNE	82
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	K.P	NA	NA	West	No	26	-18	9	NW	NA
2020-05-11	12:10	12:31	AQ KM 128	300-1000	J.B	NA	NA	West	No	23	-10	5	N	67
2020-05-02	13:00	13:30	AQ KM 129	NA	K.P	NA	NA	West	No	18	NA	NA	NA	NA
2020-05-03	14:00	14:18	AQ KM 130	300-1000	K.P	NA	NA	NA	No	2	-12	25	NNE	84
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	K.P	NA	NA	West	No	12	-6.1	19	NE	NA
2020-05-09	13:50	14:20	AQ KM 131	>1000	J.B	NA	NA	West	No	25	-12	33	N	40
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	K.P	NA	NA	West	Yes	1	-4	3	NA	NA
2020-05-07	8:49	9:10	AQ KM 133	300-1000	K.P	NA	NA	West	No	19	-13	1.2	SW	70
2020-05-03	14:30	15:00	AQ KM 134.6	NA	K.P	NA	NA	Both	No	28	-5	26	NNE	84
2020-05-07	12:25	12:52	AQ KM 134	>1000	J.B	NA	NA	West	Yes	45	-9	2.5	SW	60
2020-05-10	9:50	10:20	AQ KM 136	>1000	J.B	NA	NA	West	No	32	-15	27	N	70
2020-05-04	12:50	13:18	AQ KM 136	300-1000	K.P	NA	NA	West	No	47	-10.2	36	N	98
2020-05-11	13:18	13:30	AQ KM 137	300-1000	J.B	NA	NA	West	No	8	-8	2.5	N	60
2020-05-02	14:25	14:55	AQ KM 136	300-1000	K.P	NA	NA	East	No	4	NA	4	NA	NA
2020-05-04	15:10	15:19	AQ KM 147	300-1000	K.P	NA	NA	NA	Yes	3	-8.5	25	N	99
2020-04-29	12:20	12:50	AQ KM 148	50-100	K.P	NA	NA	West	No	14-22	-5	20	NE	NA
2020-04-30	8:30	8:37	AQ KM 144	100-300	K.P	NA	NA	NA	No	4	NA	60	N	NA
2020-04-30	9:00	9:30	AQ KM 140	300-1000	K.P	NA	NA	NA	No	35	NA	60	N	NA
2020-05-03	10:30	10:45	AQ KM 161	>1000	K.P	NA	NA	West	No	6	-10	26	NW	NA
2020-04-30	16:30	17:00	AQ KM 148	>1000	K.P	NA	NA	West	No	52	-5	42	N	NA
2020-04-29	11:20	11:50	AQ KM 138	300-1000	K.P	NA	NA	West	No	101-200	-6	22	SW	NA
2020-08-07	12:32	13:00	NA	300-1000	K.P	NA	NA	NA	No	>533	15	35	SE	NA
2020-08-06	15:50	16:20	AQ KM 149	>1000	K.P	NA	NA	NA	No	>400	18	45	SE	NA
2020-05-01	15:20	15:50	AQ KM 151	300-1000	K.P	NA	NA	West	No	15	-12	21	N	NA
2020-05-06	9:25	9:55	AQ KM 153	>1000	J.B	NA	NA	West	No	15	-16	32	N	60
2020-08-06	14:50	15:20	AQ KM 156	>1000	K.P	NA	NA	NA	No	193	19	40	SF	NA
2020-05-02	16:00	16:12	AQ KM 161	300-1000	K.P	NA	NA	West	No	10	NA	NA	NA	NA
2020-05-03	9:00	9:30	AQ KM 158	>1000	K.P	NA	NA	NA	No	65	-10	21.5	NE	82
2020-08-07	9:20	9:50	KM 154	>1000	K.P	NA	NA	NA	No	45	14	10	SE	NA
2020-08-06	10:37	11:07	AQ KM 106	0-50	K.P	NA	NA	East	No	2	24	35	SE	NA
2020-08-06	10:40	11:10	AQ KM 159	NA	K.P	NA	NA	East	No	400	24	35	SE	NA
2020-05-12	16:50	17:20	AQ KM 159	300-1000	J.B	NA	NA	West	No	72	-10	25	N	64
2020-05-03	8:30	9:00	AQ KM 160	300-1000	K.P	NA	NA	East	No	7	-11	21	NNE	80
2020-05-04	16:10	16:40	AQ KM 160	>1000	K.P	NA	NA	West	No	18	-8	35	N	99.9
2020-04-30	14:20	14:50	AQ KM 160	300-1000	K.P	NA	NA	West	No	110	-5	32	N	NA
2020-08-09	13:52	13:20	NA	0-50	K.P	NA	NA	NA	No	1	20	30	SE	NA
2020-08-07	9:00	9:11	KM 161	>1000	K.P	NA	NA	NA	No	1	14	10	SE	NA
2020-05-07	14:50	15:20	AQ KM 161	300-1000	J.B	NA	NA	West	No	7	-8	5.3	SW	55

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	1	NA	NA	NA	Bridge at KM 126; seacan on left
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	NA	Windy, cloudy	100 west, 0 east	NA	Bridge 1 km from group
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	1	NA	50	NA	None
2020-05-11	12:10	12:31	AQ KM 128	300-1000	NA	Cloudy	0	NA	None
2020-05-02	13:00	13:30	AQ KM 129	NA	NA	Sunny	NA	NA	NA
2020-05-03	14:00	14:18	AQ KM 130	300-1000	0	Light snow, windy, overcast	200	NA	Bridge
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	1	Partly cloudy, windy, drifting snow	25	300	Bridge 800 m from group; tower 2 km from group
2020-05-09	13:50	14:20	AQ KM 131	>1000	4	Sunny	1500	NA	NA
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	1	Sunny	50	NA	Radio tower
2020-05-07	8:49	9:10	AQ KM 133	300-1000	2	Sunny	100	NA	Tower
2020-05-03	14:30	15:00	AQ KM 134.6	NA	1-2	Drifting snow, clearing sky	200 west, 0 east	NA	Radio tower within 1 km
2020-05-07	12:25	12:52	AQ KM 134	>1000	2	Sunny	2500 west, 0 east	NA	None
2020-05-10	9:50	10:20	AQ KM 136	>1000	NA	Partly cloudy	0	NA	None
2020-05-04	12:50	13:18	AQ KM 136	300-1000	NA	Drifting snow, sunny	NA	NA	NA
2020-05-11	13:18	13:30	AQ KM 137	300-1000	NA	Cloudy	0	NA	None
2020-05-02	14:25	14:55	AQ KM 136	300-1000	1	NA	NA	NA	None
2020-05-04	15:10	15:19	AQ KM 147	300-1000	1	Windy, sunny	50 west, 100 east	NA	Bridge at KM 147; spill seacan
2020-04-29	12:20	12:50	AQ KM 148	50-100	1	NA	Level with tundra	NA	Generator 200 m away (not running)
2020-04-30	8:30	8:37	AQ KM 144	100-300	NA	NA	100	NA	NA
2020-04-30	9:00	9:30	AQ KM 140	300-1000	NA	Drifting/blowing snow	NA	NA	NA
2020-05-03	10:30	10:45	AQ KM 161	>1000	NA	White out, light snow, overcast	NA	NA	NA
2020-04-30	16:30	17:00	AQ KM 148	>1000	NA	Sunny, some drifting snow	100	NA	NA
2020-04-29	11:20	11:50	AQ KM 138	300-1000	1	Sunny, windy	NA	NA	Bridge 500 m away
2020-08-07	12:32	13:00	NA	300-1000	NA	Overcast, light drizzle	200	800	NA
2020-08-06	15:50	16:20	AQ KM 149	>1000	NA	NA	0-100	NA	Sand truck
2020-05-01	15:20	15:50	AQ KM 151	300-1000	1	Sunny	500 west, 100 east	NA	None
2020-05-06	9:25	9:55	AQ KM 153	>1000	1	Sunny	1500-2000 west	NA	None
2020-08-06	14:50	15:20	AQ KM 156	>1000	NA	Overcast	400	NA	None
2020-05-02	16:00	16:12	AQ KM 161	300-1000	NA	NA	NA	NA	NA
2020-05-03	9:00	9:30	AQ KM 158	>1000	2	Windy, overcast	50 west, 0 east	NA	Bridge at KM 159; 2 km away
2020-08-07	9:20	9:50	KM 154	>1000	NA	Overcast	100	NA	None
2020-08-06	10:37	11:07	AQ KM 106	0-50	NA	Cloudy	NA	NA	Bridge
2020-08-06	10:40	11:10	AQ KM 159	NA	NA	Cloudy	200	NA	Bridge
2020-05-12	16:50	17:20	AQ KM 159	300-1000	NA	NA	0	NA	None
2020-05-03	8:30	9:00	AQ KM 160	300-1000	2	Windy, white out, light snow	0 west, 50 east	NA	Bridge at KM 160 and KM 159; group was intervened
2020-05-04	16:10	16:40	AQ KM 160	>1000	NA	NA	100 west, 0 east	NA	Bridge KM 160; 1 km away
2020-04-30	14:20	14:50	AQ KM 160	300-1000	1	Sunny, windy	NA	NA	NA
2020-08-09	13:52	13:20	NA	0-50	NA	NA	100	600	Bridge
2020-08-07	9:00	9:11	KM 161	>1000	NA	Overcast	400	NA	Parked long haul truck on the road
2020-05-07	14:50	15:20	AQ KM 161	300-1000	2	Sunny	100	NA	None

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	1	0	0	0	0	0	1	0	0	0	0	0
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	20	0	1	11	0	0	6	0	2	23	1	0
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	0	0	0	25	1	0	0	0	5	14	3	4
2020-05-11	12:10	12:31	AQ KM 128	300-1000	19	0	0	4	0	0	9	0	0	0	0	0
2020-05-02	13:00	13:30	AQ KM 129	NA	11	0	0	0	0	0	9	0	1	1	0	0
2020-05-03	14:00	14:18	AQ KM 130	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	6	6	0	0	0	0	4	6	0	2	0	0
2020-05-09	13:50	14:20	AQ KM 131	>1000	20	0	0	5	0	0	24	0	0	1	0	0
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	1	0	0	0	0	0	1	0	0	0	0	0
2020-05-07	8:49	9:10	AQ KM 133	300-1000	6	0	8	5	0	0	0	0	2	17	0	0
2020-05-03	14:30	15:00	AQ KM 134.6	NA	20	0	1	5	0	0	26	0	2	0	0	0
2020-05-07	12:25	12:52	AQ KM 134	>1000	3	0	0	25	3	10	0	0	5	36	0	0
2020-05-10	9:50	10:20	AQ KM 136	>1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-05-04	12:50	13:18	AQ KM 136	300-1000	0	0	2	45	0	0	0	0	0	11	1	0
2020-05-11	13:18	13:30	AQ KM 137	300-1000	0	0	0	8	0	0	0	0	0	8	0	0
2020-05-02	14:25	14:55	AQ KM 136	300-1000	4	0	0	0	0	0	4	0	0	0	0	0
2020-05-04	15:10	15:19	AQ KM 147	300-1000	0	0	0	2	0	0	2	0	0	1	0	0
2020-04-29	12:20	12:50	AQ KM 148	50-100	17	0	0	3	2	0	19	0	0	1	1	0
2020-04-30	8:30	8:37	AQ KM 144	100-300	0	0	0	4	0	0	3	0	0	1	0	0
2020-04-30	9:00	9:30	AQ KM 140	300-1000	24	0	10	0	1	0	0	0	0	18	2	15
2020-05-03	10:30	10:45	AQ KM 161	>1000	0	6	0	0	0	0	0	6	0	0	0	0
2020-04-30	16:30	17:00	AQ KM 148	>1000	48	0	0	4	0	0	47	0	0	4	1	0
2020-04-29	11:20	11:50	AQ KM 138	300-1000	40	0	0	60	20	0	20	0	50	30	10	0
2020-08-07	12:32	13:00	NA	300-1000	0	0	0	33	0	0	0	0	0	140	0	0
2020-08-06	15:50	16:20	AQ KM 149	>1000	350	0	0	40	0	10	350	0	20	30	0	0
2020-05-01	15:20	15:50	AQ KM 151	300-1000	2	0	0	1	0	0	1	1	1	0	0	0
2020-05-06	9:25	9:55	AQ KM 153	>1000	0	15	0	0	0	0	0	15	0	0	0	0
2020-08-06	14:50	15:20	AQ KM 156	>1000	3	0	0	78	0	0	8	0	0	19	0	4
2020-05-02	16:00	16:12	AQ KM 161	300-1000	2	8	0	0	0	0	2	8	0	0	0	0
2020-05-03	9:00	9:30	AQ KM 158	>1000	59	0	0	6	0	0	57	0	2	6	0	0
2020-08-07	9:20	9:50	KM 154	>1000	24	0	1	6	0	0	26	0	2	3	0	0
2020-08-06	10:37	11:07	AQ KM 106	0-50	2	0	0	0	0	0	0	0	0	2	0	0
2020-08-06	10:40	11:10	AQ KM 159	NA	280	10	0	100	5	5	306	10	30	50	0	4
2020-05-12	16:50	17:20	AQ KM 159	300-1000	60	0	0	12	0	0	15	0	0	30	0	0
2020-05-03	8:30	9:00	AQ KM 160	300-1000	7	0	0	0	0	0	2	0	0	5	0	0
2020-05-04	16:10	16:40	AQ KM 160	>1000	0	18	0	0	0	0	0	18	0	0	0	0
2020-04-30	14:20	14:50	AQ KM 160	300-1000	80	3	0	15	2	0	102	4	0	4	0	0
2020-08-09	13:52	13:20	NA	0-50	0	1	0	0	0	0	0	1	0	0	0	0
2020-08-07	9:00	9:11	KM 161	>1000	1	0	0	0	0	0	1	0	0	0	0	0
2020-05-07	14:50	15:20	AQ KM 161	300-1000	7	0	0	0	0	0	7	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	0	0	0	0	0	1	0	0	0	2	0	0
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	0	0	1	31	0	0	0	0	2	30	0	0
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	0	0	2	9	3	12	0	0	0	26	0	0
2020-05-11	12:10	12:31	AQ KM 128	300-1000	5	0	0	0	0	0	5	0	0	0	0	0
2020-05-02	13:00	13:30	AQ KM 129	NA	10	0	0	1	0	0	10	0	0	1	0	0
2020-05-03	14:00	14:18	AQ KM 130	300-1000	0	0	0	1	0	1	1	0	0	1	0	0
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	4	6	0	2	0	0	5	6	0	1	0	0
2020-05-09	13:50	14:20	AQ KM 131	>1000	17	0	0	1	0	0	14	0	3	0	0	0
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	0	0	1	0	0	0	0	0	0	1	0	0
2020-05-07	8:49	9:10	AQ KM 133	300-1000	6	0	1	2	0	0	11	0	0	1	0	0
2020-05-03	14:30	15:00	AQ KM 134.6	NA	23	0	1	4	0	0	25	0	0	3	0	0
2020-05-07	12:25	12:52	AQ KM 134	>1000	0	0	0	All	0	0	0	0	6	39	0	0
2020-05-10	9:50	10:20	AQ KM 136	>1000	0	0	1	0	0	0	14	0	1	0	0	0
2020-05-04	12:50	13:18	AQ KM 136	300-1000	0	0	0	30	0	0	0	0	38	5	0	0
2020-05-11	13:18	13:30	AQ KM 137	300-1000	2	0	0	6	0	0	0	0	0	0	0	0
2020-05-02	14:25	14:55	AQ KM 136	300-1000	3	0	0	1	0	0	4	0	0	0	0	0
2020-05-04	15:10	15:19	AQ KM 147	300-1000	3	0	0	0	0	0	2	0	0	1	0	0
2020-04-29	12:20	12:50	AQ KM 148	50-100	7	0	0	3	1	0	6	0	0	4	0	0
2020-04-30	8:30	8:37	AQ KM 144	100-300	0	0	2	0	2	0	NA	NA	NA	NA	NA	NA
2020-04-30	9:00	9:30	AQ KM 140	300-1000	0	0	0	24	0	0	0	0	0	20	2	2
2020-05-03	10:30	10:45	AQ KM 161	>1000	0	0	0	6	0	0	0	0	1	5	0	0
2020-04-30	16:30	17:00	AQ KM 148	>1000	44	0	0	3	5	0	43	0	3	2	4	0
2020-04-29	11:20	11:50	AQ KM 138	300-1000	12	0	52	16	40	0	30	0	45	35	15	0
2020-08-07	12:32	13:00	NA	300-1000	0	0	0	196	0	0	0	0	0	239	0	0
2020-08-06	15:50	16:20	AQ KM 149	>1000	350	25	0	19	0	0	300	25	0	20	0	0
2020-05-01	15:20	15:50	AQ KM 151	300-1000	1	2	0	0	0	0	0	3	0	0	0	0
2020-05-06	9:25	9:55	AQ KM 153	>1000	0	15	0	0	0	0	0	15	0	0	0	0
2020-08-06	14:50	15:20	AQ KM 156	>1000	2	0	0	59	0	5	8	0	0	55	0	2
2020-05-02	16:00	16:12	AQ KM 161	300-1000	1	9	0	0	0	0	0	0	0	0	0	10
2020-05-03	9:00	9:30	AQ KM 158	>1000	62	0	0	3	0	0	59	0	3	3	0	0
2020-08-07	9:20	9:50	KM 154	>1000	23	0	0	4	0	0	27	0	0	2	0	0
2020-08-06	10:37	11:07	AQ KM 106	0-50	0	0	0	2	0	0	0	0	0	2	0	0
2020-08-06	10:40	11:10	AQ KM 159	NA	300	8	12	78	0	2	250	2	20	120	4	4
2020-05-12	16:50	17:20	AQ KM 159	300-1000	18	0	0	15	0	0	13	0	0	15	0	0
2020-05-03	8:30	9:00	AQ KM 160	300-1000	4	0	0	3	0	0	5	0	1	1	0	0
2020-05-04	16:10	16:40	AQ KM 160	>1000	0	16	2	0	0	0	0	12	4	0	0	0
2020-04-30	14:20	14:50	AQ KM 160	300-1000	92	3	0	10	2	3	85	0	0	21	2	2
2020-08-09	13:52	13:20	NA	0-50	0	1	0	0	0	0	0	0	0	0	1	0
2020-08-07	9:00	9:11	KM 161	>1000	0	0	0	1	0	0	1	0	0	0	0	0
2020-05-07	14:50	15:20	AQ KM 161	300-1000	7	0	0	0	0	0	6	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	0	0	0	2	0	0	0	0	0	0	0
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	0	0	1	25	0	0	0	0	0	0	0
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	0	0	0	26	0	0	0	0	0	26	0
2020-05-11	12:10	12:31	AQ KM 128	300-1000	2	0	0	0	0	0	0	0	0	0	0
2020-05-02	13:00	13:30	AQ KM 129	NA	10	0	0	1	0	0	9	0	1	1	0
2020-05-03	14:00	14:18	AQ KM 130	300-1000	0	0	0	2	0	0	2	0	0	0	0
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	6	6	0	0	0	0	5	6	0	1	0
2020-05-09	13:50	14:20	AQ KM 131	>1000	10	0	1	6	0	0	15	0	0	0	0
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	0	0	0	0	0	1	0	0	0	0	1
2020-05-07	8:49	9:10	AQ KM 133	300-1000	1	0	0	10	0	0	0	0	0	0	0
2020-05-03	14:30	15:00	AQ KM 134.6	NA	21	0	1	6	0	0	18	0	0	5	0
2020-05-07	12:25	12:52	AQ KM 134	>1000	10	0	13	22	0	0	25	0	0	6	0
2020-05-10	9:50	10:20	AQ KM 136	>1000	12	0	0	0	0	0	14	0	0	1	0
2020-05-04	12:50	13:18	AQ KM 136	300-1000	0	0	29	18	0	0	5	0	15	12	0
2020-05-11	13:18	13:30	AQ KM 137	300-1000	0	0	0	0	0	0	NA	NA	NA	NA	NA
2020-05-02	14:25	14:55	AQ KM 136	300-1000	4	0	0	0	0	0	3	0	1	0	0
2020-05-04	15:10	15:19	AQ KM 147	300-1000	3	0	0	0	0	0	3	0	0	1	0
2020-04-29	12:20	12:50	AQ KM 148	50-100	8	0	3	4	0	0	9	0	0	3	0
2020-04-30	8:30	8:37	AQ KM 144	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	9:00	9:30	AQ KM 140	300-1000	0	1	7	10	6	0	0	0	1	20	3
2020-05-03	10:30	10:45	AQ KM 161	>1000	0	0	0	6	0	0	NA	NA	NA	NA	NA
2020-04-30	16:30	17:00	AQ KM 148	>1000	39	5	2	4	2	0	43	5	0	3	1
2020-04-29	11:20	11:50	AQ KM 138	300-1000	27	0	20	50	20	8	15	0	10	50	20
2020-08-07	12:32	13:00	NA	300-1000	0	0	0	314	1	0	0	0	0	427	3
2020-08-06	15:50	16:20	AQ KM 149	>1000	260	20	5	15	0	0	248	38	0	12	2
2020-05-01	15:20	15:50	AQ KM 151	300-1000	8	5	0	0	2	0	6	8	0	0	1
2020-05-06	9:25	9:55	AQ KM 153	>1000	0	15	0	0	0	0	0	15	0	0	0
2020-08-06	14:50	15:20	AQ KM 156	>1000	3	0	0	83	0	0	0	0	0	88	0
2020-05-02	16:00	16:12	AQ KM 161	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	9:00	9:30	AQ KM 158	>1000	56	7	0	2	0	0	54	8	1	2	0
2020-08-07	9:20	9:50	KM 154	>1000	25	0	0	0	0	0	25	3	0	2	0
2020-08-06	10:37	11:07	AQ KM 106	0-50	2	0	0	0	0	0	2	0	0	0	0
2020-08-06	10:40	11:10	AQ KM 159	NA	48	2	0	100	0	0	150	8	12	30	0
2020-05-12	16:50	17:20	AQ KM 159	300-1000	10	0	0	22	0	0	7	0	2	13	0
2020-05-03	8:30	9:00	AQ KM 160	300-1000	7	0	0	0	0	0	6	0	0	1	0
2020-05-04	16:10	16:40	AQ KM 160	>1000	0	15	3	0	0	0	0	18	0	0	0
2020-04-30	14:20	14:50	AQ KM 160	300-1000	94	2	0	11	3	0	103	0	0	6	1
2020-08-09	13:52	13:20	NA	0-50	0	0	1	0	0	0	0	0	1	0	0
2020-08-07	9:00	9:11	KM 161	>1000	0	0	0	0	0	0	NA	NA	NA	NA	NA
2020-05-07	14:50	15:20	AQ KM 161	300-1000	5	0	1	1	0	0	3	0	0	2	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	0	0	0	2	0	0	0	0	0	0	0
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	0	0	0	0	0	0	0	0	0	0	14
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	0	0	0	1	25	0	0	0	0	2	24
2020-05-11	12:10	12:31	AQ KM 128	300-1000	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-02	13:00	13:30	AQ KM 129	NA	0	8	0	0	3	0	0	13	0	0	1
2020-05-03	14:00	14:18	AQ KM 130	300-1000	0	0	0	0	2	0	0	0	0	0	0
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	0	4	6	0	2	0	0	3	7	0	0
2020-05-09	13:50	14:20	AQ KM 131	>1000	0	15	0	0	0	0	0	13	2	0	0
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-07	8:49	9:10	AQ KM 133	300-1000	0	0	0	0	3	0	0	0	0	0	0
2020-05-03	14:30	15:00	AQ KM 134.6	NA	5	18	0	0	10	0	0	18	0	0	10
2020-05-07	12:25	12:52	AQ KM 134	>1000	0	8	0	0	17	0	0	10	0	0	2
2020-05-10	9:50	10:20	AQ KM 136	>1000	0	20	0	2	6	0	0	32	0	0	0
2020-05-04	12:50	13:18	AQ KM 136	300-1000	0	8	0	0	23	0	1	6	1	0	5
2020-05-11	13:18	13:30	AQ KM 137	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-02	14:25	14:55	AQ KM 136	300-1000	0	0	0	0	0	0	0	4	0	0	0
2020-05-04	15:10	15:19	AQ KM 147	300-1000	0	0	0	0	3	0	0	0	0	0	0
2020-04-29	12:20	12:50	AQ KM 148	50-100	0	7	0	0	4	0	0	10	0	0	3
2020-04-30	8:30	8:37	AQ KM 144	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	9:00	9:30	AQ KM 140	300-1000	0	0	0	0	26	4	0	0	0	6	10
2020-05-03	10:30	10:45	AQ KM 161	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	16:30	17:00	AQ KM 148	>1000	0	35	14	0	2	1	0	29	16	0	5
2020-04-29	11:20	11:50	AQ KM 138	300-1000	0	10	0	0	70	10	5	15	3	0	66
2020-08-07	12:32	13:00	NA	300-1000	0	3	0	0	512	4	0	0	0	0	533
2020-08-06	15:50	16:20	AQ KM 149	>1000	0	200	0	7	22	1	0	150	40	0	8
2020-05-01	15:20	15:50	AQ KM 151	300-1000	0	5	8	2	0	0	0	4	10	0	1
2020-05-06	9:25	9:55	AQ KM 153	>1000	0	0	15	0	0	0	0	0	15	0	0
2020-08-06	14:50	15:20	AQ KM 156	>1000	10	0	0	0	35	0	2	0	0	0	48
2020-05-02	16:00	16:12	AQ KM 161	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	9:00	9:30	AQ KM 158	>1000	0	50	6	1	3	0	0	32	3	2	2
2020-08-07	9:20	9:50	KM 154	>1000	0	21	4	2	0	0	0	20	0	0	7
2020-08-06	10:37	11:07	AQ KM 106	0-50	0	0	0	0	2	0	0	0	0	0	2
2020-08-06	10:40	11:10	AQ KM 159	NA	0	83	4	1	7	0	0	67	3	1	2
2020-05-12	16:50	17:20	AQ KM 159	300-1000	0	16	0	5	0	0	0	17	0	3	1
2020-05-03	8:30	9:00	AQ KM 160	300-1000	0	5	0	0	2	0	0	7	0	0	0
2020-05-04	16:10	16:40	AQ KM 160	>1000	0	0	17	0	1	0	0	0	18	0	0
2020-04-30	14:20	14:50	AQ KM 160	300-1000	0	90	0	0	18	2	0	73	0	0	34
2020-08-09	13:52	13:20	NA	0-50	0	0	0	1	0	0	0	0	0	0	1
2020-08-07	9:00	9:11	KM 161	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-07	14:50	15:20	AQ KM 161	300-1000	0	3	0	0	1	0	0	0	0	0	1

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	0	2	2	0	0	0	0	0	0	0	0
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	0	0	0	0	0	24	0	0	0	0	1
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	0	0	0	0	0	12	0	0	NA	NA	NA
2020-05-11	12:10	12:31	AQ KM 128	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-02	13:00	13:30	AQ KM 129	NA	0	0	14	0	1	2	1	0	15	0	1
2020-05-03	14:00	14:18	AQ KM 130	300-1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	2	0	3	7	0	0	2	0	5	7	0
2020-05-09	13:50	14:20	AQ KM 131	>1000	0	0	16	2	0	0	0	0	18	2	0
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	NA	NA	0	0	0	0	0	1	0	0	0
2020-05-07	8:49	9:10	AQ KM 133	300-1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	14:30	15:00	AQ KM 134.6	NA	0	0	16	0	2	10	0	0	13	0	3
2020-05-07	12:25	12:52	AQ KM 134	>1000	0	0	0	0	0	0	0	0	0	0	0
2020-05-10	9:50	10:20	AQ KM 136	>1000	0	0	~31	0	1	0	0	0	32	0	0
2020-05-04	12:50	13:18	AQ KM 136	300-1000	0	0	5	0	0	4	0	0	0	0	0
2020-05-11	13:18	13:30	AQ KM 137	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-02	14:25	14:55	AQ KM 136	300-1000	0	0	3	0	0	1	0	0	4	0	0
2020-05-04	15:10	15:19	AQ KM 147	300-1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-29	12:20	12:50	AQ KM 148	50-100	2	0	12	0	0	5	0	0	10	0	5
2020-04-30	8:30	8:37	AQ KM 144	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	9:00	9:30	AQ KM 140	300-1000	3	0	2	0	4	8	2	0	6	0	8
2020-05-03	10:30	10:45	AQ KM 161	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	16:30	17:00	AQ KM 148	>1000	2	0	16	34	2	0	0	0	12	36	0
2020-04-29	11:20	11:50	AQ KM 138	300-1000	6	5	13	0	0	16	4	0	4	0	0
2020-08-07	12:32	13:00	NA	300-1000	3	0	25	0	75	430	2	0	50	0	100
2020-08-06	15:50	16:20	AQ KM 149	>1000	2	0	140	52	3	3	2	0	125	32	0
2020-05-01	15:20	15:50	AQ KM 151	300-1000	0	0	3	10	2	0	0	0	4	10	1
2020-05-06	9:25	9:55	AQ KM 153	>1000	0	0	0	15	0	0	0	0	0	15	0
2020-08-06	14:50	15:20	AQ KM 156	>1000	0	0	0	0	0	25	0	1	0	0	0
2020-05-02	16:00	16:12	AQ KM 161	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	9:00	9:30	AQ KM 158	>1000	1	0	24	2	0	0	0	0	21	2	2
2020-08-07	9:20	9:50	KM 154	>1000	1	0	19	0	0	14	1	0	14	0	0
2020-08-06	10:37	11:07	AQ KM 106	0-50	0	0	0	0	0	1	1	0	2	0	0
2020-08-06	10:40	11:10	AQ KM 159	NA	0	0	61	5	2	4	0	0	40	6	1
2020-05-12	16:50	17:20	AQ KM 159	300-1000	0	0	19	0	1	1	0	0	5	0	14
2020-05-03	8:30	9:00	AQ KM 160	300-1000	0	0	7	0	1	0	0	0	5	0	0
2020-05-04	16:10	16:40	AQ KM 160	>1000	0	0	0	18	0	0	0	0	0	18	0
2020-04-30	14:20	14:50	AQ KM 160	300-1000	3	0	16	0	0	86	8	0	NA	NA	NA
2020-08-09	13:52	13:20	NA	0-50	0	0	1	0	0	0	0	0	1	0	0
2020-08-07	9:00	9:11	KM 161	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-07	14:50	15:20	AQ KM 161	300-1000	0	0	0	0	3	1	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	2	0	0	2	0	0	0	0	0
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	35	0	0	0	0	0	36	0	0
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-11	12:10	12:31	AQ KM 128	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-02	13:00	13:30	AQ KM 129	NA	4	0	0	16	0	0	2	0	0
2020-05-03	14:00	14:18	AQ KM 130	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	0	0	0	4	7	0	1	0	0
2020-05-09	13:50	14:20	AQ KM 131	>1000	0	0	0	18	2	0	0	0	0
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	1	0	0	1	0	0	0	0	0
2020-05-07	8:49	9:10	AQ KM 133	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	14:30	15:00	AQ KM 134.6	NA	12	0	0	18	0	0	10	0	0
2020-05-07	12:25	12:52	AQ KM 134	>1000	0	0	0	NA	NA	NA	NA	NA	NA
2020-05-10	9:50	10:20	AQ KM 136	>1000	0	0	0	32	0	0	0	0	0
2020-05-04	12:50	13:18	AQ KM 136	300-1000	0	0	6	NA	NA	NA	NA	NA	NA
2020-05-11	13:18	13:30	AQ KM 137	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-02	14:25	14:55	AQ KM 136	300-1000	0	0	0	3	0	1	0	0	0
2020-05-04	15:10	15:19	AQ KM 147	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-29	12:20	12:50	AQ KM 148	50-100	0	1	0	9	0	0	4	1	0
2020-04-30	8:30	8:37	AQ KM 144	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	9:00	9:30	AQ KM 140	300-1000	12	2	0	12	2	4	6	4	0
2020-05-03	10:30	10:45	AQ KM 161	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	16:30	17:00	AQ KM 148	>1000	4	2	0	14	36	0	2	0	0
2020-04-29	11:20	11:50	AQ KM 138	300-1000	62	7	3	12	0	0	80	5	4
2020-08-07	12:32	13:00	NA	300-1000	377	6	0	4	0	4	528	1	0
2020-08-06	15:50	16:20	AQ KM 149	>1000	41	2	0	166	20	8	6	4	0
2020-05-01	15:20	15:50	AQ KM 151	300-1000	0	0	0	3	10	2	0	0	0
2020-05-06	9:25	9:55	AQ KM 153	>1000	0	0	0	0	15	0	0	0	0
2020-08-06	14:50	15:20	AQ KM 156	>1000	10	0	0	0	0	0	2	0	0
2020-05-02	16:00	16:12	AQ KM 161	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	9:00	9:30	AQ KM 158	>1000	1	2	0	22	2	1	1	0	0
2020-08-07	9:20	9:50	KM 154	>1000	28	0	0	8	0	2	35	0	0
2020-08-06	10:37	11:07	AQ KM 106	0-50	0	0	0	0	0	0	2	0	0
2020-08-06	10:40	11:10	AQ KM 159	NA	11	0	0	15	8	1	0	2	0
2020-05-12	16:50	17:20	AQ KM 159	300-1000	2	0	0	12	0	1	9	0	0
2020-05-03	8:30	9:00	AQ KM 160	300-1000	2	0	0	7	0	0	0	0	0
2020-05-04	16:10	16:40	AQ KM 160	>1000	0	0	0	0	18	0	0	0	0
2020-04-30	14:20	14:50	AQ KM 160	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-09	13:52	13:20	NA	0-50	0	0	0	0	0	0	0	0	0
2020-08-07	9:00	9:11	KM 161	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-07	14:50	15:20	AQ KM 161	300-1000	4	0	0	0	0	0	3	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	NA	NA	NA	NA	NA	NA
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	NA	NA	NA	NA	NA	NA
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	NA	NA	NA	NA	NA	NA
2020-05-11	12:10	12:31	AQ KM 128	300-1000	Haul truck	NA	NA	NA	NA	Haul truck
2020-05-02	13:00	13:30	AQ KM 129	NA	NA	NA	NA	NA	NA	NA
2020-05-03	14:00	14:18	AQ KM 130	300-1000	NA	NA	NA	NA	NA	NA
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	NA	NA	NA	NA	NA	NA
2020-05-09	13:50	14:20	AQ KM 131	>1000	NA	NA	NA	NA	NA	Haul truck
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	NA	NA	NA	NA	NA	NA
2020-05-07	8:49	9:10	AQ KM 133	300-1000	NA	NA	NA	NA	Light truck	Light truck
2020-05-03	14:30	15:00	AQ KM 134.6	NA	NA	NA	NA	NA	NA	NA
2020-05-07	12:25	12:52	AQ KM 134	>1000	Haul truck	NA	NA	NA	NA	Haul truck
2020-05-10	9:50	10:20	AQ KM 136	>1000	NA	NA	NA	Light truck	NA	NA
2020-05-04	12:50	13:18	AQ KM 136	300-1000	NA	NA	NA	NA	NA	NA
2020-05-11	13:18	13:30	AQ KM 137	300-1000	NA	Road maintenance vehicle	NA	NA	NA	NA
2020-05-02	14:25	14:55	AQ KM 136	300-1000	NA	NA	NA	NA	NA	NA
2020-05-04	15:10	15:19	AQ KM 147	300-1000	NA	NA	NA	NA	NA	NA
2020-04-29	12:20	12:50	AQ KM 148	50-100	NA	NA	NA	NA	NA	NA
2020-04-30	8:30	8:37	AQ KM 144	100-300	Light truck	NA	Light truck	NA	NA	NA
2020-04-30	9:00	9:30	AQ KM 140	300-1000	NA	Haul truck	NA	NA	NA	Light truck
2020-05-03	10:30	10:45	AQ KM 161	>1000	NA	NA	NA	NA	NA	NA
2020-04-30	16:30	17:00	AQ KM 148	>1000	NA	Light truck	NA	NA	NA	NA
2020-04-29	11:20	11:50	AQ KM 138	300-1000	NA	NA	Light truck	NA	NA	NA
2020-08-07	12:32	13:00	NA	300-1000	NA	NA	NA	NA	NA	Light truck
2020-08-06	15:50	16:20	AQ KM 149	>1000	NA	NA	NA	NA	NA	NA
2020-05-01	15:20	15:50	AQ KM 151	300-1000	NA	NA	NA	NA	NA	NA
2020-05-06	9:25	9:55	AQ KM 153	>1000	NA	NA	NA	NA	NA	Light truck
2020-08-06	14:50	15:20	AQ KM 156	>1000	NA	Helicopter	NA	NA	NA	NA
2020-05-02	16:00	16:12	AQ KM 161	300-1000	NA	NA	NA	Convoy	NA	NA
2020-05-03	9:00	9:30	AQ KM 158	>1000	NA	NA	NA	NA	NA	NA
2020-08-07	9:20	9:50	KM 154	>1000	NA	NA	NA	NA	NA	NA
2020-08-06	10:37	11:07	AQ KM 106	0-50	NA	NA	NA	NA	NA	NA
2020-08-06	10:40	11:10	AQ KM 159	NA	NA	NA	NA	NA	NA	NA
2020-05-12	16:50	17:20	AQ KM 159	300-1000	NA	NA	NA	NA	NA	NA
2020-05-03	8:30	9:00	AQ KM 160	300-1000	NA	NA	NA	NA	NA	NA
2020-05-04	16:10	16:40	AQ KM 160	>1000	NA	NA	NA	NA	NA	NA
2020-04-30	14:20	14:50	AQ KM 160	300-1000	NA	NA	NA	Bus	Bus	NA
2020-08-09	13:52	13:20	NA	0-50	NA	NA	NA	NA	NA	NA
2020-08-07	9:00	9:11	KM 161	>1000	NA	NA	NA	NA	NA	NA
2020-05-07	14:50	15:20	AQ KM 161	300-1000	NA	NA	Haul truck	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2020-05-01	12:30	13:00	AQ Rd KM 126	NA	NA	NA	NA	NA	NA	2020	-96.1051	65.14147	NA
2020-05-03	13:00	13:30	AQ KM 126.5	>1000	NA	NA	NA	NA	NA	2020	-96.1108	65.1481	NA
2020-05-01	9:50	10:14	AQ Rd KM 127	300-1000	NA	NA	NA	NA	NA	2020	-96.1261	65.15404	NA
2020-05-11	12:10	12:31	AQ KM 128	300-1000	NA	NA	NA	NA	NA	2020	-96.1436	65.16596	NA
2020-05-02	13:00	13:30	AQ KM 129	NA	NA	NA	NA	NA	NA	2020	-96.1461	65.16955	NA
2020-05-03	14:00	14:18	AQ KM 130	300-1000	NA	NA	NA	NA	NA	2020	-96.1542	65.17925	NA
2020-04-29	10:20	10:50	AQ Hal Rd KM 130	300-1000	NA	NA	NA	NA	NA	2020	-96.1592	65.18238	NA
2020-05-09	13:50	14:20	AQ KM 131	>1000	NA	Haul truck	Haul truck	NA	Haul truck	2020	-96.1604	65.18523	NA
2020-05-02	13:40	14:10	AQ KM 132.5	50-100	NA	NA	NA	NA	NA	2020	-96.1643	65.19579	NA
2020-05-07	8:49	9:10	AQ KM 133	300-1000	Haul truck	NA	NA	NA	NA	2020	-96.1646	65.19599	NA
2020-05-03	14:30	15:00	AQ KM 134.6	NA	NA	NA	NA	NA	NA	2020	-96.1804	65.19973	NA
2020-05-07	12:25	12:52	AQ KM 134	>1000	NA	NA	Haul truck	NA	NA	2020	-96.1824	65.20059	NA
2020-05-10	9:50	10:20	AQ KM 136	>1000	NA	NA	NA	Haul truck	NA	2020	-96.2249	65.21218	NA
2020-05-04	12:50	13:18	AQ KM 136	300-1000	NA	NA	NA	Light truck	NA	2020	-96.2275	65.21262	NA
2020-05-11	13:18	13:30	AQ KM 137	300-1000	NA	NA	NA	NA	NA	2020	-96.2427	65.2129	NA
2020-05-02	14:25	14:55	AQ KM 136	300-1000	NA	NA	NA	Grader	NA	2020	-96.2336	65.21606	NA
2020-05-04	15:10	15:19	AQ KM 147	300-1000	NA	NA	NA	NA	NA	2020	-96.4263	65.22214	NA
2020-04-29	12:20	12:50	AQ KM 148	50-100	NA	NA	NA	NA	NA	2020	-96.442	65.22313	NA
2020-04-30	8:30	8:37	AQ KM 144	100-300	NA	NA	NA	NA	NA	2020	-96.3707	65.22281	NA
2020-04-30	9:00	9:30	AQ KM 140	300-1000	Light truck	NA	NA	NA	Tractor trailer	2020	-96.2518	65.22157	NA
2020-05-03	10:30	10:45	AQ KM 161	>1000	NA	NA	NA	NA	NA	2020	-96.2552	65.22248	NA
2020-04-30	16:30	17:00	AQ KM 148	>1000	NA	NA	NA	NA	NA	2020	-96.3958	65.22618	NA
2020-04-29	11:20	11:50	AQ KM 138	300-1000	NA	NA	NA	NA	NA	2020	-96.2641	65.22479	NA
2020-08-07	12:32	13:00	NA	300-1000	NA	Light truck	NA	NA	NA	2020	-96.4668	65.23247	NA
2020-08-06	15:50	16:20	AQ KM 149	>1000	NA	NA	NA	Light truck	NA	2020	-96.4686	65.23646	NA
2020-05-01	15:20	15:50	AQ KM 151	300-1000	NA	NA	NA	NA	NA	2020	-96.4751	65.24053	NA
2020-05-06	9:25	9:55	AQ KM 153	>1000	NA	NA	NA	NA	NA	2020	-96.4751	65.2406	NA
2020-08-06	14:50	15:20	AQ KM 156	>1000	NA	NA	NA	NA	NA	2020	-96.4045	65.27556	NA
2020-05-02	16:00	16:12	AQ KM 161	300-1000	NA	NA	NA	NA	NA	2020	-96.4089	65.28358	NA
2020-05-03	9:00	9:30	AQ KM 158	>1000	NA	NA	NA	NA	NA	2020	-96.4127	65.28547	NA
2020-08-07	9:20	9:50	KM 154	>1000	NA	NA	NA	Helicopter	NA	2020	-96.4088	65.28592	NA
2020-08-06	10:37	11:07	AQ KM 106	0-50	NA	NA	NA	NA	NA	2020	-96.4139	65.29316	NA
2020-08-06	10:40	11:10	AQ KM 159	NA	NA	NA	NA	NA	NA	2020	-96.4139	65.29316	NA
2020-05-12	16:50	17:20	AQ KM 159	300-1000	NA	NA	NA	NA	Haul truck	2020	-96.4134	65.2966	NA
2020-05-03	8:30	9:00	AQ KM 160	300-1000	NA	NA	NA	NA	NA	2020	-96.4127	65.29738	NA
2020-05-04	16:10	16:40	AQ KM 160	>1000	NA	NA	NA	Light truck	NA	2020	-96.4119	65.30093	NA
2020-04-30	14:20	14:50	AQ KM 160	300-1000	Light truck	Haul truck	NA	NA	NA	2020	-96.4122	65.30462	NA
2020-08-09	13:52	13:20	NA	0-50	NA	Fuel truck	NA	NA	NA	2020	-96.412	65.30469	NA
2020-08-07	9:00	9:11	KM 161	>1000	NA	NA	NA	NA	NA	2020	-96.4141	65.30902	NA
2020-05-07	14:50	15:20	AQ KM 161	300-1000	NA	NA	Haul truck	NA	NA	2020	-96.4145	65.30961	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	K.P	NA	NA	NA	No	62	-12	10	NW	NA
2020-05-03	7:40	8:10	AQ KM 161	>1000	K.P	NA	NA	West	No	11	-10	17	NE	77
2020-04-29	13:45	14:00	AQ KM 163	300-1000	K.P	NA	NA	West	No	10	-4	35	NE	NA
2020-05-03	16:40	15:01	AQ KM 168	300-1000	K.P	NA	NA	East	No	2	-5.5	26	NE	85
2020-04-30	11:30	12:00	AQ KM 167	300-1000	K.P	NA	NA	NA	No	20	NA	NA	NA	NA
2020-04-29	16:15	16:33	AQ KM 173	>1000	K.P	NA	NA	West	No	23	-3	30	NE	NA
2020-04-30	12:20	12:50	AQ KM 175	100-300	K.P	NA	NA	NA	No	2	NA	25	N	NA
2020-04-29	14:40	15:10	AQ KM 175	>1000	K.P	NA	NA	West	No	21	-4	21	NE	NA
2020-05-14	16:30	17:00	AQ KM 175	300-1000	J.B	NA	NA	West	No	4	-5	2.5	N	58
2020-05-06	7:20	7:50	AQ KM 160	>1000	K.P	NA	NA	NA	No	2	-20	28	NNE	61
2020-05-06	7:23	7:53	AQ KM 176	300-1000	J.B	NA	NA	West	No	21	-20	28	N	61
2020-05-06	17:10	17:40	AQ KM 176	>1000	J.B/K.P	NA	NA	NA	No	32	NA	NA	NA	NA
2020-05-06	17:20	17:50	NA	300-1000	J.B/K.P	NA	NA	West	No	34	NA	NA	NA	NA
2020-05-02	7:00	7:30	KM 175	300-1000	K.P	NA	NA	West	No	52	NA	NA	NA	NA
2020-05-11	16:15	16:45	AQ KM 177	300-1000	J.B	NA	NA	West	No	50-100	-3	10	N	50
2020-08-06	11:25	11:55	AQ KM 166	NA	K.P	NA	NA	NA	No	~300	17	35	SE	NA
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	K.P	NA	NA	West	No	2	7	50	NE	NA
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	C.G.P	NA	NA	East	No	29	9	18	NW	59
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	S.K.	NA	SW	West	No	350	-16	7	N	80
2020-11-08	11:22	11:52	AWAR KM 60	100-300	S.K.	NA	E	East	No	135	-18	11	N	80
2020-11-09	9:50	10:20	AWAR KM 57	50-100	S.K.	NA	W	West	No	52	-8	15	SW	91
2020-11-18	10:22	10:39	AWAR KM 80	100-300	S.K.	NA	NA	East	No	27	-17	NA	NA	NA
2020-11-19	11:17	11:45	AWAR KM 64	100-300	S.K.	NA	NA	East	No	39	-23	6	WSW	72
2020-11-12	11:00	11:12	AWAR KM 77	>1000	K.P.	NA	NA	East	No	52	-21	10	NW	70
2020-11-13	11:20	11:50	AWAR KM 58	>1000	K.P.	NA	NA	East	No	212	-14	20	NW	78
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	K.P.	NA	NA	East	No	27	-22	27	NW	70
2020-11-14	10:20	10:50	AWAR KM 53	>1000	K.P.	NA	NA	East	No	170	-22	27	NW	70
2020-11-14	11:20	11:50	AWAR KM 46	>1000	K.P.	NA	NA	East	No	28	-22	27	NW	70
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	K.P.	NA	NA	East	No	123	-24	27	NW	70
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	K.P.	NA	NA	East	No	41	-24	27	NW	70
2020-11-15	15:03	15:33	AWAR KM 75	>1000	K.P.	NA	NA	NA	No	31	-26	12	SE	69
2020-11-15	10:00	10:30	AWAR KM 50	>1000	K.P.	NA	NA	West	No	29	31	12	SE	69
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	EF	NA	NA	West	No	62	-18	22	NA	NA
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	Kathleen, Krista Kenyon	NA	3	West	No	16	-13	30	NA	NA
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	Louis Dubois	NA	90	West	No	52	-17	46	NA	NA
2021-04-08	13:46	14:18	AWAR KM 103	0-50	Louis Dubois	NA	90	West	No	18	-15	33	NA	NA
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	Krista Kenyon	NA	270	East	No	12	NA	NA	NA	NA
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	Louis Dubois	NA	90	West	No	63	-26	8	NA	NA
2021-04-13	9:23	9:54	AWAR KM 82	>1000	KAK	NA	270	West	No	11	-24	20	NA	NA
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	KAK	NA	90	West	No	72	-19	37	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	NA	NA	100	NA	
2020-05-03	7:40	8:10	AQ KM 161	>1000	1	White out, light snow	500 west, 0 east	NA	NA
2020-04-29	13:45	14:00	AQ KM 163	300-1000	1	Windy, drifting snow	NA	NA	NA
2020-05-03	16:40	15:01	AQ KM 168	300-1000	NA	NA	NA	NA	NA
2020-04-30	11:30	12:00	AQ KM 167	300-1000	1	Drifting snow, good visibility, sunny	400 west, 0 east	NA	None
2020-04-29	16:15	16:33	AQ KM 173	>1000	1	Snowy, windy	NA	NA	NA
2020-04-30	12:20	12:50	AQ KM 175	100-300	1	Sunny, windy	100 west, 0 east	NA	None
2020-04-29	14:40	15:10	AQ KM 175	>1000	1	Snowy	Almost flat	NA	NA
2020-05-14	16:30	17:00	AQ KM 175	300-1000	NA	Partly cloudy	1000	NA	None
2020-05-06	7:20	7:50	AQ KM 160	>1000	1	NA	200 west, 0 east	200	None
2020-05-06	7:23	7:53	AQ KM 176	300-1000	NA	NA	300-400	NA	None
2020-05-06	17:10	17:40	AQ KM 176	>1000	1	NA	100 west, 0 east	NA	NA
2020-05-06	17:20	17:50	NA	300-1000	NA	NA	NA	NA	NA
2020-05-02	7:00	7:30	KM 175	300-1000	NA	NA	NA	NA	NA
2020-05-11	16:15	16:45	AQ KM 177	300-1000	NA	Cloudy	~1000	NA	None
2020-08-06	11:25	11:55	AQ KM 166	NA	NA	Started to rain, overcast	NA	NA	NA
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	0	NA	NA	NA	None
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	NA	NA	NA	NA	NA
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	4	Sunny, light clouds	100	600	None
2020-11-08	11:22	11:52	AWAR KM 60	100-300	4	Sunny	100	600	None
2020-11-09	9:50	10:20	AWAR KM 57	50-100	5	White out, visibility 50 m minimum, 300 m maximum	100	600	None
2020-11-18	10:22	10:39	AWAR KM 80	100-300	NA	NA	100	700	None
2020-11-19	11:17	11:45	AWAR KM 64	100-300	NA	Partly cloudy	100	700	None
2020-11-12	11:00	11:12	AWAR KM 77	>1000	1	NA	100	800	None
2020-11-13	11:20	11:50	AWAR KM 58	>1000	0	Drifting snow/overcast	50	500	None
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	1	Overcast, -38 windchill	125	400	Bridge at KM 49
2020-11-14	10:20	10:50	AWAR KM 53	>1000	1	Overcast, -38 windchill	50	500	None
2020-11-14	11:20	11:50	AWAR KM 46	>1000	2	1/2 overcast, sunny, increasing wind, -38 windchill	200	800	Quarry
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	1	Clearing sky, -38 windchill	0	600	None
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	1	Clear and sunny, -38 windchill	25	600	None
2020-11-15	15:03	15:33	AWAR KM 75	>1000	2	Setting sun, overcast	0	10	None
2020-11-15	10:00	10:30	AWAR KM 50	>1000	2	NA	100	500	Bridge at KM 49
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	0	Cloudy, windy	NA	NA	Bridge at KM 119
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	0	Sunny in the morning, got cloudy around 13:00	0	6	None
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	NA	NA	NA	NA	NA
2021-04-08	13:46	14:18	AWAR KM 103	0-50	1	NA	0	NA	Flags
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	NA	NA	NA	NA	NA
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	3	NA	0	0	Flags
2021-04-13	9:23	9:54	AWAR KM 82	>1000	2	Sunny	0	6	None
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	2	Overcast, clear Weather shifted at start of survey. Visibility dropped and some snow is drifting low over the road. Subsampled to what group was clearly visible.	0	6	None

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	53	0	3	5	1	0	0	0	2	45	5	10
2020-05-03	7:40	8:10	AQ KM 161	>1000	0	0	2	9	0	0	1	0	1	9	0	0
2020-04-29	13:45	14:00	AQ KM 163	300-1000	0	0	0	10	0	0	0	0	0	2	8	0
2020-05-03	16:40	15:01	AQ KM 168	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2020-04-30	11:30	12:00	AQ KM 167	300-1000	18	1	0	0	1	0	17	1	0	0	2	0
2020-04-29	16:15	16:33	AQ KM 173	>1000	0	0	0	23	0	0	0	0	0	23	0	0
2020-04-30	12:20	12:50	AQ KM 175	100-300	1	0	0	0	1	0	0	2	0	0	0	0
2020-04-29	14:40	15:10	AQ KM 175	>1000	4	0	3	8	0	0	4	0	1	9	1	0
2020-05-14	16:30	17:00	AQ KM 175	300-1000	1	2	0	1	0	0	1	2	1	0	0	0
2020-05-06	7:20	7:50	AQ KM 160	>1000	0	2	0	0	0	0	0	2	0	0	0	0
2020-05-06	7:23	7:53	AQ KM 176	300-1000	0	19	2	0	0	0	0	21	0	0	0	0
2020-05-06	17:10	17:40	AQ KM 176	>1000	29	2	0	1	0	0	25	1	5	1	0	0
2020-05-06	17:20	17:50	NA	300-1000	0	0	0	34	0	0	4	0	0	30	0	0
2020-05-02	7:00	7:30	KM 175	300-1000	38	0	5	2	0	0	31	0	0	21	0	0
2020-05-11	16:15	16:45	AQ KM 177	300-1000	40	43	1	1	0	0	40	40	1	15	0	0
2020-08-06	11:25	11:55	AQ KM 166	NA	50	0	0	240	4	6	10	0	0	240	2	4
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	0	0	0	29	0	0	0	0	0	0	0	29
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	337	0	5	8	0	0	342	0	3	4	1	0
2020-11-08	11:22	11:52	AWAR KM 60	100-300	15	0	9	36	2	0	23	0	5	23	12	12
2020-11-09	9:50	10:20	AWAR KM 57	50-100	33	0	1	0	0	0	34	0	0	0	0	0
2020-11-18	10:22	10:39	AWAR KM 80	100-300	0	0	0	26	1	0	0	0	0	27	0	0
2020-11-19	11:17	11:45	AWAR KM 64	100-300	0	0	3	36	0	0	3	0	4	32	0	0
2020-11-12	11:00	11:12	AWAR KM 77	>1000	40	0	2	0	0	0	38	0	1	3	0	0
2020-11-13	11:20	11:50	AWAR KM 58	>1000	205	0	3	4	0	0	198	2	1	11	0	0
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	25	2	0	0	0	0	25	2	0	0	0	0
2020-11-14	10:20	10:50	AWAR KM 53	>1000	62	0	3	0	0	0	65	0	4	6	0	0
2020-11-14	11:20	11:50	AWAR KM 46	>1000	27	0	0	1	0	0	26	0	0	2	0	0
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	30	0	0	2	0	0	29	0	0	3	0	0
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	27	0	1	0	3	0	24	0	2	4	1	0
2020-11-15	15:03	15:33	AWAR KM 75	>1000	0	0	0	31	0	0	0	0	0	31	0	0
2020-11-15	10:00	10:30	AWAR KM 50	>1000	22	7	0	0	0	0	21	6	1	1	0	0
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	8	0	0	0	0	0	8	0	0	0	0	0
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	0	0	0	16	0	0	0	0	0	16	0	0
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	0	51	0	0	1	0	0	52	0	0	0	0
2021-04-08	13:46	14:18	AWAR KM 103	0-50	18	0	0	0	0	0	18	0	0	0	0	0
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	0	0	2	10	0	0	10	0	0	2	0	0
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	5	1	4	18	0	0	0	0	4	19	0	0
2021-04-13	9:23	9:54	AWAR KM 82	>1000	7	0	0	0	0	0	7	0	0	0	0	0
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	1	28	0	0	0	0	1	28	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	0	0	4	56	2	0	NA	NA	NA	NA	NA	NA
2020-05-03	7:40	8:10	AQ KM 161	>1000	0	0	0	11	0	0	0	0	0	11	0	0
2020-04-29	13:45	14:00	AQ KM 163	300-1000	0	0	0	9	1	0	0	0	0	0	0	0
2020-05-03	16:40	15:01	AQ KM 168	300-1000	0	0	0	2	0	0	0	0	0	2	0	0
2020-04-30	11:30	12:00	AQ KM 167	300-1000	17	0	0	0	3	0	19	0	0	0	1	0
2020-04-29	16:15	16:33	AQ KM 173	>1000	0	0	0	19	0	4	0	0	18	5	0	0
2020-04-30	12:20	12:50	AQ KM 175	100-300	0	2	0	0	0	0	0	2	0	0	0	0
2020-04-29	14:40	15:10	AQ KM 175	>1000	6	0	1	6	2	0	14	0	0	0	1	0
2020-05-14	16:30	17:00	AQ KM 175	300-1000	2	2	0	0	0	0	1	0	0	3	0	0
2020-05-06	7:20	7:50	AQ KM 160	>1000	0	2	0	0	0	0	0	2	0	0	0	0
2020-05-06	7:23	7:53	AQ KM 176	300-1000	0	21	0	0	0	0	0	11	10	0	0	0
2020-05-06	17:10	17:40	AQ KM 176	>1000	30	0	0	2	0	0	28	0	2	2	0	0
2020-05-06	17:20	17:50	NA	300-1000	0	0	0	34	0	0	0	0	3	31	0	0
2020-05-02	7:00	7:30	KM 175	300-1000	27	0	1	23	4	0	22	0	0	27	3	0
2020-05-11	16:15	16:45	AQ KM 177	300-1000	25	0	0	75	0	0	50	0	0	50	0	0
2020-08-06	11:25	11:55	AQ KM 166	NA	2	0	6	280	0	8	50	0	2	240	2	0
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	1	0	0	1	0	0	0	0	0	2	0	0
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	0	0	0	29	0	0	0	0	0	29	0	0
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	340	0	5	3	2	0	306	0	31	8	5	0
2020-11-08	11:22	11:52	AWAR KM 60	100-300	25	0	17	57	6	0	47	0	11	24	15	3
2020-11-09	9:50	10:20	AWAR KM 57	50-100	28	0	1	5	0	0	34	0	0	0	0	0
2020-11-18	10:22	10:39	AWAR KM 80	100-300	0	0	3	23	0	1	3	0	2	22	0	0
2020-11-19	11:17	11:45	AWAR KM 64	100-300	0	0	0	39	0	0	39	0	0	0	0	0
2020-11-12	11:00	11:12	AWAR KM 77	>1000	34	3	2	2	1	0	34	7	2	1	1	0
2020-11-13	11:20	11:50	AWAR KM 58	>1000	184	0	2	26	0	0	185	0	3	24	0	0
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	26	1	0	0	0	0	23	2	0	2	0	0
2020-11-14	10:20	10:50	AWAR KM 53	>1000	72	0	2	8	1	0	80	0	0	72	2	0
2020-11-14	11:20	11:50	AWAR KM 46	>1000	23	0	0	5	0	0	27	0	0	1	0	0
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	30	0	0	2	0	0	16	0	2	67	0	0
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	29	0	1	1	0	0	28	0	2	1	0	0
2020-11-15	15:03	15:33	AWAR KM 75	>1000	6	0	0	25	0	0	21	0	0	10	0	0
2020-11-15	10:00	10:30	AWAR KM 50	>1000	21	6	0	2	0	0	24	5	0	0	0	0
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	8	0	0	1	0	0	7	0	0	1	0	0
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	0	0	0	16	0	0	0	0	0	16	0	0
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	0	52	0	0	0	0	0	52	0	0	0	0
2021-04-08	13:46	14:18	AWAR KM 103	0-50	17	0	1	0	0	0	18	0	0	0	0	0
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	12	0	0	0	0	0	12	0	0	0	0	0
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	0	0	10	11	0	0	0	0	1	0	0	0
2021-04-13	9:23	9:54	AWAR KM 82	>1000	7	0	0	2	0	0	10	0	0	1	0	0
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	1	27	1	0	0	0	1	28	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	7:40	8:10	AQ KM 161	>1000	0	0	0	11	0	0	0	0	0	11	0
2020-04-29	13:45	14:00	AQ KM 163	300-1000	0	0	0	0	0	0	0	0	0	0	0
2020-05-03	16:40	15:01	AQ KM 168	300-1000	0	0	0	0	2	0	0	0	0	2	0
2020-04-30	11:30	12:00	AQ KM 167	300-1000	16	0	0	3	1	0	20	0	0	0	0
2020-04-29	16:15	16:33	AQ KM 173	>1000	0	0	0	23	0	0	15	0	2	6	0
2020-04-30	12:20	12:50	AQ KM 175	100-300	0	2	0	0	0	0	0	2	0	0	0
2020-04-29	14:40	15:10	AQ KM 175	>1000	13	0	1	2	0	0	16	0	0	0	0
2020-05-14	16:30	17:00	AQ KM 175	300-1000	2	0	0	0	0	0	0	0	0	4	0
2020-05-06	7:20	7:50	AQ KM 160	>1000	0	2	0	0	0	0	0	2	0	0	0
2020-05-06	7:23	7:53	AQ KM 176	300-1000	1	20	0	0	0	0	1	20	0	0	0
2020-05-06	17:10	17:40	AQ KM 176	>1000	28	0	0	2	0	0	32	0	0	0	0
2020-05-06	17:20	17:50	NA	300-1000	32	0	0	2	0	0	21	0	3	10	0
2020-05-02	7:00	7:30	KM 175	300-1000	17	0	4	16	1	0	26	0	2	14	0
2020-05-11	16:15	16:45	AQ KM 177	300-1000	100	0	0	100	0	0	75	4	0	0	0
2020-08-06	11:25	11:55	AQ KM 166	NA	30	0	0	216	4	0	4	0	0	40	2
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	2	0	0	0	0	0	2	0	0	0	0
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	0	0	0	29	0	0	0	0	0	29	0
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	312	0	17	5	16	0	330	0	15	2	3
2020-11-08	11:22	11:52	AWAR KM 60	100-300	104	2	4	23	2	0	100	1	5	26	3
2020-11-09	9:50	10:20	AWAR KM 57	50-100	52	0	0	0	0	0	52	0	0	0	0
2020-11-18	10:22	10:39	AWAR KM 80	100-300	0	0	0	24	0	3	0	0	2	23	0
2020-11-19	11:17	11:45	AWAR KM 64	100-300	37	0	2	0	0	0	39	0	0	0	0
2020-11-12	11:00	11:12	AWAR KM 77	>1000	0	0	0	0	0	52	NA	NA	NA	NA	NA
2020-11-13	11:20	11:50	AWAR KM 58	>1000	160	6	2	44	0	0	136	3	4	69	0
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	22	2	0	3	0	0	25	1	0	1	0
2020-11-14	10:20	10:50	AWAR KM 53	>1000	80	0	0	75	1	3	102	3	0	55	0
2020-11-14	11:20	11:50	AWAR KM 46	>1000	15	0	1	2	0	0	17	0	0	0	0
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	5	0	0	93	0	25	0	0	0	77	6
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	39	0	0	2	0	0	30	0	0	1	0
2020-11-15	15:03	15:33	AWAR KM 75	>1000	27	0	0	3	1	0	31	0	0	0	0
2020-11-15	10:00	10:30	AWAR KM 50	>1000	24	5	0	0	0	0	24	4	1	0	0
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	3	0	0	2	0	0	4	0	0	0	0
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	0	0	0	16	0	0	0	0	0	16	0
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	0	52	0	0	0	0	0	52	0	0	0
2021-04-08	13:46	14:18	AWAR KM 103	0-50	17	0	0	1	0	0	18	0	0	0	0
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	12	0	0	0	0	0	12	0	0	0	0
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-13	9:23	9:54	AWAR KM 82	>1000	6	0	0	0	2	0	8	0	0	0	0
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	1	28	0	0	0	0	1	28	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	7:40	8:10	AQ KM 161	>1000	0	0	0	0	11	0	0	6	0	0	2
2020-04-29	13:45	14:00	AQ KM 163	300-1000	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	16:40	15:01	AQ KM 168	300-1000	0	0	0	0	2	0	0	0	0	0	2
2020-04-30	11:30	12:00	AQ KM 167	300-1000	0	13	0	0	5	2	0	0	0	0	15
2020-04-29	16:15	16:33	AQ KM 173	>1000	0	6	0	1	16	0	0	NA	NA	NA	NA
2020-04-30	12:20	12:50	AQ KM 175	100-300	0	0	2	0	0	0	0	0	2	0	0
2020-04-29	14:40	15:10	AQ KM 175	>1000	0	16	0	0	0	0	0	14	0	0	2
2020-05-14	16:30	17:00	AQ KM 175	300-1000	0	4	0	0	0	0	0	3	0	0	1
2020-05-06	7:20	7:50	AQ KM 160	>1000	0	0	2	0	0	0	0	0	2	0	0
2020-05-06	7:23	7:53	AQ KM 176	300-1000	0	1	17	3	0	0	0	0	21	0	0
2020-05-06	17:10	17:40	AQ KM 176	>1000	0	27	0	2	3	0	0	25	0	3	5
2020-05-06	17:20	17:50	NA	300-1000	0	6	0	3	0	0	0	6	0	0	11
2020-05-02	7:00	7:30	KM 175	300-1000	0	21	0	2	18	0	0	19	0	4	26
2020-05-11	16:15	16:45	AQ KM 177	300-1000	0	100	0	0	0	0	0	100	0	0	1
2020-08-06	11:25	11:55	AQ KM 166	NA	150	6	0	0	20	3	120	0	0	0	0
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	0	1	0	0	0	1	0	1	0	0	0
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	0	0	0	0	29	0	0	0	0	0	0
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	0	326	0	17	3	4	0	324	5	20	0
2020-11-08	11:22	11:52	AWAR KM 60	100-300	0	89	0	4	34	2	0	97	0	3	32
2020-11-09	9:50	10:20	AWAR KM 57	50-100	0	49	0	2	1	0	0	3	0	0	49
2020-11-18	10:22	10:39	AWAR KM 80	100-300	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-11-19	11:17	11:45	AWAR KM 64	100-300	0	27	0	0	12	0	0	18	0	5	16
2020-11-12	11:00	11:12	AWAR KM 77	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-11-13	11:20	11:50	AWAR KM 58	>1000	0	130	6	2	3	1	0	74	5	3	57
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	0	25	0	0	2	0	0	24	0	0	3
2020-11-14	10:20	10:50	AWAR KM 53	>1000	0	160	0	0	5	0	0	152	0	2	6
2020-11-14	11:20	11:50	AWAR KM 46	>1000	0	18	0	0	0	0	0	17	0	1	0
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	40	0	0	5	30	8	40	0	0	0	20
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	0	28	0	0	2	1	0	26	0	0	5
2020-11-15	15:03	15:33	AWAR KM 75	>1000	0	29	0	1	1	0	0	30	0	1	0
2020-11-15	10:00	10:30	AWAR KM 50	>1000	0	25	4	0	0	0	0	26	3	0	0
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	0	3	0	0	0	0	0	2	0	0	0
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	0	0	0	0	16	0	0	0	0	0	16
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	0	0	52	0	0	0	0	0	52	0	0
2021-04-08	13:46	14:18	AWAR KM 103	0-50	0	18	0	0	0	0	0	17	0	0	0
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	0	11	0	1	0	0	0	12	0	0	0
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	0	59	6	2	7	2	0	NA	NA	NA	NA
2021-04-13	9:23	9:54	AWAR KM 82	>1000	0	7	0	0	0	0	0	7	0	0	0
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	0	1	28	0	0	0	0	1	28	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	7:40	8:10	AQ KM 161	>1000	0	0	10	0	0	1	0	0	11	0	0
2020-04-29	13:45	14:00	AQ KM 163	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	16:40	15:01	AQ KM 168	300-1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	11:30	12:00	AQ KM 167	300-1000	2	0	0	0	0	19	0	1	0	0	1
2020-04-29	16:15	16:33	AQ KM 173	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	12:20	12:50	AQ KM 175	100-300	0	0	0	2	0	0	0	0	0	2	0
2020-04-29	14:40	15:10	AQ KM 175	>1000	0	0	18	0	0	3	0	0	15	0	0
2020-05-14	16:30	17:00	AQ KM 175	300-1000	0	0	2	0	0	2	0	0	3	0	1
2020-05-06	7:20	7:50	AQ KM 160	>1000	0	0	0	2	0	0	0	0	0	2	0
2020-05-06	7:23	7:53	AQ KM 176	300-1000	0	0	0	21	0	0	0	0	0	21	0
2020-05-06	17:10	17:40	AQ KM 176	>1000	0	0	25	0	2	0	0	5	0	0	0
2020-05-06	17:20	17:50	NA	300-1000	0	0	6	0	0	0	0	0	0	0	0
2020-05-02	7:00	7:30	KM 175	300-1000	0	2	17	0	1	18	4	0	9	7	2
2020-05-11	16:15	16:45	AQ KM 177	300-1000	0	0	100	0	0	0	0	0	100	0	0
2020-08-06	11:25	11:55	AQ KM 166	NA	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	0	0	0	0	0	1	0	0	0	0	0
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	1	0	331	2	12	3	2	0	332	0	16
2020-11-08	11:22	11:52	AWAR KM 60	100-300	2	0	103	0	5	27	0	0	86	0	6
2020-11-09	9:50	10:20	AWAR KM 57	50-100	0	0	11	0	0	34	4	3	35	0	5
2020-11-18	10:22	10:39	AWAR KM 80	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-11-19	11:17	11:45	AWAR KM 64	100-300	0	0	15	0	2	22	0	0	0	0	0
2020-11-12	11:00	11:12	AWAR KM 77	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-11-13	11:20	11:50	AWAR KM 58	>1000	1	0	62	8	2	65	0	3	43	6	0
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	0	0	23	1	1	2	0	0	21	2	1
2020-11-14	10:20	10:50	AWAR KM 53	>1000	0	0	160	1	1	8	0	0	165	1	0
2020-11-14	11:20	11:50	AWAR KM 46	>1000	0	0	15	0	0	0	0	0	14	0	0
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	1	0	0	0	0	10	1	0	NA	NA	NA
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	0	0	20	0	2	9	0	0	14	0	0
2020-11-15	15:03	15:33	AWAR KM 75	>1000	0	0	29	0	0	2	0	0	30	0	0
2020-11-15	10:00	10:30	AWAR KM 50	>1000	0	0	25	3	0	1	0	0	24	3	0
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	0	0	2	0	0	0	0	0	2	0	0
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	0	0	0	0	0	16	0	0	0	0	0
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	0	0	0	52	0	0	0	0	0	52	0
2021-04-08	13:46	14:18	AWAR KM 103	0-50	1	0	18	0	0	0	0	0	18	0	0
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	0	0	12	0	0	0	0	0	12	0	0
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	NA	NA	33	1	3	20	1	0	NA	NA	NA
2021-04-13	9:23	9:54	AWAR KM 82	>1000	0	0	7	0	0	0	0	0	6	0	0
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	0	0	1	28	0	0	0	0	1	28	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	7:40	8:10	AQ KM 161	>1000	0	0	0	8	0	0	3	0	0
2020-04-29	13:45	14:00	AQ KM 163	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-05-03	16:40	15:01	AQ KM 168	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	11:30	12:00	AQ KM 167	300-1000	17	2	0	0	0	10	9	1	0
2020-04-29	16:15	16:33	AQ KM 173	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-04-30	12:20	12:50	AQ KM 175	100-300	0	0	0	0	2	0	0	0	0
2020-04-29	14:40	15:10	AQ KM 175	>1000	2	4	0	19	0	0	0	2	0
2020-05-14	16:30	17:00	AQ KM 175	300-1000	0	0	0	0	0	0	2	0	0
2020-05-06	7:20	7:50	AQ KM 160	>1000	0	0	0	0	2	0	0	0	0
2020-05-06	7:23	7:53	AQ KM 176	300-1000	0	0	0	0	21	0	0	0	0
2020-05-06	17:10	17:40	AQ KM 176	>1000	32	0	0	0	0	0	8	0	0
2020-05-06	17:20	17:50	NA	300-1000	34	0	0	0	0	0	34	0	0
2020-05-02	7:00	7:30	KM 175	300-1000	9	0	1	10	6	1	25	1	0
2020-05-11	16:15	16:45	AQ KM 177	300-1000	0	0	0	100	0	0	0	0	0
2020-08-06	11:25	11:55	AQ KM 166	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	0	1	0	0	0	0	1	0	0
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	1	1	0	328	14	8	0	0	0
2020-11-08	11:22	11:52	AWAR KM 60	100-300	42	1	0	89	0	5	39	2	0
2020-11-09	9:50	10:20	AWAR KM 57	50-100	8	2	0	45	0	3	2	0	0
2020-11-18	10:22	10:39	AWAR KM 80	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-11-19	11:17	11:45	AWAR KM 64	100-300	29	0	0	NA	NA	NA	NA	NA	NA
2020-11-12	11:00	11:12	AWAR KM 77	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-11-13	11:20	11:50	AWAR KM 58	>1000	24	2	0	42	8	1	19	0	0
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	2	1	0	22	2	2	1	0	0
2020-11-14	10:20	10:50	AWAR KM 53	>1000	4	0	0	157	1	0	12	0	0
2020-11-14	11:20	11:50	AWAR KM 46	>1000	0	0	0	12	2	0	0	0	0
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	17	0	0	14	0	1	14	2	0
2020-11-15	15:03	15:33	AWAR KM 75	>1000	1	0	0	29	0	1	1	0	0
2020-11-15	10:00	10:30	AWAR KM 50	>1000	2	0	0	25	3	0	0	0	0
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	0	0	0	1	0	0	0	0	0
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	0	0	16	16	0	0	0	0	0
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	0	0	0	0	52	0	0	0	0
2021-04-08	13:46	14:18	AWAR KM 103	0-50	0	0	0	18	0	0	0	0	0
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	0	0	0	12	0	0	0	0	0
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	NA	NA	NA	18	0	1	0	0	0
2021-04-13	9:23	9:54	AWAR KM 82	>1000	0	0	1	5	0	0	0	0	0
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	0	0	0	1	28	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	NA	Light truck	Light truck	NA	NA	NA
2020-05-03	7:40	8:10	AQ KM 161	>1000	NA	NA	NA	NA	NA	NA
2020-04-29	13:45	14:00	AQ KM 163	300-1000	NA	Light truck	NA	NA	NA	NA
2020-05-03	16:40	15:01	AQ KM 168	300-1000	NA	NA	NA	NA	NA	NA
2020-04-30	11:30	12:00	AQ KM 167	300-1000	NA	NA	NA	NA	NA	NA
2020-04-29	16:15	16:33	AQ KM 173	>1000	NA	Light truck	NA	NA	NA	NA
2020-04-30	12:20	12:50	AQ KM 175	100-300	NA	NA	NA	NA	NA	NA
2020-04-29	14:40	15:10	AQ KM 175	>1000	NA	NA	NA	NA	NA	NA
2020-05-14	16:30	17:00	AQ KM 175	300-1000	Haul truck	NA	NA	Haul truck	NA	NA
2020-05-06	7:20	7:50	AQ KM 160	>1000	NA	NA	NA	NA	NA	NA
2020-05-06	7:23	7:53	AQ KM 176	300-1000	NA	NA	NA	NA	NA	NA
2020-05-06	17:10	17:40	AQ KM 176	>1000	NA	NA	NA	NA	NA	NA
2020-05-06	17:20	17:50	NA	300-1000	NA	NA	NA	NA	NA	NA
2020-05-02	7:00	7:30	KM 175	300-1000	NA	NA	NA	NA	NA	NA
2020-05-11	16:15	16:45	AQ KM 177	300-1000	NA	Haul truck	Haul truck	NA	NA	NA
2020-08-06	11:25	11:55	AQ KM 166	NA	NA	NA	NA	NA	NA	NA
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	NA	NA	NA	NA	Light truck	Light truck
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	Haul truck	NA	NA	NA	NA	NA
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	NA	NA	NA	NA	Fuel truck	NA
2020-11-08	11:22	11:52	AWAR KM 60	100-300	NA	NA	NA	Fuel truck	NA	NA
2020-11-09	9:50	10:20	AWAR KM 57	50-100	NA	NA	NA	NA	NA	NA
2020-11-18	10:22	10:39	AWAR KM 80	100-300	NA	NA	NA	NA	NA	NA
2020-11-19	11:17	11:45	AWAR KM 64	100-300	NA	NA	NA	NA	NA	NA
2020-11-12	11:00	11:12	AWAR KM 77	>1000	NA	NA	NA	NA	Predator	NA
2020-11-13	11:20	11:50	AWAR KM 58	>1000	NA	NA	NA	NA	NA	NA
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	NA	Light truck	NA	NA	NA	Fuel truck
2020-11-14	10:20	10:50	AWAR KM 53	>1000	NA	NA	NA	NA	NA	NA
2020-11-14	11:20	11:50	AWAR KM 46	>1000	NA	NA	NA	NA	NA	NA
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	NA	NA	Fuel truck	NA	NA	ATV
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	NA	NA	NA	NA	NA	NA
2020-11-15	15:03	15:33	AWAR KM 75	>1000	NA	NA	NA	NA	NA	NA
2020-11-15	10:00	10:30	AWAR KM 50	>1000	NA	NA	NA	NA	NA	NA
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	NA	Heavy equipment	NA	NA	Heavy equipment	Light truck
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	NA	NA	NA	NA	NA	NA
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	NA	NA	NA	NA	NA	NA
2021-04-08	13:46	14:18	AWAR KM 103	0-50	Light truck	NA	NA	NA	NA	NA
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	NA	NA	NA	NA	Heavy equipment	Road maintenance
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	NA	NA	Tanker	Tractor	NA	NA
2021-04-13	9:23	9:54	AWAR KM 82	>1000	NA	NA	NA	NA	NA	NA
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	Road maintenance	NA	NA	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2020-05-01	16:50	17:00	AQ Rd KM 162	100-300	NA	NA	NA	NA	NA	2020	-96.4297	65.31742	NA
2020-05-03	7:40	8:10	AQ KM 161	>1000	NA	NA	NA	NA	NA	2020	-96.4396	65.31957	NA
2020-04-29	13:45	14:00	AQ KM 163	300-1000	NA	NA	NA	NA	NA	2020	-96.4441	65.32139	NA
2020-05-03	16:40	15:01	AQ KM 168	300-1000	Grader	NA	NA	NA	NA	2020	-96.5208	65.33207	NA
2020-04-30	11:30	12:00	AQ KM 167	300-1000	NA	NA	NA	Light truck	NA	2020	-96.5152	65.33245	NA
2020-04-29	16:15	16:33	AQ KM 173	>1000	NA	NA	NA	NA	NA	2020	-96.6016	65.36887	NA
2020-04-30	12:20	12:50	AQ KM 175	100-300	NA	NA	NA	NA	NA	2020	-96.6022	65.37899	NA
2020-04-29	14:40	15:10	AQ KM 175	>1000	NA	NA	NA	Light truck	NA	2020	-96.6023	65.37924	NA
2020-05-14	16:30	17:00	AQ KM 175	300-1000	NA	NA	NA	NA	NA	2020	-96.6065	65.39299	NA
2020-05-06	7:20	7:50	AQ KM 160	>1000	Light truck	NA	NA	NA	NA	2020	-96.6075	65.39358	NA
2020-05-06	7:23	7:53	AQ KM 176	300-1000	Light truck	NA	NA	NA	NA	2020	-96.6075	65.39358	NA
2020-05-06	17:10	17:40	AQ KM 176	>1000	NA	NA	NA	Light truck	NA	2020	-96.6128	65.39669	NA
2020-05-06	17:20	17:50	NA	300-1000	Light truck	NA	NA	NA	Haul truck	2020	-96.6128	65.39669	NA
2020-05-02	7:00	7:30	KM 175	300-1000	NA	NA	NA	NA	NA	2020	-96.613	65.39671	NA
2020-05-11	16:15	16:45	AQ KM 177	300-1000	NA	NA	NA	Light truck	NA	2020	-96.6225	65.40148	NA
2020-08-06	11:25	11:55	AQ KM 166	NA	NA	NA	NA	NA	NA	2020	NA	NA	NA
2020-08-16	16:00	16:30	AWAR KM 89	300-1000	NA	Tractor trailer	NA	NA	NA	2020	NA	NA	NA
2020-08-22	13:11	13:41	AWAR KM 15	300-1000	NA	NA	NA	NA	NA	2020	NA	NA	NA
2020-11-08	12:10	12:40	AWAR KM 54	300-1000	NA	NA	NA	NA	NA	2020	-96.3467	64.71835	NA
2020-11-08	11:22	11:52	AWAR KM 60	100-300	NA	NA	NA	NA	NA	2020	-96.3663	64.7533	NA
2020-11-09	9:50	10:20	AWAR KM 57	50-100	NA	NA	NA	NA	NA	2020	-96.3461	64.72504	NA
2020-11-18	10:22	10:39	AWAR KM 80	100-300	NA	NA	NA	NA	NA	2020	-96.306	64.91738	NA
2020-11-19	11:17	11:45	AWAR KM 64	100-300	NA	NA	NA	NA	NA	2020	-96.3456	64.78273	NA
2020-11-12	11:00	11:12	AWAR KM 77	>1000	NA	NA	NA	NA	NA	2020	-96.3397	64.89465	NA
2020-11-13	11:20	11:50	AWAR KM 58	>1000	NA	Tractor trailer	NA	NA	NA	2020	-96.3418	64.72157	NA
2020-11-14	9:30	10:00	AWAR KM 50	300-1000	Fuel truck	NA	NA	NA	NA	2020	-96.37	64.66562	NA
2020-11-14	10:20	10:50	AWAR KM 53	>1000	NA	ATV	NA	NA	NA	2020	-96.3588	64.71282	NA
2020-11-14	11:20	11:50	AWAR KM 46	>1000	NA	NA	NA	NA	NA	2020	-96.3077	64.64673	NA
2020-11-14	12:23	12:53	AWAR KM 50.5	>1000	NA	NA	NA	NA	NA	2020	-96.3735	64.68112	NA
2020-11-14	13:45	14:15	AWAR KM 56	300-1000	NA	NA	NA	NA	NA	2020	-96.3506	64.72585	NA
2020-11-15	15:03	15:33	AWAR KM 75	>1000	NA	NA	NA	NA	NA	2020	-96.3248	64.87191	NA
2020-11-15	10:00	10:30	AWAR KM 50	>1000	NA	NA	NA	NA	NA	2020	-96.3711	64.67173	NA
2021-03-31	9:41	10:11	Amaruq KM 119	>1000	Heavy equipment	Heavy equipment	NA	NA	NA	2021	-96.0648	65.09321	NA
2021-04-06	16:17	16:45	AWAR KM 72	300-1000	NA	NA	NA	Light truck	NA	2021	-96.3215	64.84679	NA
2021-04-07	10:13	10:50	AWAR KM 97	300-1000	NA	NA	NA	NA	NA	2021	-96.1761	65.02429	NA
2021-04-08	13:46	14:18	AWAR KM 103	0-50	NA	NA	NA	NA	NA	2021	-96.1108	65.04881	NA
2021-04-12	16:29	17:05	AWAR KM (NA)	300-1000	NA	Road maintenance	Road maintenance	NA	NA	2021	-96.1628	65.02991	NA
2021-04-13	9:13	9:51	AWAR KM 53	300-1000	NA	Tanker	NA	NA	NA	2021	-96.3731	64.70606	NA
2021-04-13	9:23	9:54	AWAR KM 82	>1000	NA	NA	NA	NA	NA	2021	-96.312	64.9306	NA
2021-04-13	11:36	12:10	AWAR KM 57	300-1000	NA	NA	Heavy equipment	NA	NA	2021	-96.3601	64.73137	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	KAK	NA	110	West	No	15	NA	NA	NA	NA
2021-04-14	5:43	7:16	AWAR KM 96	50-100	Louis Dubois	NA	30	West	No	300	-13	24	NA	NA
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	Louis Dubois	NA	45	West	Yes	476	-12	24	NA	NA
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	Louis Dubois	NA	80	West	No	76	-9	24	NA	NA
2021-04-14	13:40	14:11	AWAR KM 72	>1000	Louis Dubois	NA	90	West	No	70	-1	24	NA	NA
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	KAK	NA	90	West	No	52	-18	60	NA	NA
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	KAK	NA	90	West	No	52	-18	60	NA	NA
2021-04-19	8:00	8:34	AWAR KM 53	100-300	Louis Dubois	NA	45	West	No	6	-17	17	NA	NA
2021-04-19	8:45	9:17	AWAR KM 52	>1000	Louis Dubois	NA	90	West	No	6	-17	17	NA	NA
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	Louis Dubois	NA	15	East	No	14	-10	17	NA	NA
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	Louis Dubois	NA	10	West	No	14	-10	17	NA	NA
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	Louis Dubois	NA	10	East	No	8	-10	17	NA	NA
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	BHJ	NA	90	West	No	10	-3	8	NA	NA
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	BHK, MTS	NA	310	West	No	83	-3	15	NA	NA
2021-04-22	16:20	16:52	AWAR KM 83	>1000	BHJ	NA	205	West	No	20	-9	20	NA	NA
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	Michael Schumacher	NA	270	West	No	62	-14	20	NA	NA
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	Michael Schumacher	NA	270	West	No	15	-14	20	NA	NA
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	Michael Schumacher	NA	290	West	No	21	-10	20	NA	NA
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	BHJ, NS	NA	300	West	No	33	-16	10	NA	NA
2021-04-23	11:15	11:55	AWAR KM 46	100-300	Michael Schumacher	NA	280	West	No	19	-10	20	NA	NA
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	BHJ, NS	NA	0	West	No	210	-15	20	NA	NA
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	Michael Schumacher	NA	270	West	No	8	-10	20	NA	NA
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	Michael Schumacher	NA	315	West	No	9	-10	20	NA	NA
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	Michael Schumacher	NA	200	West	Yes	200	-21	26	NA	NA
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	Michael Schumacher	NA	200	West	Yes	200	-21	26	NA	NA
2021-04-25	12:52	13:29	AWAR KM 26	100-300	BHJ	NA	200	West	No	50	-16	20	NA	NA
2021-04-25	14:32	15:04	AWAR KM 67	50-100	BHJ	NA	NA	West	No	27	-15	20	NA	NA
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	BHJ	NA	190	West	No	32	-18	20	NA	NA
2021-04-26	9:32	9:50	AWAR KM 42	100-300	BHJ	NA	200	West	No	32	-20	20	NA	NA
2021-04-26	9:52	10:26	AWAR KM 42	>1000	BHJ	NA	210	East	No	32	-20	20	NA	NA
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	BHJ	NA	215	West	No	58	-15	20	NA	NA
2021-04-26	14:51	15:25	AWAR KM 78	100-300	BHJ	NA	220	West	No	26	-16	25	NA	NA
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	Michael Schumacher	NA	30	Both	Yes	144	-15	30	NA	NA
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	Michael Schumacher	NA	360	East	No	17	-10	30	NA	NA
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	Michael Schumacher	NA	360	East	No	17	-10	30	NA	NA
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	Michael Schumacher	NA	360	East	No	17	-14	30	NA	NA
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	Michael Schumacher, Nicolas Saucier	NA	220	West	No	15	-8	40	NA	NA
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	Michael Schumacher	NA	220	West	No	15	-8	40	NA	NA
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	Michael Schumacher, Nicolas Saucier	NA	220	West	No	15	-8	40	NA	NA
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	KN	NA	270	West	No	94	-14	17	NA	NA
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	Laurence Archambault	NA	15	West	No	16	-11	7	NA	NA
2021-05-01	7:21	7:50	AWAR KM 102	0-50	KN	NA	90	East	No	7	-16	41	NA	NA
2021-05-01	8:10	8:44	AWAR KM 98	100-300	KN	NA	280	East	No	24	-16	41	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	NA	NA	40	6	None
2021-04-14	5:43	7:16	AWAR KM 96	50-100	NA	NA	NA	NA	Flags
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	NA	NA	NA	NA	NA
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	NA	NA	NA	NA	NA
2021-04-14	13:40	14:11	AWAR KM 72	>1000	NA	NA	NA	NA	NA
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	NA	Sunny, wind chill -31	0	6	None
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	NA	NA	0	6	None
2021-04-19	8:00	8:34	AWAR KM 53	100-300	NA	NA	0	8	Flags
2021-04-19	8:45	9:17	AWAR KM 52	>1000	NA	NA	0	8	Flags
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	NA	NA	0	8	Flags
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	NA	NA	0	NA	Flags
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	NA	NA	0	NA	Flags
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	2	Overcast	5	20	Mine; flags; freshwater barge
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	4	Foggy	0	20	Flags
2021-04-22	16:20	16:52	AWAR KM 83	>1000	5	Sunny, clear skies	0	20	Flags
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	4	NA	1	2	None
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	4	NA	1	2	None
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	4	NA	1	2	None
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	6	Cloudy	0	8	Flags; road
2021-04-23	11:15	11:55	AWAR KM 46	100-300	4	NA	1	4	None
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	2	Partly cloudy	0	8	Flags; road
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	4	NA	1	1	None
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	4	NA	1	4	None
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	5	NA	1	2	None
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	5	NA	1	2	None
2021-04-25	12:52	13:29	AWAR KM 26	100-300	7	Sunny	0	10	Flags; road
2021-04-25	14:32	15:04	AWAR KM 67	50-100	7	Partly cloudy	0	10	Flags; road
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	8	Partly cloudy	NA	10	Flags; "Yellow must all sign"; road
2021-04-26	9:32	9:50	AWAR KM 42	100-300	8	Mostly sunny	0	10	Flags; "Yellow must all sign"; road
2021-04-26	9:52	10:26	AWAR KM 42	>1000	NA	NA	0	10	Flags; "Yellow must all sign"; road
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	8	Partly cloudy	0	10	Flags; road
2021-04-26	14:51	15:25	AWAR KM 78	100-300	8	Mostly sunny	0	8	Flags; road
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	NA	NA	NA	3	NA
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	NA	NA	NA	3	NA
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	NA	NA	NA	3	NA
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	NA	NA	NA	3	NA
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	NA	NA	NA	7	NA
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	NA	NA	1	7	NA
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	NA	NA	1	7	NA
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	2	Sunny	1	1	NA
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	2	Sunny	NA	NA	NA
2021-05-01	7:21	7:50	AWAR KM 102	0-50	3	High winds	1	1	None
2021-05-01	8:10	8:44	AWAR KM 98	100-300	3	NA	1	1	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	5	6	0	4	0	0	5	9	1	0	0	0
2021-04-14	5:43	7:16	AWAR KM 96	50-100	30	8	0	3	0	0	32	8	0	1	0	0
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	60	0	0	2	0	0	60	0	0	2	0	0
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	75	0	1	0	0	0	76	0	0	0	0	0
2021-04-14	13:40	14:11	AWAR KM 72	>1000	48	6	0	0	0	0	45	3	0	4	2	0
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	42	8	1	1	0	0	38	12	0	2	0	0
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	0	8	1	15	0	0	4	5	0	5	0	0
2021-04-19	8:00	8:34	AWAR KM 53	100-300	4	0	0	0	2	0	6	0	0	0	0	0
2021-04-19	8:45	9:17	AWAR KM 52	>1000	2	4	0	0	0	0	4	2	0	0	0	0
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	5	9	0	0	0	0	5	9	0	0	0	0
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	14	0	0	0	0	0	14	0	0	0	0	0
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	0	3	5	0	0	0	2	2	0	0	2	0
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	9	0	0	1	0	0	9	0	0	1	0	0
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	39	32	0	2	0	0	35	45	0	3	0	0
2021-04-22	16:20	16:52	AWAR KM 83	>1000	10	0	10	0	0	0	15	5	0	0	0	0
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	0	0	0	62	0	0	0	0	0	62	0	0
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	0	0	0	15	0	0	0	0	0	10	0	0
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	15	6	0	0	0	0	10	8	0	3	0	0
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	0	0	0	33	0	0	7	0	0	26	0	0
2021-04-23	11:15	11:55	AWAR KM 46	100-300	18	0	0	0	0	0	16	0	0	2	0	0
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	80	80	0	50	0	0	80	60	0	80	0	0
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	0	0	0	8	0	0	0	0	0	8	0	0
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	0	9	0	0	0	0	0	9	0	0	0	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	6	2	0	6	0	0	0	2	8	4	0	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	12	0	0	0	0	0	0	0	0	0	0	12
2021-04-25	12:52	13:29	AWAR KM 26	100-300	0	0	0	10	0	0	0	0	0	31	0	0
2021-04-25	14:32	15:04	AWAR KM 67	50-100	0	0	0	26	1	0	0	0	0	25	0	0
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	10	20	0	2	0	0	7	25	0	0	0	0
2021-04-26	9:32	9:50	AWAR KM 42	100-300	3	29	0	0	0	0	0	0	0	0	32	0
2021-04-26	9:52	10:26	AWAR KM 42	>1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	19	0	0	30	0	0	16	1	2	41	0	0
2021-04-26	14:51	15:25	AWAR KM 78	100-300	2	0	0	24	0	0	4	0	4	22	0	0
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	19	3	0	0	0	0	19	3	0	0	0	0
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	17	0	0	0	0	0	17	0	0	0	0	0
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	17	0	0	0	0	0	17	0	0	0	0	0
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	17	0	0	0	0	0	17	0	0	0	0	0
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	15	0	0	0	0	0	15	0	0	0	0	0
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	12	0	0	0	3	0	12	0	0	0	3	0
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	13	0	0	2	0	0	13	0	0	2	0	0
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	0	0	0	94	0	0	0	0	0	94	0	0
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	16	0	0	0	0	0	16	0	0	0	0	0
2021-05-01	7:21	7:50	AWAR KM 102	0-50	0	7	0	0	0	0	0	7	0	0	0	0
2021-05-01	8:10	8:44	AWAR KM 98	100-300	0	0	0	24	0	0	5	0	0	19	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	5	10	0	0	0	0	5	10	0	0	0	0
2021-04-14	5:43	7:16	AWAR KM 96	50-100	26	9	0	6	0	0	0	8	6	0	0	27
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	61	0	0	1	0	0	60	0	0	2	0	0
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	76	0	0	0	0	0	74	0	0	2	0	0
2021-04-14	13:40	14:11	AWAR KM 72	>1000	43	1	2	14	0	0	49	1	0	10	0	0
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	39	12	0	1	0	0	34	18	0	0	0	0
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-04-19	8:00	8:34	AWAR KM 53	100-300	5	0	0	0	0	0	6	0	0	0	0	0
2021-04-19	8:45	9:17	AWAR KM 52	>1000	3	2	1	0	0	0	1	4	1	0	0	0
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	5	9	0	0	0	0	2	12	0	0	0	0
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	14	0	0	0	0	0	14	0	0	0	0	0
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	10	0	0	0	0	0	10	0	0	0	0	0
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	35	37	0	1	0	0	37	36	0	0	0	0
2021-04-22	16:20	16:52	AWAR KM 83	>1000	10	10	0	0	0	0	10	10	0	0	0	0
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	0	0	0	62	0	0	0	0	0	62	0	0
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	8	8	0	5	0	0	7	13	0	1	0	0
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	25	0	1	7	0	0	11	0	3	6	0	0
2021-04-23	11:15	11:55	AWAR KM 46	100-300	18	0	0	0	0	0	18	0	0	0	0	0
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	30	60	0	40	0	0	20	40	0	40	0	0
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	0	0	0	8	0	0	0	0	0	8	0	0
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	0	9	0	0	0	0	0	9	0	0	0	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	0	2	0	12	0	0	11	0	0	1	0	2
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-04-25	12:52	13:29	AWAR KM 26	100-300	0	0	0	31	0	0	0	0	0	31	0	0
2021-04-25	14:32	15:04	AWAR KM 67	50-100	0	0	0	25	0	0	0	0	0	20	0	0
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	8	24	0	0	0	0	9	22	0	1	0	0
2021-04-26	9:32	9:50	AWAR KM 42	100-300	0	0	0	0	0	0	0	0	0	32	0	0
2021-04-26	9:52	10:26	AWAR KM 42	>1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	13	1	0	36	0	0	7	1	0	42	0	0
2021-04-26	14:51	15:25	AWAR KM 78	100-300	0	0	0	26	0	0	0	0	0	26	0	0
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	19	3	0	0	0	0	18	4	0	0	0	0
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	17	0	0	0	0	0	17	0	0	0	0	0
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	17	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	17	0	0	0	0	0	17	0	0	0	0	0
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	15	0	0	0	0	0	15	0	0	0	0	0
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	0	0	0	94	0	0	0	0	0	33	0	5
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	9	0	0	4	0	0	7	0	0	0	0	0
2021-05-01	7:21	7:50	AWAR KM 102	0-50	0	7	0	0	0	0	0	7	0	0	0	0
2021-05-01	8:10	8:44	AWAR KM 98	100-300	18	0	0	6	0	0	6	0	0	16	0	2

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	5	10	0	0	0	0	3	11	0	0	0
2021-04-14	5:43	7:16	AWAR KM 96	50-100	18	8	0	15	0	0	14	10	0	17	0
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	NA	NA	NA	NA	NA	NA	32	0	0	30	0
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	76	0	0	0	0	0	75	0	0	1	0
2021-04-14	13:40	14:11	AWAR KM 72	>1000	57	0	0	13	0	0	55	0	0	5	0
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	38	18	1	2	0	0	31	16	1	4	0
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-19	8:00	8:34	AWAR KM 53	100-300	6	0	0	0	0	0	6	0	0	0	0
2021-04-19	8:45	9:17	AWAR KM 52	>1000	2	4	0	0	0	0	1	5	0	0	0
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	1	13	0	0	0	0	1	13	0	0	0
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	14	0	1	0	0	0	14	0	0	0	0
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	9	0	1	0	0	0	8	0	2	0	0
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	31	41	0	1	0	0	27	44	0	2	0
2021-04-22	16:20	16:52	AWAR KM 83	>1000	10	10	0	0	0	0	10	10	0	0	0
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	9	0	0	53	0	0	0	0	0	62	0
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	11	9	0	0	0	0	10	8	0	3	0
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	18	0	0	5	0	2	19	0	0	6	0
2021-04-23	11:15	11:55	AWAR KM 46	100-300	12	0	0	0	0	0	18	0	0	0	0
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	30	10	5	30	0	0	5	10	0	20	0
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	1	0	0	7	0	0	0	0	0	8	0
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	0	9	0	0	0	0	0	9	0	0	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	12	0	0	2	0	0	12	0	0	2	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-25	12:52	13:29	AWAR KM 26	100-300	0	0	0	25	0	0	0	0	0	0	0
2021-04-25	14:32	15:04	AWAR KM 67	50-100	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	8	23	0	1	0	0	8	24	0	0	0
2021-04-26	9:32	9:50	AWAR KM 42	100-300	0	0	0	32	0	0	0	0	7	0	0
2021-04-26	9:52	10:26	AWAR KM 42	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	20	0	0	30	0	0	20	0	10	9	0
2021-04-26	14:51	15:25	AWAR KM 78	100-300	0	0	3	22	0	1	0	0	1	25	0
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	18	4	0	0	0	0	18	4	0	0	0
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	17	0	0	0	0	0	17	0	0	0	0
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	17	0	0	0	0	0	17	0	0	0	0
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	15	0	0	0	0	0	15	0	0	0	0
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	0	0	0	40	0	10	0	0	0	33	0
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	9	0	0	0	0	0	7	0	0	0	0
2021-05-01	7:21	7:50	AWAR KM 102	0-50	0	7	0	0	0	0	0	7	0	0	0
2021-05-01	8:10	8:44	AWAR KM 98	100-300	0	0	0	17	0	0	0	0	0	9	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	0	1	11	0	0	0	0	1	11	0	0
2021-04-14	5:43	7:16	AWAR KM 96	50-100	0	14	10	0	2	0	0	17	11	0	0
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	0	11	0	0	51	0	0	0	0	0	62
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	0	59	0	0	16	1	0	44	0	0	32
2021-04-14	13:40	14:11	AWAR KM 72	>1000	0	54	0	0	6	0	0	53	0	0	7
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	0	24	24	0	0	4	0	24	24	0	2
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2021-04-19	8:00	8:34	AWAR KM 53	100-300	0	6	0	0	0	0	0	6	0	0	0
2021-04-19	8:45	9:17	AWAR KM 52	>1000	0	1	5	0	0	0	0	2	4	0	0
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	0	2	12	0	0	0	0	3	11	0	0
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	0	14	0	0	0	0	0	14	0	0	0
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	0	8	0	0	2	0	0	9	1	0	2
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	0	31	42	0	0	0	0	22	51	0	0
2021-04-22	16:20	16:52	AWAR KM 83	>1000	0	10	10	0	0	0	0	10	10	0	0
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	0	0	0	0	62	0	0	0	0	0	62
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	0	9	12	0	0	0	0	7	13	0	1
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	0	22	0	1	2	0	0	13	3	5	2
2021-04-23	11:15	11:55	AWAR KM 46	100-300	0	18	0	0	0	0	0	14	0	0	0
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	0	5	15	0	4	0	0	5	20	0	0
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	0	0	9	0	0	0	0	0	9	0	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	0	12	0	0	0	0	0	12	0	0	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-25	12:52	13:29	AWAR KM 26	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-04-25	14:32	15:04	AWAR KM 67	50-100	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	0	10	22	0	0	0	0	10	22	0	0
2021-04-26	9:32	9:50	AWAR KM 42	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	9:52	10:26	AWAR KM 42	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	0	10	2	5	23	0	0	10	0	10	28
2021-04-26	14:51	15:25	AWAR KM 78	100-300	0	0	0	0	26	0	0	0	0	0	26
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	0	15	7	0	0	0	0	7	15	0	0
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	0	17	0	0	0	0	0	17	0	0	0
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	0	17	0	0	0	0	0	0	0	0	0
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	0	15	0	0	0	0	0	15	0	0	0
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	5	0	0	0	24	2	0	0	0	0	9
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	0	8	0	0	0	0	0	9	0	0	0
2021-05-01	7:21	7:50	AWAR KM 102	0-50	0	0	7	0	0	0	0	0	7	0	0
2021-05-01	8:10	8:44	AWAR KM 98	100-300	0	10	0	0	0	0	0	0	0	0	12

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	0	0	1	9	0	4	0	0	1	12	1
2021-04-14	5:43	7:16	AWAR KM 96	50-100	1	0	14	9	0	2	0	0	20	9	0
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	0	0	0	0	0	62	0	0	0	0	0
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	0	0	34	0	0	42	0	0	21	0	0
2021-04-14	13:40	14:11	AWAR KM 72	>1000	0	0	59	0	0	1	0	0	60	0	0
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	2	0	26	26	0	0	0	0	24	26	1
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2021-04-19	8:00	8:34	AWAR KM 53	100-300	0	0	4	0	0	0	2	0	1	0	0
2021-04-19	8:45	9:17	AWAR KM 52	>1000	0	0	1	3	0	2	0	0	2	4	0
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	0	0	4	10	0	0	0	0	14	0	0
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	0	0	7	0	0	5	2	0	NA	NA	NA
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	0	0	9	2	1	0	0	0	8	2	0
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	0	0	21	52	0	0	0	0	14	59	0
2021-04-22	16:20	16:52	AWAR KM 83	>1000	0	0	11	9	0	0	0	0	11	9	0
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	0	0	9	11	0	1	0	0	9	11	0
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	0	0	9	10	1	0	0	0	7	10	0
2021-04-23	11:15	11:55	AWAR KM 46	100-300	0	0	14	0	0	0	0	0	14	0	0
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	0	0	0	25	0	0	0	0	2	23	0
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	0	0	0	9	0	0	0	0	0	9	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	0	0	12	0	0	0	0	0	12	0	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-25	12:52	13:29	AWAR KM 26	100-300	0	0	10	0	0	40	0	0	15	0	10
2021-04-25	14:32	15:04	AWAR KM 67	50-100	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	0	0	9	22	0	1	0	0	6	26	0
2021-04-26	9:32	9:50	AWAR KM 42	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	9:52	10:26	AWAR KM 42	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	0	0	10	15	0	6	0	0	15	1	5
2021-04-26	14:51	15:25	AWAR KM 78	100-300	0	0	0	0	0	24	4	0	0	0	0
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	0	0	16	6	0	0	0	0	16	6	0
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	0	0	17	0	0	0	0	0	17	0	0
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	0	0	6	0	0	0	0	0	6	0	0
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	0	0	14	0	0	1	0	0	0	0	0
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	0	0	9	0	0	2	0	0	6	0	0
2021-05-01	7:21	7:50	AWAR KM 102	0-50	0	0	0	7	0	0	0	0	0	7	0
2021-05-01	8:10	8:44	AWAR KM 98	100-300	0	0	0	0	0	12	0	0	6	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	0	0	0	1	13	0	0	0	0
2021-04-14	5:43	7:16	AWAR KM 96	50-100	0	0	0	17	9	0	4	0	0
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	62	0	0	0	0	0	62	0	0
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	55	0	0	10	0	0	63	3	0
2021-04-14	13:40	14:11	AWAR KM 72	>1000	0	0	0	60	0	0	0	0	0
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	1	0	0	20	22	0	10	0	0
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2021-04-19	8:00	8:34	AWAR KM 53	100-300	0	0	0	4	0	0	0	1	0
2021-04-19	8:45	9:17	AWAR KM 52	>1000	0	0	0	2	4	0	0	0	0
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	0	0	0	12	0	0	0	2	0
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	NA	NA	NA	4	3	0	0	0	0
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	0	0	0	0	0	0	0	0	0
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	1	1	0	10	3	0	3	0	0
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	0	0	0	10	63	0	0	0	0
2021-04-22	16:20	16:52	AWAR KM 83	>1000	0	0	0	10	10	0	0	0	0
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	0	0	0	0	0	0	0	0	0
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	0	0	0	0	0	0	0	0	0
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	0	0	0	6	15	0	0	0	0
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	3	0	0	7	12	0	1	0	0
2021-04-23	11:15	11:55	AWAR KM 46	100-300	0	0	0	14	0	0	0	0	0
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	0	0	0	3	18	0	0	0	1
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	0	0	0	0	0	0	0	0	0
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	0	0	0	0	9	0	0	0	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	0	0	0	12	0	0	0	0	0
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	0	0	0	0	0	0	0	0	0
2021-04-25	12:52	13:29	AWAR KM 26	100-300	20	0	0	8	0	0	25	0	0
2021-04-25	14:32	15:04	AWAR KM 67	50-100	0	0	0	0	0	0	0	0	0
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	0	0	0	7	25	0	0	0	0
2021-04-26	9:32	9:50	AWAR KM 42	100-300	0	0	0	0	0	0	0	0	0
2021-04-26	9:52	10:26	AWAR KM 42	>1000	0	0	0	0	0	0	0	0	0
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	6	0	0	16	2	3	5	0	0
2021-04-26	14:51	15:25	AWAR KM 78	100-300	10	0	0	0	0	0	5	0	0
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	0	0	0	15	7	0	0	0	0
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	0	0	0	17	0	0	0	0	0
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	0	0	0	0	0	0	0	0	0
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	0	0	0	9	0	0	1	0	0
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	0	0	0	0	0	0	0	0	0
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	0	0	0	0	0	0	0	0	0
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	4	0	0	9	0	0	1	0	0
2021-05-01	7:21	7:50	AWAR KM 102	0-50	0	0	0	0	7	0	0	0	0
2021-05-01	8:10	8:44	AWAR KM 98	100-300	6	0	0	0	0	0	14	0	0

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	NA	NA	NA	NA	NA	NA
2021-04-14	5:43	7:16	AWAR KM 96	50-100	NA	NA	Road maintenance	NA	NA	NA
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	NA	NA	NA	NA	NA	NA
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	NA	NA	NA	NA	NA	NA
2021-04-14	13:40	14:11	AWAR KM 72	>1000	NA	NA	NA	NA	NA	NA
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	NA	NA	NA	NA	NA	NA
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	NA	NA	NA	NA	NA	NA
2021-04-19	8:00	8:34	AWAR KM 53	100-300	NA	NA	NA	NA	Light trucks, tankers, convoy	NA
2021-04-19	8:45	9:17	AWAR KM 52	>1000	NA	NA	NA	NA	NA	NA
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	NA	NA	NA	NA	NA	Roll-off truck
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	NA	NA	NA	NA	NA	NA
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	Road maintenance	NA	NA	NA	NA	NA
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	NA	NA	NA	NA	NA	Light truck, road maintenance
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	NA	NA	NA	NA	NA	NA
2021-04-22	16:20	16:52	AWAR KM 83	>1000	NA	NA	NA	NA	NA	NA
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	NA	NA	NA	NA	Light truck	NA
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	NA	NA	NA	NA	NA	NA
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	NA	NA	NA	NA	NA	NA
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	NA	NA	NA	NA	NA	NA
2021-04-23	11:15	11:55	AWAR KM 46	100-300	NA	NA	NA	NA	NA	NA
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	NA	NA	NA	NA	NA	NA
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	NA	NA	NA	NA	NA	NA
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	NA	NA	NA	NA	NA	NA
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	NA	NA	NA	NA	NA	NA
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	NA	Tanker	NA	NA	NA	NA
2021-04-25	12:52	13:29	AWAR KM 26	100-300	NA	NA	NA	NA	NA	NA
2021-04-25	14:32	15:04	AWAR KM 67	50-100	NA	NA	NA	NA	NA	NA
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	NA	NA	NA	NA	NA	NA
2021-04-26	9:32	9:50	AWAR KM 42	100-300	NA	Light truck, tankers, snow ploughs	NA	NA	NA	NA
2021-04-26	9:52	10:26	AWAR KM 42	>1000	NA	NA	NA	NA	NA	NA
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	NA	NA	NA	NA	NA	NA
2021-04-26	14:51	15:25	AWAR KM 78	100-300	NA	NA	NA	NA	NA	NA
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	NA	NA	NA	NA	NA	Light truck
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	NA	NA	NA	NA	NA	NA
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	NA	NA	Convoy	NA	NA	NA
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	NA	NA	Light truck	NA	NA	NA
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	NA	Snow plough	NA	NA	NA	NA
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	2 tankers, 4 pickup, 1 emulsion, 2 cubes, 3 buses	NA	NA	NA	NA	NA
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	NA	NA	NA	NA	NA	NA
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	NA	Snow plough	NA	NA	NA	NA
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	NA	NA	NA	NA	NA	NA
2021-05-01	7:21	7:50	AWAR KM 102	0-50	NA	NA	NA	NA	NA	NA
2021-05-01	8:10	8:44	AWAR KM 98	100-300	NA	NA	Snow plough	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2021-04-13	16:40	17:12	AWAR KM 85	300-1000	NA	NA	NA	NA	NA	2021	-96.2614	64.93886	NA
2021-04-14	5:43	7:16	AWAR KM 96	50-100	NA	NA	NA	NA	NA	2021	-96.1809	65.0181	NA
2021-04-14	6:58	7:33	AWAR KM 90	300-1000	NA	NA	NA	NA	NA	2021	-96.2221	64.97501	NA
2021-04-14	11:56	12:31	AWAR KM 44	300-1000	Tanker	Light truck	NA	NA	NA	2021	-96.3035	64.64171	NA
2021-04-14	13:40	14:11	AWAR KM 72	>1000	Light truck	NA	NA	NA	NA	2021	-96.3238	64.85386	NA
2021-04-18	8:34	9:03	AWAR KM 43	300-1000	Convoy	NA	NA	NA	NA	2021	-96.3007	64.63477	NA
2021-04-18	9:04	9:20	AWAR KM 43	300-1000	NA	NA	NA	NA	NA	2021	-96.3007	64.63477	NA
2021-04-19	8:00	8:34	AWAR KM 53	100-300	NA	NA	NA	NA	NA	2021	-96.3754	64.70401	NA
2021-04-19	8:45	9:17	AWAR KM 52	>1000	NA	NA	NA	NA	NA	2021	-96.3629	64.7111	NA
2021-04-19	15:49	16:22	Amaruq KM 103	0-50	NA	NA	NA	Roll-off truck	NA	2021	-96.1007	65.0466	NA
2021-04-19	16:22	16:46	AWAR KM 103	300-1000	NA	Road maintenance	NA	NA	NA	2021	-96.1007	65.04659	NA
2021-04-19	16:56	17:11	Amaruq KM 103	>1000	NA	NA	NA	NA	NA	2021	-96.1007	65.04665	NA
2021-04-20	16:39	17:22	AWAR KM 105	300-1000	NA	NA	NA	Snow plough	NA	2021	-96.085	65.02732	NA
2021-04-21	13:02	13:42	AWAR KM 38	300-1000	NA	NA	NA	NA	NA	2021	-96.2807	64.6182	NA
2021-04-22	16:20	16:52	AWAR KM 83	>1000	NA	NA	NA	NA	NA	2021	-96.2243	64.95718	NA
2021-04-23	8:56	9:33	AWAR KM 35	300-1000	NA	NA	Light truck	NA	NA	2021	-96.2418	64.57277	NA
2021-04-23	9:34	9:40	AWAR KM 35	300-1000	NA	NA	NA	NA	NA	2021	-96.2443	64.57386	NA
2021-04-23	10:17	10:54	AWAR KM 37	300-1000	NA	NA	NA	NA	NA	2021	-96.2719	64.58578	NA
2021-04-23	11:11	11:52	AWAR KM 12	300-1000	NA	NA	NA	NA	NA	2021	-96.0274	64.41047	NA
2021-04-23	11:15	11:55	AWAR KM 46	100-300	NA	NA	NA	NA	NA	2021	-96.3314	64.65628	NA
2021-04-23	12:41	13:19	AWAR KM 26	300-1000	NA	NA	NA	NA	NA	2021	-96.1614	64.52384	NA
2021-04-23	12:45	13:10	AWAR KM 61	300-1000	NA	NA	NA	NA	NA	2021	-96.3577	64.76065	NA
2021-04-23	14:46	15:25	AWAR KM 74	300-1000	NA	NA	NA	NA	NA	2021	-96.3289	64.8744	NA
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	NA	NA	NA	NA	NA	2021	-96.3279	64.81094	NA
2021-04-24	7:52	8:41	AWAR KM 66	300-1000	NA	NA	NA	NA	NA	2021	-96.3279	64.81094	NA
2021-04-25	12:52	13:29	AWAR KM 26	100-300	NA	NA	NA	NA	NA	2021	-96.1613	64.52151	NA
2021-04-25	14:32	15:04	AWAR KM 67	50-100	NA	NA	NA	NA	NA	2021	-96.3275	64.81812	NA
2021-04-26	8:15	9:00	AWAR KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.2939	64.62689	NA
2021-04-26	9:32	9:50	AWAR KM 42	100-300	NA	NA	NA	NA	NA	2021	-96.2939	64.62685	NA
2021-04-26	9:52	10:26	AWAR KM 42	>1000	NA	NA	NA	NA	NA	2021	-96.2939	64.62686	NA
2021-04-26	13:54	14:29	AWAR KM 58	300-1000	NA	NA	NA	NA	NA	2021	-96.3659	64.74499	NA
2021-04-26	14:51	15:25	AWAR KM 78	100-300	NA	NA	Snow plough	NA	NA	2021	-96.342	64.8845	NA
2021-04-29	8:06	8:41	Amaruq KM 119	300-1000	NA	NA	NA	NA	NA	2021	-96.0668	65.09567	NA
2021-04-29	9:05	9:40	Amaruq KM 119	300-1000	NA	NA	NA	NA	NA	2021	-96.0671	65.09587	NA
2021-04-29	9:55	10:01	Amaruq KM 119	300-1000	NA	NA	NA	NA	NA	2021	-96.0671	65.09587	NA
2021-04-29	10:04	10:36	Amaruq KM 119	300-1000	NA	NA	NA	NA	NA	2021	-96.0671	65.09588	NA
2021-04-29	14:56	14:59	Amaruq KM 128	300-1000	NA	NA	NA	NA	NA	2021	-96.1315	65.15875	NA
2021-04-29	15:00	15:03	Amaruq KM 128	300-1000	NA	NA	NA	NA	NA	2021	-96.1315	65.15875	NA
2021-04-29	15:04	15:31	Amaruq KM 128	300-1000	NA	NA	NA	NA	NA	2021	-96.1315	65.15875	NA
2021-04-30	8:46	9:13	AWAR KM 93	300-1000	NA	NA	NA	NA	NA	2021	-96.215	65.00686	NA
2021-04-30	12:12	13:00	Amaruq KM 178	100-300	NA	NA	NA	NA	NA	2021	-96.6219	65.40086	NA
2021-05-01	7:21	7:50	AWAR KM 102	0-50	NA	NA	NA	NA	NA	2021	-96.1407	65.05651	NA
2021-05-01	8:10	8:44	AWAR KM 98	100-300	NA	NA	NA	NA	NA	2021	-96.1407	65.05654	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2021-05-01	9:09	9:27	AWAR KM 16	>1000	Michael Schumacher	NA	270	West	No	64	-13	37	NA	NA
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	KN	NA	280	West	No	24	-16	41	NA	NA
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	KN	NA	280	West	No	24	-16	41	NA	NA
2021-05-01	9:51	10:16	AWAR KM 20	100-300	Michael Schumacher	NA	280	Both	Yes	5	-14	40	NA	NA
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	Michael Schumacher	NA	320	West	No	10	-14	40	NA	NA
2021-05-02	8:05	8:33	AWAR KM 106	0-50	KN	NA	90	East	No	16	-6	39	NA	NA
2021-05-02	9:00	9:30	AWAR KM 106	0-50	KN	NA	90	East	No	7	-6	39	NA	NA
2021-05-02	9:35	9:35	AWAR KM 102	100-300	KN	NA	45	East	No	7	-6	39	NA	NA
2021-05-02	9:36	9:52	AWAR KM 102	50-100	KN	NA	75	West	No	7	-6	39	NA	NA
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	Michael Schumacher	NA	290	West	No	63	-2	37	NA	NA
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	KN	NA	0	West	No	22	-6	39	NA	NA
2021-05-02	14:32	15:07	AWAR KM 23	>1000	KN	NA	270	West	No	22	-6	39	NA	NA
2021-05-02	14:40	14:01	AWAR KM 23	>1000	KN	NA	270	West	No	22	-6	39	NA	NA
2021-05-03	9:51	10:15	AWAR KM 92	>1000	Laurence Archambault	NA	45	West	No	22	0	14	NA	NA
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	Laurence Archambault	NA	5	West	No	8	1	12	NA	NA
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	Laurence Archambault	NA	-90	West	No	5	1	11	NA	NA
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	Laurence Archambault	NA	-85	West	No	6	1	11	NA	NA
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	LA, CM	NA	15	West	No	55	0	6	NA	NA
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	KN	NA	285	West	No	42	1	8	NA	NA
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	LA, CM	NA	5	West	No	35	1	9	NA	NA
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	KN	NA	280	West	No	10	1	8	NA	NA
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	KN	NA	90	West	No	25	0	13	NA	NA
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	OJ KAK	NA	45	West	No	49	0	NA	NA	NA
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	LA, CM	NA	45	West	No	20	NA	NA	NA	NA
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	LA, CM	NA	85	West	No	20	NA	NA	NA	NA
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	OJ, KAK	NA	340	West	No	41	-1	37	NA	NA
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	OJ, KAK	NA	330	West	No	10	-1	37	NA	NA
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	Louis Dubois	NA	90	West	No	19	-5	20	NA	NA
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	KAK, EF	NA	270	West	No	66	-2	28	NA	NA
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	KAK, EF	NA	270	West	No	22	-2	28	NA	NA
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	KAK, EF	NA	NA	West	No	41	-3	17	NA	NA
2021-05-08	12:58	13:30	AWAR KM 30	100-300	KAK, EF	NA	90	West	No	17	-3	17	NA	NA
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	KAK, EF	NA	270	West	No	8	-1	21	NA	NA
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	KN	NA	280	West	No	33	-5	9	NA	NA
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	KN	NA	270	West	No	36	-5	9	NA	NA
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	KN	NA	270	West	No	2	-5	9	NA	NA
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	KAK, EF	NA	270	West	No	2	-1	21	NA	NA
2021-05-09	10:48	11:25	AWAR KM 68	100-300	OJ, KAK	NA	320	East	No	2	-3	18	NA	NA
2021-05-10	8:10	8:50	AWAR KM 104	100-300	KAK	NA	90	West	No	1	-7	6	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2021-05-01	9:09	9:27	AWAR KM 16	>1000	NA	NA	NA	3	NA
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	3	Blowing snow	1	1	NA
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	3	Cloudy/foggy	1	1	NA
2021-05-01	9:51	10:16	AWAR KM 20	100-300	NA	NA	NA	4	NA
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	NA	NA	NA	4	NA
2021-05-02	8:05	8:33	AWAR KM 106	0-50	4	Cloudy	3	5	Berm of rocks, sea can; other side of road is tailings; very close to site
2021-05-02	9:00	9:30	AWAR KM 106	0-50	4	Cloudy	1	2	NA
2021-05-02	9:35	9:35	AWAR KM 102	100-300	4	Light snow	1	2	NA
2021-05-02	9:36	9:52	AWAR KM 102	50-100	4	Light snow	1	2	NA
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	NA	NA	NA	4	NA
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	NA	NA	1	1	NA
2021-05-02	14:32	15:07	AWAR KM 23	>1000	40	NA	1	1	NA
2021-05-02	14:40	14:01	AWAR KM 23	>1000	4	Snow melting quickly	1	1	NA
2021-05-03	9:51	10:15	AWAR KM 92	>1000	0	Light snow	NA	NA	NA
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	0	Light snow	NA	NA	NA
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	0	Light snow	NA	NA	NA
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	0	Light snow	NA	NA	NA
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	0	Light snow, foggy	NA	NA	NA
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	1	Very foggy in morning; light snow in afternoon and snow yesterday	0	0	"Height: 0,4 and Width 0,5"
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	0	Light snow, foggy	NA	NA	Bridge near
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	1	Very foggy in morning; light snow in afternoon and snow yesterday	1	2	NA
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	1	Light snow at the end of the day	1	2	Emergency sea can and big green sign that says to change channel
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	NA	NA	NA	NA	None
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	1	NA	NA	NA	NA
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	NA	NA	NA	NA	NA
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	0	Overcast	NA	NA	None
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	0	Overcast, a bit foggy	NA	NA	Radio tower
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	NA	NA	0	8	NA
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	1	Partial sun	1	1	Sea can and bridge 800-1000 m north of truck (same direction that caribou approached from)
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	1	Overcast	1	1	None
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	2	Good visibility (no fog)	0	0	None
2021-05-08	12:58	13:30	AWAR KM 30	100-300	2	Overcast; fog has lifted in this area	1	1	None
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	2	Overcast; fog has lifted in this area	1	1	None
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	NA	Cloudy	3	7	NA
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	NA	Cloudy	6	3	NA
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	NA	Sky clearing up	1	2	NA
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	2	Sunny	1	1	None
2021-05-09	10:48	11:25	AWAR KM 68	100-300	3	Sunny	1	1	None
2021-05-10	8:10	8:50	AWAR KM 104	100-300	3	Overcast	1	1	None

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2021-05-01	9:09	9:27	AWAR KM 16	>1000	20	0	0	0	0	0	20	0	0	0	0	0
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	0	0	0	17	3	4	2	0	0	22	0	0
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	0	0	0	24	0	0	0	0	0	4	0	0
2021-05-01	9:51	10:16	AWAR KM 20	100-300	3	0	0	2	0	0	0	0	0	5	0	0
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	0	0	0	10	0	0	0	0	0	8	0	2
2021-05-02	8:05	8:33	AWAR KM 106	0-50	0	16	0	0	0	0	0	16	0	0	0	0
2021-05-02	9:00	9:30	AWAR KM 106	0-50	7	0	0	0	0	0	7	0	0	0	0	0
2021-05-02	9:35	9:35	AWAR KM 102	100-300	5	0	0	0	2	0	5	0	0	0	0	2
2021-05-02	9:36	9:52	AWAR KM 102	50-100	4	0	0	3	0	0	7	0	0	0	0	0
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	0	0	0	38	0	0	0	0	0	38	0	0
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	0	0	0	22	0	0	0	0	0	22	0	0
2021-05-02	14:32	15:07	AWAR KM 23	>1000	5	0	0	14	3	0	0	0	0	19	0	3
2021-05-02	14:40	14:01	AWAR KM 23	>1000	0	0	0	17	0	0	0	0	0	17	0	0
2021-05-03	9:51	10:15	AWAR KM 92	>1000	0	0	0	22	0	0	0	0	0	22	0	0
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	1	7	0	0	0	0	1	7	0	0	0	0
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	5	0	0	0	0	0	4	0	0	0	1	0
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	0	0	0	0	6	0	0	0	6	0	0	0
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	55	0	0	0	0	0	55	0	0	0	0	0
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	37	0	0	14	0	0	32	0	0	19	0	0
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	0	0	6	0	0	0	0	0	0	0	0	20
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	0	0	0	12	0	0	0	0	0	11	0	1
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	0	0	0	23	0	0	0	0	0	23	0	0
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	46	0	0	2	0	0	48	0	1	1	0	0
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	6	12	0	0	2	0	7	13	0	0	0	0
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	0	20	0	0	0	0	0	5	0	1	0	0
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	0	38	3	0	0	0	0	38	0	3	0	0
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	10	0	0	0	0	0	9	0	0	1	0	0
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	0	0	0	19	0	0	0	0	0	19	0	0
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	0	0	0	20	0	0	0	0	0	20	0	0
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	22	0	0	0	0	0	22	0	0	0	0	0
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	0	0	0	41	0	0	0	0	0	41	0	0
2021-05-08	12:58	13:30	AWAR KM 30	100-300	0	0	0	17	0	0	0	0	0	17	0	0
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	4	0	0	4	0	0	4	0	0	0	0	0
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	33	0	0	0	0	0	30	0	0	3	0	0
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	24	12	0	0	0	0	18	13	0	1	0	0
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	0	1	1	0	0	0	0	2	0	0	0	0
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2021-05-09	10:48	11:25	AWAR KM 68	100-300	2	0	0	0	0	0	1	0	1	0	0	0
2021-05-10	8:10	8:50	AWAR KM 104	100-300	0	1	0	0	0	0	0	1	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2021-05-01	9:09	9:27	AWAR KM 16	>1000	9	0	0	11	0	0	0	0	0	5	0	0
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	0	0	0	4	0	0	0	0	0	0	0	0
2021-05-01	9:51	10:16	AWAR KM 20	100-300	1	0	0	4	0	0	0	0	0	3	0	2
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	0	0	0	10	0	0	0	0	0	4	0	0
2021-05-02	8:05	8:33	AWAR KM 106	0-50	0	0	16	0	0	0	0	16	0	0	0	0
2021-05-02	9:00	9:30	AWAR KM 106	0-50	2	0	0	5	0	0	0	0	0	4	0	3
2021-05-02	9:35	9:35	AWAR KM 102	100-300	0	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	9:36	9:52	AWAR KM 102	50-100	7	0	0	0	0	0	7	0	0	0	0	0
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	0	0	0	38	0	0	0	0	0	0	0	0
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	0	0	0	22	0	0	0	0	0	22	0	0
2021-05-02	14:32	15:07	AWAR KM 23	>1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	14:40	14:01	AWAR KM 23	>1000	0	0	0	17	0	0	0	0	0	17	0	0
2021-05-03	9:51	10:15	AWAR KM 92	>1000	0	0	0	22	0	0	0	0	0	20	2	0
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	1	7	0	0	0	0	1	7	0	0	0	0
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	1	0	0	0	2	0	0	0	2	3	0	0
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	0	0	0	6	0	0	0	0	0	6	0	0
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	55	0	0	0	0	0	0	0	0	0	0	55
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	25	0	0	26	0	0	16	0	0	35	0	0
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	5	0	0	11	4	0	5	0	0	15	0	0
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	5	0	0	7	0	0	0	0	0	12	0	0
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	0	0	0	23	0	0	0	0	0	25	0	0
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	27	0	0	25	0	0	38	0	0	6	0	0
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	9	7	0	0	4	0	4	16	0	0	0	0
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	0	2	0	5	1	0	0	2	0	8	0	0
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	0	33	1	7	0	0	0	0	0	41	0	0
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	6	0	2	2	0	0	10	0	0	0	0	0
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	0	0	0	19	0	0	0	0	0	0	0	0
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	0	0	0	20	0	0	0	0	0	20	0	0
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	22	0	0	0	0	0	22	0	0	0	0	0
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-05-08	12:58	13:30	AWAR KM 30	100-300	0	0	0	17	0	0	0	0	0	17	0	0
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	4	0	0	0	0	0	7	0	0	1	0	0
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	32	0	1	0	0	0	24	0	0	2	0	0
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	17	14	0	1	0	0	16	15	0	1	0	0
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	0	2	0	0	0	0	0	2	0	0	0	0
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	1	0	1	0	0	0	2	0	0	0	0	0
2021-05-09	10:48	11:25	AWAR KM 68	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2021-05-10	8:10	8:50	AWAR KM 104	100-300	0	1	0	0	0	0	0	1	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2021-05-01	9:09	9:27	AWAR KM 16	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:51	10:16	AWAR KM 20	100-300	0	0	0	5	0	0	0	0	0	5	0
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	0	0	0	3	0	1	0	0	0	0	0
2021-05-02	8:05	8:33	AWAR KM 106	0-50	0	16	0	0	0	0	0	16	0	0	0
2021-05-02	9:00	9:30	AWAR KM 106	0-50	4	0	3	0	0	0	5	1	1	1	0
2021-05-02	9:35	9:35	AWAR KM 102	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	9:36	9:52	AWAR KM 102	50-100	7	0	0	0	0	0	0	0	0	0	0
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	0	0	0	0	0	0	0	0	0	38	0
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	0	0	0	22	0	0	0	0	0	22	0
2021-05-02	14:32	15:07	AWAR KM 23	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	14:40	14:01	AWAR KM 23	>1000	0	0	0	17	0	0	0	0	0	17	0
2021-05-03	9:51	10:15	AWAR KM 92	>1000	0	0	0	21	1	0	0	0	0	6	0
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	1	7	0	0	0	0	1	7	0	0	0
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	0	0	0	4	2	0	0	6	0	0	0
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	0	0	0	3	0	0	0	0	0	0	0
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	3	0	1	47	0	0	17	0	0	34	0
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	13	0	0	8	0	0	14	0	0	7	0
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	7	0	0	5	0	0	2	0	0	10	0
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	0	0	0	18	0	0	0	0	0	0	0
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	28	0	0	1	0	0	25	0	0	0	0
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	3	16	0	0	1	0	2	18	0	0	0
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	0	2	0	10	0	0	10	0	0	2	1
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	0	0	0	41	0	0	1	0	2	38	0
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	8	0	0	2	0	0	9	0	0	1	0
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	0	0	0	20	0	0	0	0	0	17	0
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	22	0	0	0	0	0	22	0	0	0	0
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-08	12:58	13:30	AWAR KM 30	100-300	0	0	0	17	0	0	7	0	0	1	0
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	1	0	0	6	0	0	1	0	0	3	0
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	9	0	2	13	0	0	7	2	3	15	0
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	13	17	0	2	0	0	14	17	1	0	0
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	0	2	0	0	0	0	0	2	0	0	0
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	2	0	0	0	0	0	2	0	0	0	0
2021-05-09	10:48	11:25	AWAR KM 68	100-300	1	0	0	1	0	0	0	0	0	2	0
2021-05-10	8:10	8:50	AWAR KM 104	100-300	0	1	0	0	0	0	0	1	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2021-05-01	9:09	9:27	AWAR KM 16	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:51	10:16	AWAR KM 20	100-300	0	0	0	0	5	0	0	0	0	0	5
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	8:05	8:33	AWAR KM 106	0-50	0	0	16	0	0	0	0	0	16	0	0
2021-05-02	9:00	9:30	AWAR KM 106	0-50	0	4	1	0	0	0	0	3	0	1	3
2021-05-02	9:35	9:35	AWAR KM 102	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	9:36	9:52	AWAR KM 102	50-100	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	0	0	0	0	3	0	35	0	0	0	38
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	0	0	0	0	17	0	0	0	0	0	0
2021-05-02	14:32	15:07	AWAR KM 23	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	14:40	14:01	AWAR KM 23	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-03	9:51	10:15	AWAR KM 92	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	0	1	7	0	0	0	0	0	1	0	7
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	0	0	6	0	0	0	0	0	6	0	0
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	0	23	0	0	28	0	0	31	0	0	20
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	0	5	0	0	0	0	0	23	0	0	12
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	0	0	0	0	0	0	0	0	0	0	7
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	0	0	0	0	23	0	0	1	0	14	8
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	0	14	0	0	13	0	0	23	0	6	0
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	0	1	19	0	0	0	0	0	20	0	0
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	0	13	0	0	0	0	0	12	0	0	1
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	0	2	0	1	38	0	0	2	0	1	38
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	0	7	0	0	3	0	0	8	0	0	2
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	0	0	0	0	3	0	0	3	0	0	14
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	0	22	0	0	0	0	0	22	0	0	0
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-08	12:58	13:30	AWAR KM 30	100-300	0	0	0	0	17	0	0	1	0	0	15
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	0	0	0	0	3	0	0	0	0	0	0
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	0	9	3	4	6	0	0	0	3	2	10
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	0	16	16	0	0	0	0	17	16	0	0
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	0	0	2	0	0	0	0	0	2	0	0
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	0	2	0	0	0	0	0	2	0	0	0
2021-05-09	10:48	11:25	AWAR KM 68	100-300	0	0	0	1	1	0	0	2	0	0	0
2021-05-10	8:10	8:50	AWAR KM 104	100-300	0	0	1	0	0	0	0	0	1	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2021-05-01	9:09	9:27	AWAR KM 16	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	9:51	10:16	AWAR KM 20	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	8:05	8:33	AWAR KM 106	0-50	0	0	0	16	0	0	0	0	0	16	0
2021-05-02	9:00	9:30	AWAR KM 106	0-50	0	0	3	0	0	3	0	2	8	0	0
2021-05-02	9:35	9:35	AWAR KM 102	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	9:36	9:52	AWAR KM 102	50-100	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	0	0	0	0	0	38	0	0	0	0	0
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	14:32	15:07	AWAR KM 23	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-02	14:40	14:01	AWAR KM 23	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-03	9:51	10:15	AWAR KM 92	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	0	0	0	0	3	5	0	0	0	0	0
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	0	0	0	6	0	0	0	0	0	6	0
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	0	0	40	0	0	11	0	0	23	0	0
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	0	0	35	0	0	0	0	0	35	0	0
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	0	0	0	0	8	0	0	0	0	0	0
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	1	0	14	4	0	0	0	0	0	3	2
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	0	0	2	18	0	0	0	0	0	0	0
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	0	0	11	0	0	0	2	0	10	0	0
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	0	0	7	0	0	34	0	0	18	0	0
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	0	0	6	0	0	0	0	0	0	0	0
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	0	0	11	0	0	0	0	0	10	0	0
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	0	0	20	0	0	0	0	0	16	0	0
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-08	12:58	13:30	AWAR KM 30	100-300	1	0	0	0	0	17	0	0	0	0	0
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	0	0	0	3	0	5	0	0	0	3	0
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	0	0	19	16	0	0	0	0	17	13	2
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	0	0	0	0	2	0	0	0	0	0	0
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	0	0	2	0	0	0	0	0	2	0	0
2021-05-09	10:48	11:25	AWAR KM 68	100-300	0	0	2	0	0	0	0	0	0	0	0
2021-05-10	8:10	8:50	AWAR KM 104	100-300	0	0	0	1	0	0	0	0	0	1	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2021-05-01	9:09	9:27	AWAR KM 16	>1000	0	0	0	0	0	0	0	0	0
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	0	0	0	0	0	0	0	0	0
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	0	0	0	0	0	0	0	0	0
2021-05-01	9:51	10:16	AWAR KM 20	100-300	0	0	0	0	0	0	0	0	0
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	0	0	0	0	0	0	0	0	0
2021-05-02	8:05	8:33	AWAR KM 106	0-50	0	0	0	0	16	0	0	0	0
2021-05-02	9:00	9:30	AWAR KM 106	0-50	0	0	0	7	0	0	0	0	0
2021-05-02	9:35	9:35	AWAR KM 102	100-300	0	0	0	0	0	0	0	0	0
2021-05-02	9:36	9:52	AWAR KM 102	50-100	0	0	0	0	0	0	0	0	0
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	38	0	0	0	0	0	38	0	0
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	0	0	0	0	0	0	0	0	0
2021-05-02	14:32	15:07	AWAR KM 23	>1000	0	0	0	0	0	0	0	0	0
2021-05-02	14:40	14:01	AWAR KM 23	>1000	0	0	0	0	0	0	0	0	0
2021-05-03	9:51	10:15	AWAR KM 92	>1000	0	0	0	0	0	0	0	0	0
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	7	0	0	0	0	0	0	0	0
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	0	0	0	0	6	0	0	0	0
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	0	0	0	0	0	0	0	0	0
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	0	0	0	0	0	0	0	0	0
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	14	0	14	36	0	0	15	0	0
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	0	0	0	35	0	0	0	0	0
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	8	0	0	0	0	0	8	0	0
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	0	0	0	0	0	0	0	0	0
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	15	0	0	16	3	0	20	0	0
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	0	0	0	0	0	0	0	0	0
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	3	0	0	11	0	0	2	0	0
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	1	0	0	11	0	0	0	0	3
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	0	0	0	0	0	0	0	0	0
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	0	0	0	0	0	0	0	0	0
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	0	0	0	6	0	0	4	0	0
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	0	0	0	12	0	0	0	0	0
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	0	0	0	0	0	0	0	0	0
2021-05-08	12:58	13:30	AWAR KM 30	100-300	0	0	0	0	0	0	0	0	0
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	0	0	0	0	0	0	0	0	0
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	0	0	0	0	3	0	0	0	0
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	0	0	0	22	11	0	0	0	0
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	2	0	0	2	0	0	0	0	0
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	0	0	0	2	0	0	0	0	0
2021-05-09	10:48	11:25	AWAR KM 68	100-300	2	0	0	2	1	1	1	1	1
2021-05-10	8:10	8:50	AWAR KM 104	100-300	0	0	0	1	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2021-05-01	9:09	9:27	AWAR KM 16	>1000	NA	NA	NA	NA	NA	NA
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	Tankers	NA	NA	NA	NA	NA
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	NA	NA	NA	NA	NA	NA
2021-05-01	9:51	10:16	AWAR KM 20	100-300	NA	NA	NA	NA	NA	NA
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	NA	NA	NA	NA	NA	NA
2021-05-02	8:05	8:33	AWAR KM 106	0-50	Grader, snow blower, light truck	NA	Loader	NA	Light truck	NA
2021-05-02	9:00	9:30	AWAR KM 106	0-50	NA	NA	Snow plough	Fuel truck	NA	NA
2021-05-02	9:35	9:35	AWAR KM 102	100-300	Convoy	NA	NA	NA	NA	NA
2021-05-02	9:36	9:52	AWAR KM 102	50-100	NA	NA	NA	NA	NA	NA
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	NA	NA	NA	NA	NA	NA
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	NA	NA	NA	NA	NA	NA
2021-05-02	14:32	15:07	AWAR KM 23	>1000	Convoy	NA	NA	NA	NA	NA
2021-05-02	14:40	14:01	AWAR KM 23	>1000	NA	NA	NA	NA	NA	NA
2021-05-03	9:51	10:15	AWAR KM 92	>1000	NA	NA	Light truck, heavy equipment	Snow plough	NA	NA
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	NA	Light truck	NA	NA	NA	NA
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	NA	Light truck, tankers	NA	NA	NA	Loader
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	Light truck, heavy equipment	NA	NA	NA	NA	NA
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	NA	NA	NA	NA	NA	NA
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	NA	NA	NA	NA	NA	NA
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	NA	NA	NA	NA	NA	NA
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	NA	NA	NA	NA	NA	NA
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	NA	NA	NA	NA	NA	NA
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	NA	NA	NA	NA	NA	NA
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	NA	NA	NA	NA	NA	NA
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	Heavy equipment	NA	Heavy equipment	Heavy equipment	NA	Heavy equipment
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	NA	NA	NA	NA	NA	NA
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	NA	NA	NA	NA	NA	Grader
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	NA	NA	NA	NA	NA	NA
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	NA	NA	NA	NA	NA	NA
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	NA	NA	NA	NA	NA	NA
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	NA	NA	NA	NA	NA	NA
2021-05-08	12:58	13:30	AWAR KM 30	100-300	NA	NA	Heavy equipment	NA	NA	NA
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	NA	NA	NA	NA	NA	NA
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	NA	NA	NA	NA	NA	Heavy equipment, light truck
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	NA	Tractor	NA	Tractor	NA	Tractor
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	Heavy equipment	NA	Heavy equipment	NA	Heavy equipment	NA
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	NA	NA	NA	Light truck	NA	NA
2021-05-09	10:48	11:25	AWAR KM 68	100-300	NA	Heavy equipment	NA	NA	NA	NA
2021-05-10	8:10	8:50	AWAR KM 104	100-300	NA	Heavy equipment	NA	Light truck	NA	NA

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2021-05-01	9:09	9:27	AWAR KM 16	>1000	NA	NA	NA	NA	NA	2021	-96.0619	64.44618	NA
2021-05-01	9:15	9:22	AWAR KM 98	300-1000	NA	NA	NA	NA	NA	2021	-96.1821	65.03578	NA
2021-05-01	9:23	9:32	AWAR KM 98	300-1000	NA	NA	NA	NA	NA	2021	-96.1598	65.0315	NA
2021-05-01	9:51	10:16	AWAR KM 20	100-300	NA	NA	NA	NA	NA	2021	-96.0993	64.48262	NA
2021-05-01	10:28	10:46	AWAR KM 24	300-1000	NA	NA	NA	NA	NA	2021	-96.0993	64.48262	NA
2021-05-02	8:05	8:33	AWAR KM 106	0-50	Light truck	NA	NA	Fuel truck	NA	2021	-96.0819	65.03001	NA
2021-05-02	9:00	9:30	AWAR KM 106	0-50	NA	NA	NA	NA	NA	2021	-96.082	65.03003	NA
2021-05-02	9:35	9:35	AWAR KM 102	100-300	NA	NA	NA	NA	NA	2021	-96.129	65.05358	NA
2021-05-02	9:36	9:52	AWAR KM 102	50-100	NA	NA	NA	NA	NA	2021	-96.129	65.05355	NA
2021-05-02	11:01	11:33	AWAR KM 18	300-1000	NA	NA	NA	NA	NA	2021	-96.0819	64.45973	NA
2021-05-02	14:11	14:28	AWAR KM 23	300-1000	NA	NA	NA	NA	NA	2021	-96.1253	64.50198	NA
2021-05-02	14:32	15:07	AWAR KM 23	>1000	NA	NA	NA	NA	NA	2021	-96.1429	64.51104	NA
2021-05-02	14:40	14:01	AWAR KM 23	>1000	NA	NA	NA	NA	NA	2021	-96.14	64.50952	NA
2021-05-03	9:51	10:15	AWAR KM 92	>1000	NA	NA	NA	NA	NA	2021	-96.0714	65.02307	NA
2021-05-03	10:51	11:21	AWAR KM 68	300-1000	NA	Snow plough	NA	NA	NA	2021	-96.3268	64.82032	NA
2021-05-03	13:52	14:21	Amaruq KM 147	0-50	NA	NA	NA	NA	NA	2021	-96.4184	65.22786	NA
2021-05-03	14:21	14:39	Amaruq KM 147	300-1000	NA	NA	NA	NA	NA	2021	-96.4255	65.2233	NA
2021-05-04	8:57	9:09	Amaruq KM 177	300-1000	NA	NA	NA	NA	NA	2021	-96.6668	65.40149	NA
2021-05-04	10:00	10:30	AWAR KM 22	300-1000	NA	NA	NA	NA	NA	2021	-96.123	64.49816	NA
2021-05-04	10:09	10:40	Amaruq KM 161	300-1000	NA	NA	NA	NA	NA	2021	-96.4121	65.30324	NA
2021-05-04	10:35	11:05	AWAR KM 24	300-1000	NA	NA	NA	NA	NA	2021	-96.1425	64.51079	NA
2021-05-05	10:53	11:20	AWAR KM 16	300-1000	NA	NA	NA	NA	NA	2021	-96.0801	64.45453	NA
2021-05-05	13:26	14:10	Amaruq KM 178	50-100	Light truck	NA	NA	NA	NA	2021	-96.6219	65.40086	NA
2021-05-06	12:17	12:42	Amaruq KM 178	100-300	Light truck, heavy equipment	NA	NA	NA	NA	2021	-96.6447	65.40513	NA
2021-05-06	12:42	13:14	Amaruq KM 178	100-300	NA	Heavy equipment	NA	Heavy equipment	NA	2021	-96.6447	65.40514	NA
2021-05-06	13:52	14:31	AWAR KM 34	300-1000	NA	NA	NA	NA	NA	2021	-96.2405	64.56875	NA
2021-05-06	14:47	15:17	AWAR KM 39	300-1000	NA	NA	NA	NA	NA	2021	-96.262	64.5806	NA
2021-05-07	8:14	8:26	AWAR KM 6	300-1000	NA	NA	NA	NA	NA	2021	-96.0007	64.36405	NA
2021-05-07	14:06	14:55	AWAR KM 44	300-1000	NA	Fuel truck	NA	NA	NA	2021	-96.3035	64.64171	NA
2021-05-07	15:45	16:16	AWAR KM 59	300-1000	NA	NA	NA	Fuel truck	NA	2021	-96.3706	64.74953	NA
2021-05-08	12:25	12:28	AWAR KM (NA)	300-1000	NA	NA	NA	NA	NA	2021	-96.0633	64.44663	NA
2021-05-08	12:58	13:30	AWAR KM 30	100-300	NA	NA	NA	NA	NA	2021	-96.2032	64.55877	NA
2021-05-08	14:11	14:34	AWAR KM 51	300-1000	NA	NA	NA	NA	NA	2021	-96.3749	64.68437	NA
2021-05-08	14:20	14:50	Amaruq KM 115	300-1000	NA	Heavy equipment	NA	Heavy equipment	NA	2021	-96.0731	65.02215	NA
2021-05-08	15:05	15:35	Amaruq KM 122	100-300	Light truck, tractor	NA	Tractor	Tractor	NA	2021	-96.0971	65.11477	NA
2021-05-08	15:48	16:18	Amaruq KM 125	100-300	NA	Heavy equipment	NA	Heavy equipment	NA	2021	-96.0972	65.11501	NA
2021-05-08	15:58	16:33	AWAR KM 81	300-1000	NA	NA	NA	NA	NA	2021	-96.3264	64.82106	NA
2021-05-09	10:48	11:25	AWAR KM 68	100-300	NA	NA	NA	NA	NA	2021	-96.3246	64.81542	NA
2021-05-10	8:10	8:50	AWAR KM 104	100-300	NA	NA	NA	NA	NA	2021	-96.1006	65.04803	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2021-05-10	9:47	10:27	AWAR KM 100	100-300	KAK	NA	280	East	No	2	-4	6	NA	NA
2021-05-10	17:15	17:55	AWAR KM 83	100-300	KAK	NA	280	West	No	1	1	24	NA	NA
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	KAK, EF	NA	15	East	No	39	-4	50	NA	NA
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	KAK, EF	NA	280	West	No	1	-4	70	NA	NA
2021-05-11	17:24	18:01	AWAR KM 100	100-300	KAK, EF	NA	45	East	No	62	-5	70	NA	NA
2021-05-12	8:30	9:05	AWAR KM 100	100-300	OJ, KAK	NA	280	East	No	2	-13	47	NA	NA
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	OJ, KAK	NA	280	West	No	1	-8	27	NA	NA
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	OJ, KAK	NA	300	West	No	1	-13	47	NA	NA
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	RW, AA	NA	NA	West	No	30	-10	50	NA	NA
2021-05-14	9:53	10:08	AWAR KM 45	100-300	EF, OJ	NA	100	West	No	29	-18	24	NA	NA
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	AA, CM	NA	NA	West	No	33	-17	19	NA	NA
2021-05-15	15:02	15:38	AWAR KM 105	>1000	OJ, EF	NA	260	East	No	28	-9	20	NA	NA
2021-05-16	9:00	9:31	AWAR KM 104	100-300	EF	NA	200	East	No	2	NA	NA	NA	NA
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	EF, AB	NA	50	West	No	2	NA	NA	NA	NA
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	ST, CM	NA	NA	East	No	2	6	7	NA	NA
2021-05-17	14:53	16:28	AWAR KM 67	0-50	EF	NA	NA	West	No	8	-20	22	NA	NA
2021-05-17	15:11	15:47	AWAR KM 73	>1000	EF	NA	140	West	No	37	-6	24	NA	NA
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	EF	NA	80	East	No	2	-15	32	NA	NA
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	EF	NA	NA	East	No	2	-9	30	NA	NA
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	EF	NA	NA	East	No	2	-9	30	NA	NA
2021-05-20	12:18	12:50	Other	100-300	FL, RW, AA	NA	NA	West	No	19	-2	5	NA	NA
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	AA	NA	NA	West	No	5	-4	20	NA	NA
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	LA, AG	NA	90	West	No	2	1	23	NA	NA
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	LA, AG	NA	90	West	No	2	1	23	NA	NA
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	LA, AG	NA	90	West	No	21	3	10	NA	NA
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	LA, AG	NA	20	West	No	21	3	10	NA	NA
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	ST	NA	NA	West	No	18	1	NA	NA	NA
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	LA	NA	80	West	No	12	1	21	NA	NA
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	LA	NA	80	West	No	12	NA	NA	NA	NA
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	ST, AA	NA	NA	West	No	22	2	11	NA	NA
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	Y	NA	NA	West	No	23	1	NA	NA	NA
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	ST, CM	NA	NA	East	No	45	5	40	NA	NA
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	LA, KM	NA	15	West	Yes	3	13	7	NA	NA
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	LA, KM	NA	90	West	No	1	13	7	NA	NA
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	Do	NA	NA	West	No	1	12	10	NA	NA
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	Do	NA	NA	West	No	1	12	10	NA	NA
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	LA, AG	NA	90	East	No	2	9	40	NA	NA
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	LA, AG	NA	90	East	No	3	10	51	NA	NA
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	LA, AG, AASPB	NA	85	West	No	2	15	21	NA	NA
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	Laurence Archambault	NA	100	West	No	138	6	18	NA	NA
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	Laurence Archambault	NA	100	West	No	138	6	18	NA	NA
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	Laurence Archambault, Kathleen Newberry	NA	25	West	No	7	-3	33	NA	NA
2021-11-05	8:16	8:25	AWAR KM 75	0-50	Lia	NA	2	East	No	200	2	2	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2021-05-10	9:47	10:27	AWAR KM 100	100-300	3	Overcast	1	1	None
2021-05-10	17:15	17:55	AWAR KM 83	100-300	3	Overcast	1	1	Bridge 100 m north
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	0	Windy, blowing snow	NA	NA	NA
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	0	Partial sun, cloudy	1	1	None
2021-05-11	17:24	18:01	AWAR KM 100	100-300	0	Sunny, windy	2	1	None
2021-05-12	8:30	9:05	AWAR KM 100	100-300	0	Sunny	NA	NA	None
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	0	Sunny	1	1	"Sea can and bridge 400"
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	0	Sunny	1	1	None
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	0	Blowing snow	1	0	NA
2021-05-14	9:53	10:08	AWAR KM 45	100-300	0	Sunny, windy; wind 24-36 km/h	1	1	None
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	3	NA	1	8	NA
2021-05-15	15:02	15:38	AWAR KM 105	>1000	1	Cloudy, calm	1	1	Mine a few km away
2021-05-16	9:00	9:31	AWAR KM 104	100-300	NA	NA	1	1	None
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	NA	NA	1	1	None
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	0	Cloudy	1	30	Bridge KM 159,8
2021-05-17	14:53	16:28	AWAR KM 67	0-50	NA	Clear day, no clouds, little wind	NA	NA	NA
2021-05-17	15:11	15:47	AWAR KM 73	>1000	NA	Cloudy	1	1	None
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	NA	Sunny	1	1	Seacan at 800 m
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	NA	NA	1	1	Bridge at 131
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	Sunny, windy	NA	1	1	None
2021-05-20	12:18	12:50	Other	100-300	NA	NA	NA	NA	NA
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	0	Snow, low visibility	1	15	None
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	NA	Cloudy	NA	NA	NA
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	0	Cloudy	NA	NA	NA
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	NA	NA	NA	NA	Near Dyno EMR
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	NA	NA	NA	NA	Near Dyno EMR
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	NA	Cloudy	NA	NA	Near Dyno EMR
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	NA	NA	NA	NA	NA
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	NA	Sunny	NA	NA	Near dyno plant
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	NA	Sunny	NA	NA	Dyno plant
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	0	Cloudy	1	NA	Near landfill
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	NA	Cloudy	1	NA	Near landfill
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	NA	NA	NA	NA	Near dyno
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	7	No precipitation, lots of fog	1	25	NA
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	7	No precipitation, lots of fog	1	25	NA
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	3	No precipitation	0	10	WRSF
2021-11-05	8:16	8:25	AWAR KM 75	0-50	2	No precipitation	2	2	None

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2021-05-10	9:47	10:27	AWAR KM 100	100-300	0	2	0	0	0	0	0	2	0	0	0	0
2021-05-10	17:15	17:55	AWAR KM 83	100-300	0	1	0	0	0	0	0	1	0	0	0	0
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	9	0	2	0	0	0	9	0	2	0	0	0
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	0	1	0	0	0	0	0	1	0	0	0	0
2021-05-11	17:24	18:01	AWAR KM 100	100-300	35	0	0	0	0	0	35	0	0	0	0	0
2021-05-12	8:30	9:05	AWAR KM 100	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	0	0	0	1	0	0	0	0	0	1	0	0
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	0	0	0	1	0	0	0	0	0	1	0	0
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	25	0	0	5	0	0	30	0	0	0	0	0
2021-05-14	9:53	10:08	AWAR KM 45	100-300	7	0	0	22	0	0	3	0	4	20	0	0
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	24	0	0	2	0	0	23	0	1	2	0	0
2021-05-15	15:02	15:38	AWAR KM 105	>1000	27	0	1	0	0	0	26	0	0	2	0	0
2021-05-16	9:00	9:31	AWAR KM 104	100-300	1	1	0	0	0	0	1	1	0	0	0	0
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	2	0	0	0	0	0	0	0	0	0	0	0
2021-05-17	14:53	16:28	AWAR KM 67	0-50	8	0	0	0	0	0	7	1	0	0	0	0
2021-05-17	15:11	15:47	AWAR KM 73	>1000	0	0	0	17	0	0	3	0	0	14	0	0
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	0	2	0	0	0	0	0	2	0	0	0	0
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	1	0	1	0	0	0	1	0	0	1	0	0
2021-05-20	12:18	12:50	Other	100-300	4	15	0	0	0	0	3	16	0	0	0	0
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	0	0	0	5	0	0	2	0	0	3	0	0
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	0	2	0	0	0	0	0	2	0	0	0	0
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	12	9	0	0	0	0	11	9	0	0	1	0
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	16	4	0	0	0	0	16	4	0	0	0	0
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	15	3	0	0	0	0	11	7	0	0	0	0
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	12	0	0	0	0	0	11	0	0	1	0	0
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	10	1	0	0	0	0	11	1	0	0	0	0
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	12	10	0	0	0	0	12	10	0	0	0	0
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	42	3	0	0	0	0	0	3	0	0	0	0
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	3	0	0	0	0	0	1	0	0	0	0	1
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	0	0	0	0	1	0	1	0	0	0	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	0	1	0	0	0	0	0	1	0	0	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	0	1	0	0	0	0	0	1	0	0	0	0
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	1	1	0	0	0	0	1	1	0	0	0	0
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	2	1	0	0	0	0	2	1	0	0	0	0
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	7	7	0	0	0	0	13	1	0	0	0	0
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	12	2	0	0	0	0	10	4	0	0	0	0
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	7	0	0	0	0	0	3	0	0	1	0	0
2021-11-05	8:16	8:25	AWAR KM 75	0-50	5	0	0	0	0	0	0	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2021-05-10	9:47	10:27	AWAR KM 100	100-300	0	2	0	0	0	0	0	2	0	0	0	0
2021-05-10	17:15	17:55	AWAR KM 83	100-300	0	1	0	0	0	0	0	1	0	0	0	0
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	6	0	0	0	0	0	10	0	0	0	0	0
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	0	1	0	0	0	0	0	1	0	0	0	0
2021-05-11	17:24	18:01	AWAR KM 100	100-300	35	0	0	0	0	0	35	0	0	0	0	0
2021-05-12	8:30	9:05	AWAR KM 100	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	0	0	0	1	0	0	0	0	0	1	0	0
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	0	0	0	1	0	0	0	0	0	0	0	0
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	30	0	0	0	0	0	26	0	0	4	0	0
2021-05-14	9:53	10:08	AWAR KM 45	100-300	18	0	0	0	0	0	5	14	0	5	0	0
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	25	0	0	1	0	0	22	0	1	3	0	0
2021-05-15	15:02	15:38	AWAR KM 105	>1000	28	0	0	0	0	0	27	0	0	1	0	0
2021-05-16	9:00	9:31	AWAR KM 104	100-300	1	1	0	0	0	0	1	0	0	0	1	0
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	2	0	0	0	0	0	0	0	0	2	0	0
2021-05-17	14:53	16:28	AWAR KM 67	0-50	7	1	0	0	0	0	7	1	0	0	0	0
2021-05-17	15:11	15:47	AWAR KM 73	>1000	0	0	0	17	0	0	0	0	0	17	0	0
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	0	2	0	0	0	0	0	2	0	0	0	0
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	0	0	0	0	0	0	0	0	0	0	0	0
2021-05-20	12:18	12:50	Other	100-300	3	16	0	0	0	0	3	16	0	0	0	0
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	2	0	0	3	0	0	5	0	0	0	0	0
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	2	0	0	0	0	0	1	1	0	0	0	0
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	0	2	0	0	0	0	0	2	0	0	0	0
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	12	9	0	0	0	0	11	9	0	1	0	0
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	11	9	0	0	0	0	15	4	0	0	0	0
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	7	8	0	0	0	0	5	9	0	0	0	0
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	12	0	0	0	0	0	12	0	0	0	0	0
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	4	2	0	0	0	0	0	0	0	3	0	0
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	13	9	0	0	0	0	13	9	0	0	0	0
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	0	0	0	0	0	0	0	0	0	0	0	0
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	24	5	0	0	0	0	10	5	0	10	0	0
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	1	0	0	0	0	0	1	0	0	0	0	0
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	1	0	0	0	0	0	1	0	0	0	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	0	1	0	0	0	0	0	1	0	0	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	0	1	0	0	0	0	0	1	0	0	0	0
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	2	1	0	0	0	0	2	1	0	0	0	0
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	14	0	0	0	0	0	14	0	0	0	0	0
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	10	4	0	0	0	0	11	3	0	0	0	0
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	0	0	0	2	0	4	0	0	0	0	0	0
2021-11-05	8:16	8:25	AWAR KM 75	0-50	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2021-05-10	9:47	10:27	AWAR KM 100	100-300	0	2	0	0	0	0	0	2	0	0	0
2021-05-10	17:15	17:55	AWAR KM 83	100-300	0	1	0	0	0	0	0	1	0	0	0
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	11	0	0	0	0	0	9	0	2	0	0
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	0	1	0	0	0	0	0	1	0	0	0
2021-05-11	17:24	18:01	AWAR KM 100	100-300	35	0	0	0	0	0	35	0	0	0	0
2021-05-12	8:30	9:05	AWAR KM 100	100-300	0	2	0	0	0	0	0	2	0	0	0
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	0	0	0	1	0	0	1	0	0	0	0
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	30	0	0	0	0	0	21	0	0	7	0
2021-05-14	9:53	10:08	AWAR KM 45	100-300	0	22	0	5	0	0	1	22	2	2	0
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	26	0	0	4	0	0	26	0	0	2	1
2021-05-15	15:02	15:38	AWAR KM 105	>1000	28	0	0	0	0	0	26	0	2	0	0
2021-05-16	9:00	9:31	AWAR KM 104	100-300	0	0	0	2	0	0	0	0	0	2	0
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	2	0	0	0	0	0	2	0	0	0	0
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	0	0	0	0	0	2	0	0	0	0	0
2021-05-17	14:53	16:28	AWAR KM 67	0-50	7	1	0	0	0	0	0	0	0	0	0
2021-05-17	15:11	15:47	AWAR KM 73	>1000	0	0	0	17	0	0	0	0	0	17	0
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	1	0	0	0	0	0	0	0	0	0	0
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	0	2	0	0	0	0	0	2	0	0	0
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-20	12:18	12:50	Other	100-300	0	0	0	0	0	0	3	16	0	0	0
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	4	0	0	1	0	0	3	0	0	1	1
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	0	2	0	0	0	0	0	2	0	0	0
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	0	2	0	0	0	0	0	2	0	0	0
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	12	8	1	0	0	0	14	7	0	0	0
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	14	5	0	0	0	0	13	6	0	0	0
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	5	10	0	0	0	0	6	11	0	0	0
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	11	0	1	0	0	0	10	0	0	0	0
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	14	8	0	0	0	0	14	8	0	0	0
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA	15	5	0	0	0
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	0	0	0	0	0	0	1	0	0	0	0
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	NA	0	0	1	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	0	1	0	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	0	0	0	1	0
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA	2	0	0	0	0
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA	0	2	0	0	0
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	12	2	0	0	0	0	12	2	0	0	0
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	13	1	0	0	0	0	11	3	0	0	0
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-11-05	8:16	8:25	AWAR KM 75	0-50	5	0	0	0	0	0	5	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2021-05-10	9:47	10:27	AWAR KM 100	100-300	0	0	2	0	0	0	0	2	0	0	0
2021-05-10	17:15	17:55	AWAR KM 83	100-300	0	0	1	0	0	0	0	0	1	0	0
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	0	11	0	0	0	0	0	10	0	0	0
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	0	0	1	0	0	0	0	0	1	0	0
2021-05-11	17:24	18:01	AWAR KM 100	100-300	0	48	0	0	0	0	0	47	1	0	0
2021-05-12	8:30	9:05	AWAR KM 100	100-300	0	0	2	0	0	0	0	0	0	1	0
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	0	0	0	0	1	0	0	0	0	0	1
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	0	19	0	0	10	1	0	30	0	0	0
2021-05-14	9:53	10:08	AWAR KM 45	100-300	0	1	22	1	3	0	0	1	22	0	4
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	1	30	0	0	0	0	0	29	0	0	0
2021-05-15	15:02	15:38	AWAR KM 105	>1000	0	28	0	0	0	0	0	27	0	0	1
2021-05-16	9:00	9:31	AWAR KM 104	100-300	0	0	0	0	2	0	0	0	0	0	2
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	0	2	0	0	0	0	0	2	0	0	0
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	0	0	0	0	0	0	0	0	0	0	0
2021-05-17	14:53	16:28	AWAR KM 67	0-50	0	0	0	0	0	0	0	6	2	0	0
2021-05-17	15:11	15:47	AWAR KM 73	>1000	0	0	0	0	13	0	0	0	0	0	13
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	0	0	2	0	0	0	0	0	2	0	0
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-20	12:18	12:50	Other	100-300	0	3	16	0	0	0	0	3	16	0	0
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	0	0	0	0	0	5	0	4	0	0	1
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	0	0	2	0	0	0	0	0	2	0	0
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	0	0	2	0	0	0	0	0	2	0	0
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	0	18	4	1	0	0	0	19	3	0	0
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	0	11	8	1	0	0	0	13	7	0	0
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	0	6	11	0	0	0	0	6	11	0	0
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	0	10	1	0	0	0	0	0	0	0	0
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	0	17	10	0	0	0	0	21	6	0	0
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	0	1	0	0	0	0	0	1	0	0	0
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	0	0	0	1	0	0	0	0	0	1	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	0	0	1	0	0	0	0	0	1	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	0	1	0	0	0	0	0	NA	NA	NA	NA
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	0	2	0	0	0	0	0	3	0	0	0
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	0	0	2	0	0	0	0	3	0	0	0
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	0	12	2	0	0	0	0	NA	NA	NA	NA
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	0	7	6	0	0	0	0	7	6	0	0
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-11-05	8:16	8:25	AWAR KM 75	0-50	0	5	0	0	0	0	0	5	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2021-05-10	9:47	10:27	AWAR KM 100	100-300	0	0	0	0	2	0	0	0	2	0	0
2021-05-10	17:15	17:55	AWAR KM 83	100-300	0	0	0	1	0	0	0	0	0	1	0
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	1	0	11	0	0	0	0	0	10	0	0
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	0	0	0	1	0	0	0	0	0	1	0
2021-05-11	17:24	18:01	AWAR KM 100	100-300	0	0	47	1	0	0	0	0	45	3	0
2021-05-12	8:30	9:05	AWAR KM 100	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	0	0	0	0	0	1	0	0	0	0	0
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	0	0	30	0	0	0	0	0	30	0	0
2021-05-14	9:53	10:08	AWAR KM 45	100-300	0	0	3	21	0	3	0	0	6	18	0
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	1	0	25	0	0	5	0	0	30	0	0
2021-05-15	15:02	15:38	AWAR KM 105	>1000	0	0	18	0	0	10	0	0	16	0	2
2021-05-16	9:00	9:31	AWAR KM 104	100-300	0	0	0	0	0	2	0	0	0	0	0
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	0	0	2	0	0	0	0	0	2	0	0
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	0	0	0	0	0	0	0	0	0	0	0
2021-05-17	14:53	16:28	AWAR KM 67	0-50	0	0	6	2	0	0	0	0	6	3	0
2021-05-17	15:11	15:47	AWAR KM 73	>1000	0	0	0	0	0	13	0	0	0	0	0
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	0	0	0	2	0	0	0	0	0	2	0
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-05-20	12:18	12:50	Other	100-300	0	0	4	15	0	0	0	0	4	15	0
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	0	0	3	0	0	0	2	0	3	0	0
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	0	0	0	2	0	0	0	0	0	2	0
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	0	0	0	2	0	0	0	0	0	2	0
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	0	0	18	3	0	0	0	0	18	5	1
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	0	0	10	8	0	1	0	0	12	8	0
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	0	0	6	11	0	0	0	0	16	11	0
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	0	0	0	0	0	0	0	0	0	0	0
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	0	0	19	8	0	0	0	0	18	9	0
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	0	0	0	0	0	0	0	0	0	0	0
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	0	0	1	0	0	0	0	0	1	0	0
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	0	0	0	0	1	0	0	0	0	0	1
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	0	0	0	1	0	0	0	0	0	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	0	0	3	0	0	0	0	0	3	0	0
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	0	0	3	0	0	0	0	0	3	0	0
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0	0	0
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	0	0	6	7	0	0	0	0	7	6	0
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	0	0	0	0	0	0	0	0	0	0	0
2021-11-05	8:16	8:25	AWAR KM 75	0-50	0	0	0	0	0	0	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2021-05-10	9:47	10:27	AWAR KM 100	100-300	0	0	0	2	0	0	0	0	0
2021-05-10	17:15	17:55	AWAR KM 83	100-300	0	0	0	0	1	0	0	0	0
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	1	0	0	11	0	0	0	0	0
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	0	0	0	0	1	0	0	0	0
2021-05-11	17:24	18:01	AWAR KM 100	100-300	0	0	0	45	3	0	0	0	0
2021-05-12	8:30	9:05	AWAR KM 100	100-300	0	0	0	0	0	0	0	0	0
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	1	0	0	0	0	0	1	0	0
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	0	0	0	0	0	0	0	0	0
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	0	0	0	24	0	0	5	1	0
2021-05-14	9:53	10:08	AWAR KM 45	100-300	3	0	0	2	18	0	7	0	0
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	0	0	0	29	0	0	0	1	0
2021-05-15	15:02	15:38	AWAR KM 105	>1000	10	0	0	24	0	0	4	0	0
2021-05-16	9:00	9:31	AWAR KM 104	100-300	0	0	0	0	0	0	0	0	0
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	0	0	0	0	0	0	2	0	0
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	0	0	0	0	0	0	0	0	0
2021-05-17	14:53	16:28	AWAR KM 67	0-50	0	0	0	4	5	0	0	0	0
2021-05-17	15:11	15:47	AWAR KM 73	>1000	0	0	0	0	0	0	0	0	0
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	0	0	0	0	0	0	0	0	0
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	0	0	0	0	2	0	0	0	0
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	0	0	0	0	0	0	0	0	0
2021-05-20	12:18	12:50	Other	100-300	0	0	0	4	15	0	0	0	0
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	2	0	0	3	0	0	2	0	0
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	0	0	0	0	2	0	0	0	0
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	0	0	0	0	2	0	0	0	0
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	0	0	0	17	5	1	0	0	0
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	0	0	0	12	9	0	0	0	0
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	0	0	0	16	11	0	0	0	0
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	0	0	0	0	0	0	0	0	0
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	0	0	0	18	9	0	0	0	0
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	0	0	0	0	0	0	0	0	0
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	0	0	0	1	0	0	0	0	0
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	0	0	0	0	0	1	0	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	0	0	0	0	0	0	0	0	0
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	0	1	0	0	0	0
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	0	0	0	3	0	0	0	0	0
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	0	0	0	3	0	0	0	0	0
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	0	0	0	6	8	0	0	0	0
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	0	0	0	0	0	0	0	0	0
2021-11-05	8:16	8:25	AWAR KM 75	0-50	0	0	0	0	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2021-05-10	9:47	10:27	AWAR KM 100	100-300	Tanker	NA	Tanker	Tanker	Tanker	NA
2021-05-10	17:15	17:55	AWAR KM 83	100-300	NA	NA	NA	Tanker	NA	NA
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	NA	Fuel truck	NA	NA	NA	NA
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	Heavy equipment	NA	NA	Heavy equipment, light truck	Heavy equipment	Heavy equipment
2021-05-11	17:24	18:01	AWAR KM 100	100-300	NA	NA	NA	NA	NA	NA
2021-05-12	8:30	9:05	AWAR KM 100	100-300	NA	NA	NA	NA	NA	NA
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	NA	NA	NA	NA	NA	NA
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	NA	NA	NA	NA	NA	NA
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	NA	Heavy equipment	NA	Light truck	NA	NA
2021-05-14	9:53	10:08	AWAR KM 45	100-300	NA	NA	NA	NA	NA	NA
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	Heavy equipment	NA	Heavy equipment	NA	NA	Heavy equipment
2021-05-15	15:02	15:38	AWAR KM 105	>1000	NA	EMR truck	NA	NA	NA	Tanker
2021-05-16	9:00	9:31	AWAR KM 104	100-300	NA	Light truck	NA	Roll-off truck	Tanker	Tanker
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	NA	NA	NA	NA	NA	NA
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	NA	NA	NA	NA	NA	NA
2021-05-17	14:53	16:28	AWAR KM 67	0-50	NA	NA	Tanker	NA	NA	NA
2021-05-17	15:11	15:47	AWAR KM 73	>1000	NA	NA	NA	NA	NA	NA
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	Heavy equipment	Heavy equipment	Heavy equipment	Heavy equipment	Heavy equipment	NA
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	NA	LHT	NA	Heavy equipment	NA	NA
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	NA	NA	NA	NA	NA	NA
2021-05-20	12:18	12:50	Other	100-300	NA	NA	NA	NA	NA	NA
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	NA	NA	NA	LHT; blast	NA	LHT
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	Blast	NA	NA	NA	NA	NA
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	Blast	NA	NA	NA	NA	NA
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	Light truck	NA	NA	NA	NA	NA
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	NA	NA	NA	Other	NA	NA
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	NA
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	Blast	NA	NA	NA	NA	NA
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	NA	NA	NA	NA	NA	NA
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	NA	NA	NA	NA	NA	Heavy equipment
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	NA	NA	NA	Blast	NA	NA
2021-11-05	8:16	8:25	AWAR KM 75	0-50	NA	NA	NA	NA	Convoy	Convoy

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2021-05-10	9:47	10:27	AWAR KM 100	100-300	NA	NA	NA	NA	NA	2021	-96.1463	65.05094	NA
2021-05-10	17:15	17:55	AWAR KM 83	100-300	NA	NA	NA	NA	NA	2021	-96.3009	64.9349	NA
2021-05-11	10:05	10:44	AWAR KM (NA)	300-1000	Roll-off truck	NA	NA	NA	NA	2021	-96.086	65.0292	NA
2021-05-11	13:51	14:34	Amaruq KM 124	300-1000	Heavy equipment	Heavy equipment	NA	Heavy equipment	NA	2021	-96.1067	65.12478	NA
2021-05-11	17:24	18:01	AWAR KM 100	100-300	NA	NA	NA	NA	NA	2021	-96.1464	65.0491	NA
2021-05-12	8:30	9:05	AWAR KM 100	100-300	Light truck	NA	Tanker	NA	NA	2021	-96.1464	65.05108	NA
2021-05-12	14:40	15:01	AWAR KM 48	300-1000	Road maintenance	NA	NA	NA	NA	2021	-96.3577	64.66017	NA
2021-05-12	16:07	16:22	AWAR KM 91	300-1000	NA	NA	NA	NA	NA	2021	-96.2243	64.98318	NA
2021-05-13	11:50	12:20	Amaruq KM 112	0-50	Qty 1; 12 caribou move 10 m away from the road	NA	NA	Heavy equipment	NA	2021	-96.0022	65.05112	NA
2021-05-14	9:53	10:08	AWAR KM 45	100-300	NA	NA	NA	NA	NA	2021	-96.3134	64.65243	NA
2021-05-15	9:02	9:53	Amaruq KM 132	100-300	Heavy equipment, light truck	NA	Heavy equipment, light truck	NA	Heavy equipment	2021	-96.1647	65.19423	NA
2021-05-15	15:02	15:38	AWAR KM 105	>1000	NA	NA	NA	NA	NA	2021	-96.0877	65.03413	NA
2021-05-16	9:00	9:31	AWAR KM 104	100-300	NA	NA	NA	NA	NA	2021	-96.0703	65.0232	NA
2021-05-16	9:54	10:29	AWAR KM 102	300-1000	NA	NA	NA	Tractor, tanker	NA	2021	-96.1331	65.05735	NA
2021-05-16	15:47	16:16	Amaruq KM 160	50-100	NA	NA	NA	NA	NA	2021	-96.4126	65.30638	NA
2021-05-17	14:53	16:28	AWAR KM 67	0-50	NA	NA	NA	NA	NA	2021	-96.0732	65.02139	NA
2021-05-17	15:11	15:47	AWAR KM 73	>1000	NA	NA	NA	NA	NA	2021	-96.3242	64.86213	NA
2021-05-18	9:22	9:45	Amaruq KM 133	100-300	NA	NA	NA	NA	NA	2021	-96.1897	65.20374	NA
2021-05-18	14:26	14:59	Amaruq KM 131	300-1000	Heavy equipment	Fuel truck	Heavy equipment	Fuel truck, tractor, light truck	NA	2021	-96.1623	65.18731	NA
2021-05-18	15:56	16:06	Amaruq KM 117	100-300	NA	NA	NA	NA	NA	2021	-96.0457	65.08304	NA
2021-05-20	12:18	12:50	Other	100-300	NA	NA	NA	NA	Blast	2021	-96.7062	65.39753	NA
2021-05-24	12:21	12:52	Amaruq KM 176	100-300	LHT	NA	LHT	LHT	NA	2021	-96.6038	65.38622	NA
2021-05-28	12:00	12:39	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.6962	65.41761	NA
2021-05-28	12:45	13:13	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.6961	65.41763	NA
2021-06-04	12:00	12:30	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	2021	-96.733	65.39556	NA
2021-06-04	12:41	13:11	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.6666	65.40139	NA
2021-06-05	12:12	12:43	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	2021	-96.7038	65.39708	NA
2021-06-08	12:13	12:13	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	2021	-96.6666	65.40139	NA
2021-06-08	12:32	13:05	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.7196	65.39914	NA
2021-06-09	12:18	12:43	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.6666	65.40139	NA
2021-06-18	14:58	15:00	Meadowbank KM 4	300-1000	NA	NA	NA	NA	NA	2021	-96.0732	65.02138	NA
2021-08-05	12:12	12:31	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.6859	65.41691	NA
2021-08-19	12:00	12:30	Amaruq KM (NA)	0-50	Light truck	NA	NA	NA	NA	2021	-96.6665	65.40163	NA
2021-08-19	12:42	13:09	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	2021	-96.6666	65.40144	NA
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	Blast	NA	2021	-96.6672	65.40147	NA
2021-08-20	12:13	12:59	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	2021	-96.6672	65.40147	NA
2021-08-22	12:02	12:35	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.7193	65.40345	NA
2021-08-22	12:35	13:13	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.7172	65.41074	NA
2021-08-24	11:50	12:20	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2021	-96.7336	65.39524	NA
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	NA	NA	Blast	NA	NA	2021	-96.7336	65.39524	Yes
2021-09-28	11:51	13:00	Amaruq KM 177	300-1000	NA	NA	Heavy equipment	Light truck	NA	2021	-96.7336	65.39524	Yes
2021-10-22	11:44	12:45	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	2021	-96.6666	65.40146	No
2021-11-05	8:16	8:25	AWAR KM 75	0-50	Convoy	NA	NA	NA	NA	2021	-96.0737	65.02115	No

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2021-12-09	13:04	13:43	AWAR KM 44	100-300	Nicolas S, Felix Q	NA	270	West	No	101	-20	20	NA	NA
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	Laurence Archambault, Rowan Woodall	NA	30	East	No	10	-28	40	SW	68
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	Rowan Woodall, Kathleen Newberry	NA	200	West	NA	5	-15	20	NW	67
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	Rowan Woodall, Kathleen Newberry	NA	200	West	NA	5	-15	20	NW	67
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	Rowan Woodall, Kathleen Newberry	NA	150	West	No	5	-8	8	NW	92
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	Rowan Woodall, Kathleen Newberry	NA	10	West	No	15	-6	8	NW	92
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	Derek	NA	290	West	No	27	5	5	S	10
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	Rowan Woodall, Kathleen Newberry	NA	345	West	No	100	-8	23	SE	91
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	Derek Nateela	NA	240	West	No	7	3	3	S	2
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	Kathleen Newberry	NA	190	West	No	60	-5	20	NE	84
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	Kathleen Newberry	NA	30	West	No	NA	-13	21	NE	84
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	Kathleen Newberry	NA	180	West	NA	NA	-5	20	NW	NA
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	Kathleen Newberry	NA	180	West	No	NA	-13	20	NW	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	Rowan Woodall	NA	260	West	No	NA	-18	22	NE	84
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	Rowan Woodall	NA	260	West	No	NA	-18	22	NE	84
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	Rowan Woodall	NA	260	West	No	NA	-18	22	NE	84
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	Derek	NA	180	West	No	NA	-12	40	N	78
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	Eric Leonard, Kathleen Newberry	NA	300	West	No	8	-15	46	N	78
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	Olivier Jean, Jean-Francois Dufour	NA	210	West	No	17	-16	20	NW	65
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	Olivier Jean, Jean-Francois Dufour	NA	270	West	No	117	-16	20	W	65
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	Olivier Jean, Jean-Francois Dufour	NA	270	West	No	117	-16	20	NW	65
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	Felix Quessy Savard Olivier Gagnon	NA	0	West	No	35	-14	20	NW	0
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	Eric Leonard	NA	350	East	No	5	-15	24	NW	79
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	Eric Leonard	NA	10	East	No	5	-26	18	NW	72
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	Laurence Archambault	NA	15	West	No	14	-24	18	NW	72
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	Sylvain Singaqti Olivier Gagnon	NA	90	East	No	12	-15	30	NW	0
2022-04-18	14:09	14:57	AWAR KM 95	100-300	Sylvain Singaqti	NA	0	West	No	134	-12	15	NW	14
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	OJ OG	NA	40	West	No	2	-10	14	N	75
2022-04-19	12:55	13:32	AWAR KM 93	>1000	Sylvain, Felix Quessy	NA	350	West	No	123	-14	4	SW	0
2022-04-19	16:23	17:00	AWAR KM 93	>1000	Olivier Jean, Louis Dubois	NA	0	West	No	NA	-19	14	NW	75
2022-04-19	17:00	17:12	AWAR KM 93	>1000	Olivier Jean, Louis Dubois	NA	0	West	No	NA	-19	14	NW	75
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	Eric Leonard	NA	300	East	No	14	-17	0	SW	75
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	Eric Leonard	NA	0	East	No	9	-18	12	SE	72
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	Olivier Gagnon	NA	70	East	No	84	-10	23	NW	76
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	Felix Quessy, Olivier Jean	NA	90	West	No	40	-21	20	NW	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2021-12-09	13:04	13:43	AWAR KM 44	100-300	2	No precipitation, cloudy	2	8	None
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	0	Precipitation: None	100	2000	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	2	Precipitation: 0	100	400	Electrical panel; 5kv line; nag pile
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	2	Precipitation: 0	100	400	Electrical panel; 5kv line; nag pile
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	0	Precipitation: None	200	400	None
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	0	Precipitation: 0; foggy	200	500	Flags
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	1	Precipitation: Snowing	100	1000	None
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	0	Precipitation: Light snow	200	400	None
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	1	Precipitation: White snow	0	1200	None
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	0	Precipitation: 0	100	600	None
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	0	Precipitation: 0	200	400	None
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	0	Precipitation: Light snow	100	500	LHT parked
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	0	Precipitation: Light snow	100	500	LHT parked
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	0	Precipitation: Light snow	100	400	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	0	Precipitation: Light snow	100	400	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	0	Precipitation: Light snow	100	400	NA
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	1	Precipitation: 0; nada	0	2000	Nada
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	0	Precipitation: None; gusting wind, blowing snow	200	1000	NA
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	4	Precipitation: 0	0	1000	None
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	5	Precipitation: 0	0	1500	Vault garage
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	5	Precipitation: 0	0	1500	Vault garage
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	2	Precipitation: 0 Sunny	100	1500	NA
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	5	Precipitation: 0; sunny, clear	21000	1000	No
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	5	Precipitation: 0; sunny, clear	300	1000	No
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	0	Precipitation: 0; sunny	0	2000	Dyno plant
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	5	Precipitation: Snow	300	1000	NA
2022-04-18	14:09	14:57	AWAR KM 95	100-300	1	Precipitation: Clear, sunny	200	3000	0
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	7	Precipitation: 0	0	1500	None
2022-04-19	12:55	13:32	AWAR KM 93	>1000	5	Precipitation: 0; sunny	800	1000	None
2022-04-19	16:23	17:00	AWAR KM 93	>1000	7	Precipitation: 0	0	1500	None
2022-04-19	17:00	17:12	AWAR KM 93	>1000	7	Precipitation: 0	0	1500	None
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	0	Precipitation: 0; overcast	0	1000	Surface drill nearby
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	5	Precipitation: 0; overcast	300	1000	None
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	0	Precipitation: Snow	300	800	NA
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	1	Precipitation: 0; sunny	200	1600	No

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2021-12-09	13:04	13:43	AWAR KM 44	100-300	0	8	0	0	0	0	0	8	0	0	0	0
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	NA	10	NA	NA	NA	NA	NA	10	NA	NA	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	4	NA	NA	NA	NA	NA	4	NA	1	NA	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	3	NA	NA	NA	1	NA	NA	NA	NA	NA	NA	NA
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	5	NA	NA	NA	NA	NA	5	NA	NA	NA	NA	NA
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	13	2	NA	NA	NA	NA	13	2	NA	NA	NA	NA
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	0	1	26	26	27	0	0	0	27	27	27	0
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	20	NA	NA	NA	NA	NA	20	NA	NA	NA	NA	NA
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	0	7	0	0	7	0	0	0	7	0	7	0
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	50	1	6	3	NA	NA	52	1	4	3	NA	NA
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	30	NA	NA	NA	NA	NA	12	NA	NA	8	10	NA
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	27	NA	NA	3	NA	NA	23	NA	1	5	1	NA
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	30	NA	NA	NA	NA	NA	26	NA	NA	2	2	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	16	4	NA	NA	NA	NA	16	4	NA	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	7	13	NA	NA	NA	NA	6	13	1	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	7	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	11	19	11	0	0	0	3	19	7	1	0	0
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	3	3	NA	NA	NA	NA	3	3	NA	NA	NA	NA
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	13	0	1	1	0	0	12	0	0	3	0	0
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	27	0	0	0	0	0	25	0	0	2	0	0
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	27	0	0	0	0	0	20	0	0	6	1	0
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	NA	NA	NA	35	NA	NA	NA	NA	NA	NA	NA	35
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	1	3	1	NA	NA	NA	2	3	NA	NA	NA	NA
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	NA	5	NA	NA	NA	NA	NA	5	NA	NA	NA	NA
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	0	14	0	0	0	0	0	14	0	0	0	0
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	12	0	0	0	0	0	12	0	0	0	0	0
2022-04-18	14:09	14:57	AWAR KM 95	100-300	52	39	NA	43	134	NA	51	NA	34	49	134	NA
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	NA	NA	2	NA	NA	NA	2	NA	NA	NA	NA	NA
2022-04-19	12:55	13:32	AWAR KM 93	>1000	80	NA	23	20	NA	NA	100	NA	NA	23	NA	NA
2022-04-19	16:23	17:00	AWAR KM 93	>1000	17	10	NA	NA	NA	NA	17	10	NA	NA	NA	NA
2022-04-19	17:00	17:12	AWAR KM 93	>1000	14	NA	NA	NA	NA	NA	14	NA	NA	NA	NA	NA
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	12	NA	NA	1	NA	NA	12	NA	NA	2	NA	NA
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	7	NA	NA	NA	NA	NA	2	NA	4	NA	NA	NA
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	42	10	30	NA	NA	NA	60	NA	24	NA	NA	NA
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	5	NA	NA	2	NA	NA	6	NA	NA	1	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2021-12-09	13:04	13:43	AWAR KM 44	100-300	0	8	0	0	0	0	0	6	2	0	0	0
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	NA	10	NA	NA	NA	NA	NA	10	NA	NA	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	5	NA	NA	NA	NA	NA	5	NA	NA	NA	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	5	NA	NA	NA	NA	NA	5	NA	NA	NA	NA	NA
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	12	2	NA	1	NA	NA	11	3	NA	1	NA	NA
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	0	0	27	27	27	0	20	0	27	27	27	0
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	19	NA	NA	1	NA	NA	18	NA	NA	2	NA	NA
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	7	0	7	7	7	0	7	0	0	7	7	0
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	44	6	3	7	NA	NA	46	7	3	4	NA	NA
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	NA	NA	NA	27	3	NA	NA	NA	NA	30	NA	NA
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	24	NA	NA	5	1	NA	26	NA	NA	4	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	16	4	NA	NA	NA	NA	16	4	NA	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	7	13	NA	NA	NA	NA	4	16	NA	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	6	19	5	2	0	0	8	20	8	2	0	0
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	14	NA	NA	NA	NA	NA	11	NA	3	NA	NA	NA
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	8	0	0	7	0	0	14	0	0	2	0	0
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	26	0	0	1	0	0	27	0	0	0	0	0
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	25	0	0	2	0	0	27	0	0	0	0	0
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	35	NA	NA	NA	NA	NA	35	NA	NA	NA	NA	NA
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	2	3	NA	NA	NA	NA	2	3	NA	NA	NA	NA
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	NA	5	NA	NA	NA	NA	NA	1	NA	4	NA	NA
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	0	14	0	0	0	0	0	14	0	0	0	0
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	12	0	0	0	0	0	12	0	0	0	0	0
2022-04-18	14:09	14:57	AWAR KM 95	100-300	51	NA	34	49	134	NA	133	NA	NA	1	134	NA
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	NA	NA	NA	NA	2	NA	2	NA	NA	NA	NA	NA
2022-04-19	12:55	13:32	AWAR KM 93	>1000	100	NA	23	NA	NA	NA	123	NA	NA	NA	NA	NA
2022-04-19	16:23	17:00	AWAR KM 93	>1000	17	10	NA	NA	NA	NA	15	6	NA	NA	NA	NA
2022-04-19	17:00	17:12	AWAR KM 93	>1000	2	NA	NA	NA	NA	NA	7	NA	NA	NA	NA	NA
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	14	NA	NA	NA	NA	NA	14	NA	NA	NA	NA	NA
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	4	NA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	42	20	22	NA	NA	NA	60	10	14	NA	NA	NA
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	5	NA	2	NA	NA	NA	6	NA	NA	1	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2021-12-09	13:04	13:43	AWAR KM 44	100-300	0	6	0	0	0	0	0	6	0	0	0
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	NA	10	NA	NA	NA	NA	NA	8	2	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	4	NA	1	NA	NA	NA	4	NA	NA	1	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	5	NA	NA	NA	NA	NA	5	NA	NA	NA	NA
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	11	4	NA	NA	NA	NA	10	4	NA	1	NA
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	37	5	4	33	15	4	37	0	9	28	10
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	10	NA	NA	10	NA	NA	6	NA	1	13	NA
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	0	0	0	7	7	0	7	0	7	0	7
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	50	7	1	2	NA	NA	52	8	NA	NA	NA
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	27	NA	NA	3	NA	NA	20	NA	NA	8	2
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	23	6	NA	1	NA	NA	23	7	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	16	4	NA	NA	NA	NA	14	6	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	20	NA	NA	NA	NA	NA	20	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	5	25	5	2	0	0	2	28	0	0	0
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	11	NA	1	1	NA	NA	14	NA	NA	NA	NA
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	16	0	0	0	0	0	14	0	0	2	0
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	25	0	0	2	0	0	22	0	1	4	0
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	24	0	1	2	0	0	26	0	1	0	0
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	35	NA	NA	NA	NA	NA	NA	NA	NA	35	NA
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	2	3	NA	NA	NA	NA	2	3	NA	NA	NA
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	NA	1	4	NA	NA	NA	4	1	NA	NA	NA
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	0	14	0	0	0	0	0	14	0	0	0
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	12	0	0	0	0	0	12	0	0	0	0
2022-04-18	14:09	14:57	AWAR KM 95	100-300	134	NA	NA	NA	134	NA	132	NA	NA	2	134
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	1	1	NA	NA	NA	NA	1	1	NA	NA	NA
2022-04-19	12:55	13:32	AWAR KM 93	>1000	123	NA	NA	NA	NA	NA	103	16	NA	4	NA
2022-04-19	16:23	17:00	AWAR KM 93	>1000	20	NA	NA	NA	NA	NA	17	NA	NA	NA	NA
2022-04-19	17:00	17:12	AWAR KM 93	>1000	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	12	NA	1	1	NA	NA	12	NA	2	NA	NA
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	1	NA	NA	8	NA	NA	3	NA	NA	6	NA
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	84	NA	NA	NA	NA	NA	42	NA	42	NA	NA
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	7	NA	NA	NA	NA	NA	7	NA	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2021-12-09	13:04	13:43	AWAR KM 44	100-300	0	0	6	0	0	0	0	0	6	0	0
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	NA	NA	10	NA	NA	NA	NA	NA	10	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	3	NA	1	NA	NA	NA	1	NA	NA	1
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	NA	5	NA	NA	NA	NA	NA	5	NA	NA	NA
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	NA	10	3	NA	1	1	NA	10	5	NA	NA
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	0	37	0	37	30	10	0	28	0	9	29
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	NA	6	NA	NA	14	NA	NA	NA	NA	NA	NA
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	0	7	1	6	0	0	0	5	2	5	0
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	NA	49	9	1	1	NA	NA	45	10	5	NA
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	NA	30	NA	NA	NA	NA	NA	24	NA	NA	6
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	NA	23	7	NA	NA	NA	NA	22	7	1	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	14	6	NA	NA	NA	NA	11	9	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	20	NA	NA	NA	NA	NA	20	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	0	1	29	1	0	0	0	0	30	0	0
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	NA	14	NA	NA	NA	NA	NA	12	NA	NA	2
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	0	11	0	0	6	0	0	8	0	2	7
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	0	26	0	0	1	0	0	0	NA	NA	NA
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	0	22	0	0	5	0	0	24	0	0	3
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	NA	35	NA	NA	NA	NA	NA	35	NA	NA	NA
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	NA	5	NA	NA	NA	NA	NA	NA	NA	NA	5
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	NA	4	1	NA	NA	NA	NA	4	1	NA	NA
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	0	0	14	0	0	0	0	0	14	0	0
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	0	12	0	0	0	0	0	12	0	0	0
2022-04-18	14:09	14:57	AWAR KM 95	100-300	NA	132	NA	NA	2	134	NA	132	NA	NA	2
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	NA	1	1	NA	NA	NA	NA	NA	2	NA	NA
2022-04-19	12:55	13:32	AWAR KM 93	>1000	NA	103	16	NA	4	NA	NA	100	16	NA	7
2022-04-19	16:23	17:00	AWAR KM 93	>1000	NA	15	3	NA	NA	NA	NA	14	6	NA	NA
2022-04-19	17:00	17:12	AWAR KM 93	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	NA	12	NA	NA	21	NA	NA	8	NA	NA	6
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	NA	7	NA	NA	2	NA	NA	9	NA	NA	NA
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	NA	40	15	24	5	NA	NA	84	NA	NA	NA
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	NA	6	NA	NA	NA	1	NA	3	NA	NA	3

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2021-12-09	13:04	13:43	AWAR KM 44	100-300	0	0	0	6	0	0	0	0	0	6	0
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	NA	NA	NA	10	NA	NA	NA	NA	NA	10	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	2	NA	NA	NA	NA	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	NA	NA	5	NA	NA	NA	NA	NA	5	NA	NA
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	NA	NA	9	6	NA	NA	NA	NA	9	6	NA
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	0	0	0	0	0	12	0	0	30	5	22
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	0	0	7	0	7	1	0	0	7	0	7
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	NA	NA	38	17	2	3	NA	NA	39	18	1
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	NA	NA	29	NA	NA	1	NA	NA	30	NA	NA
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	NA	NA	22	7	NA	1	NA	NA	20	7	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	14	6	NA	NA	NA	NA	15	4	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	20	NA	NA	NA	NA	NA	20	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	0	0	0	30	0	0	0	0	1	29	1
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	NA	NA	7	NA	NA	7	NA	NA	4	NA	NA
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	0	0	6	0	0	10	0	0	16	0	0
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	NA	NA	0	NA	NA	NA	NA	NA	0	NA	NA
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	0	0	5	0	0	22	0	0	3	0	0
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	NA	NA	35	NA	NA	NA	NA	NA	35	NA	NA
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	NA	NA	4	NA	1	NA	NA	NA	3	NA	2
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	NA	NA	4	1	NA	NA	NA	NA	4	1	NA
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	0	0	0	0	0	0	14	0	0	5	0
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	0	0	12	0	0	0	0	0	12	0	0
2022-04-18	14:09	14:57	AWAR KM 95	100-300	134	NA	134	NA	NA	NA	NA	NA	134	NA	NA
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	NA	NA	NA	2	NA	NA	NA	NA	NA	2	NA
2022-04-19	12:55	13:32	AWAR KM 93	>1000	NA	NA	113	NA	10	NA	NA	NA	123	NA	NA
2022-04-19	16:23	17:00	AWAR KM 93	>1000	NA	NA	14	4	NA	NA	NA	NA	15	2	NA
2022-04-19	17:00	17:12	AWAR KM 93	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	NA	NA	10	NA	NA	4	NA	NA	13	NA	NA
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	NA	NA	9	NA	NA	NA	NA	NA	9	NA	NA
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	NA	NA	24	NA	60	NA	NA	NA	34	NA	50
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	NA	NA	3	NA	NA	4	NA	NA	7	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2021-12-09	13:04	13:43	AWAR KM 44	100-300	0	0	0	0	5	1	0	0	0
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	NA	NA	NA	NA	10	NA	NA	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	NA	NA	NA	5	NA	NA	NA	NA	NA
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	NA	NA	NA	5	10	NA	NA	NA	NA
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	10	5	0	5	0	5	29	5	0
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	0	0	0	7	0	7	2	0	0
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	NA	2	NA	38	20	1	1	NA	NA
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	NA	NA	NA	29	NA	NA	1	NA	NA
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	3	NA	NA	18	7	NA	5	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	1	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	20	NA	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	0	0	0	0	30	0	0	0	0
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	7	3	NA	4	NA	NA	9	1	NA
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	1	0	0	14	0	0	3	0	0
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	NA	NA	NA	0	NA	NA	NA	NA	NA
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	24	0	0	2	0	0	25	0	0
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	NA	NA	NA	20	NA	NA	15	NA	NA
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	5	NA	NA	5	NA	6	NA	NA	NA
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	NA	NA	NA	3	1	NA	1	NA	NA
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	9	0	0	0	5	0	9	0	0
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	0	0	0	11	0	1	0	0	0
2022-04-18	14:09	14:57	AWAR KM 95	100-300	NA	NA	NA	134	NA	NA	NA	NA	NA
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	NA	NA	NA	NA	2	NA	NA	NA	NA
2022-04-19	12:55	13:32	AWAR KM 93	>1000	NA	NA	NA	63	NA	60	NA	NA	NA
2022-04-19	16:23	17:00	AWAR KM 93	>1000	NA	NA	NA	15	NA	NA	2	NA	NA
2022-04-19	17:00	17:12	AWAR KM 93	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	1	NA	NA	12	NA	1	1	NA	NA
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	NA	NA	NA	9	NA	NA	NA	NA	NA
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	NA	NA	NA	84	NA	NA	NA	NA	NA
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	NA	NA	NA	5	NA	NA	2	NA	NA

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2021-12-09	13:04	13:43	AWAR KM 44	100-300	NA	NA	NA	NA	NA	NA
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	NA	Heavy equipment	NA	NA	Blast	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	Blast	NA	NA	NA	NA	NA
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	NA	NA	Heavy equipment	NA	NA	Heavy equipment
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	NA	NA	Blast	NA	Light truck	NA
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	NA	NA	NA	NA	NA	NA
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	NA	Heavy equipment	Heavy equipment	NA	NA	NA
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	NA	Light truck	NA	NA	NA	NA
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	NA	NA	NA	NA	NA	NA
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	NA	Maintenance vehicle	NA	Maintenance vehicle	Heavy equipment	Maintenance vehicle
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	Light truck	NA	NA	NA	NA	NA
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	NA
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	NA
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	NA
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	Maintenance vehicle	NA	NA	NA	NA	NA
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	NA	NA	NA	NA	NA	NA
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	NA	NA	NA	NA	NA	NA
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	NA	NA	NA	NA	NA	NA
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	NA	NA	NA	NA	NA	NA
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	NA	NA	NA	NA	Light truck	Blast
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	NA	NA	Convoy	NA	NA	NA
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	NA	NA	NA	NA	NA	NA
2022-04-18	14:09	14:57	AWAR KM 95	100-300	NA	NA	NA	NA	NA	NA
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	Heavy equipment	Heavy equipment	Light truck	NA	NA	Heavy equipment
2022-04-19	12:55	13:32	AWAR KM 93	>1000	NA	NA	NA	NA	NA	NA
2022-04-19	16:23	17:00	AWAR KM 93	>1000	NA	NA	NA	NA	NA	NA
2022-04-19	17:00	17:12	AWAR KM 93	>1000	NA	NA	NA	NA	NA	NA
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	Heavy equipment	NA	NA	NA	Light truck	NA
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	NA	NA	NA	NA	NA	NA
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	NA	NA	NA	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2021-12-09	13:04	13:43	AWAR KM 44	100-300	NA	NA	NA	NA	NA	2021	-96.307	64.6446	No
2022-01-29	11:30	13:00	Amaruq KM (NA)	100-300	NA	NA	Heavy equipment	Heavy equipment	NA	2022	-96.6666	65.4018	No
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	2022	-96.4228	65.22691	No
2022-04-03	14:30	14:30	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	2022	-96.4228	65.22691	No
2022-04-08	9:41	10:13	Haul Road KM 147	100-300	NA	NA	NA	Heavy equipment	Heavy equipment	2022	-96.411	65.22743	Yes
2022-04-08	14:35	15:09	Haul Road KM 179	100-300	NA	NA	NA	NA	Heavy equipment	2022	-96.6464	65.4052	No
2022-04-09	9:12	9:54	AWAR KM 88	300-1000	NA	NA	NA	NA	NA	2022	-96.2181	64.96502	Yes
2022-04-09	11:48	12:18	Haul Road KM 118	300-1000	NA	NA	NA	NA	NA	2022	-96.0544	65.08503	No
2022-04-09	12:58	13:30	AWAR KM 35	300-1000	NA	NA	NA	NA	NA	2022	-96.2483	64.57509	Yes
2022-04-10	6:19	6:50	Haul Road KM 144	100-300	NA	NA	NA	NA	NA	2022	-96.3908	65.22584	No
2022-04-10	7:57	8:37	Haul Road KM 167	300-1000	Maintenance vehicle	Maintenance vehicle	Maintenance vehicle	Maintenance vehicle	Maintenance vehicle	2022	-96.556	65.34893	No
2022-04-10	8:55	8:55	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	2022	-96.556	65.34891	No
2022-04-10	9:02	9:45	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	2022	-96.556	65.34889	Yes
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	2022	-96.6216	65.40071	No
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	Blast	NA	NA	NA	NA	2022	-96.6216	65.40071	No
2022-04-10	16:50	18:15	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	2022	-96.6216	65.40071	No
2022-04-11	12:03	9:36	Haul Road KM 170	300-1000	NA	NA	NA	NA	NA	2022	-96.6213	65.40043	No
2022-04-11	17:01	18:19	Haul Road KM 179	300-1000	NA	Blast	NA	NA	NA	2022	-96.6481	65.40517	No
2022-04-14	10:42	11:15	Haul Road KM 170	100-300	NA	NA	NA	NA	NA	2022	-96.5811	65.35406	Yes
2022-04-14	12:13	13:23	Haul Road KM 115	300-1000	NA	NA	NA	NA	NA	2022	-96.0082	65.07064	Yes
2022-04-14	16:51	13:56	Haul Road KM 115	300-1000	NA	NA	NA	NA	NA	2022	-96.0082	65.07065	Yes
2022-04-15	9:29	10:16	Haul Road KM 175	300-1000	NA	NA	NA	NA	NA	2022	-96.62	65.40013	Yes
2022-04-15	17:48	18:30	Amaruq KM (NA)	100-300	NA	NA	Light truck	NA	NA	2022	-96.7223	65.39873	No
2022-04-16	10:07	10:41	Haul Road KM 149	300-1000	NA	NA	NA	NA	NA	2022	-96.4545	65.23167	No
2022-04-16	17:44	18:28	Amaruq KM (NA)	50-100	NA	NA	Blast	NA	NA	2022	-96.665	65.40275	No
2022-04-17	12:39	13:10	Haul Road KM 114	300-1000	NA	NA	NA	NA	NA	2022	-95.9975	65.0524	No
2022-04-18	14:09	14:57	AWAR KM 95	100-300	NA	NA	NA	NA	NA	2022	-95.9392	64.30977	No
2022-04-19	8:02	8:34	Haul Road KM 154	100-300	NA	NA	Heavy equipment	Heavy equipment	NA	2022	-96.1672	65.19603	Yes
2022-04-19	12:55	13:32	AWAR KM 93	>1000	NA	NA	NA	NA	NA	2022	-96.1775	65.02296	No
2022-04-19	16:23	17:00	AWAR KM 93	>1000	NA	NA	NA	NA	NA	2022	-96.1775	65.02296	Yes
2022-04-19	17:00	17:12	AWAR KM 93	>1000	NA	NA	NA	NA	NA	2022	-96.1775	65.02296	Yes
2022-04-19	17:01	17:38	Amaruq KM (NA)	300-1000	NA	Heavy equipment	NA	NA	NA	2022	-96.7178	65.39996	No
2022-04-20	12:38	13:10	Haul Road KM 150	300-1000	NA	Heavy equipment	NA	NA	NA	2022	-96.467	65.23546	No
2022-04-20	15:13	15:45	AWAR KM 93	300-1000	NA	NA	NA	NA	NA	2022	-96.2219	65.00081	Yes
2022-04-20	15:45	16:18	Haul Road KM 112	300-1000	Heavy equipment	NA	NA	NA	NA	2022	-96.1678	65.19606	Yes

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	Eric Leonard	NA	280	West	No	1414	-26	15	NW	71
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	Olivier Gagnon, Jean-François Dufour	NA	70	East	Yes	2	-10	15	NW	75
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	Olivier Gagnon, Jean-François Dufour	NA	230	West	No	16	-15	20	NW	75
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	Olivier Gagnon, Jean-François Dufour	NA	230	West	No	22	-10	20	NW	75
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	Laurence Archambault, Kevin Martee	NA	350	West	No	18	-25	25	NW	71
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	Laurence Archambault	NA	280	West	No	64	-21	6	W	81
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	Laurence Archambault	NA	280	West	No	64	-21	6	W	81
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	Laurence Archambault	NA	280	West	No	64	-21	6	W	81
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	SS - JFD	NA	140	Both	Yes	254	-19	30	NE	65
2022-04-22	12:24	12:58	AWAR KM 50	100-300	Olivier Gagnon	NA	140	East	No	12	-10	30	NW	75
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	Sylvain Singaqti, Jeff Dufour	NA	130	East	No	9	-18	20	NW	65
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	Laurence Archambault	NA	270	West	No	36	17	6	W	81
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	Sylvain Singaqti, Jeff Dufour	NA	140	East	No	10	-18	20	NW	65
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	Laurence Archambault	NA	280	West	No	14	-24	6	W	87
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	Eric Leonard	NA	0	West	No	7	-22	20	NW	60
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	Derek	NA	50	East	Yes	9	-20	40	N	78
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	Rowan Woodall, Kevin Martee	NA	330	West	NA	98	-10	7	NW	70
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	Felix Quessy Sylvain	NA	0	West	No	2	-10	15	NW	0
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	Rowan Woodall	NA	120	Both	Yes	10	-10	15	NW	70
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	Alex Blanchette	NA	0	West	No	36	-3	15	NE	75
2022-04-29	10:41	11:18	AWAR KM 6	100-300	Derek, Nicolas	NA	270	West	No	2	-10	30	N	0
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	Rowan Woodall	NA	0	West	No	22	-14	30	N	70
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	Rowan Woodall, Kathleen Newberry	NA	150	West	No	33	-6	10	SE	84
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	Alex	NA	340	East	Yes	21	-5	15	NW	85
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	Eric Leonard	NA	350	West	No	20	-10	40	SE	78
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	Kathleen Newberry	NA	150	East	No	10	0	30	NW	92
2022-05-12	13:53	14:29	AWAR KM 104	50-100	Louis Dubois, Jeff Dufour	NA	180	West	No	12	-2	20	NW	65
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	NB JL	NA	180	West	No	18	3	15	NW	75
2022-05-19	15:23	20:56	AWAR KM 102	100-300	Jeff Dufour	NA	270	West	No	2	-1	40	N	60
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	Eric Leonard	NA	0	West	No	19	22	26	W	37
2022-07-31	14:33	15:10	AWAR KM 89	>1000	JL NB	NA	300	East	No	10	8	40	NW	67
2022-07-31	15:17	15:56	AWAR KM 83	100-300	Nadine Blatter Nadine Lachance	NA	180	East	No	39	10	35	NW	67
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	Alex Blanchette	NA	90	East	No	25	10	20	E	100
2022-08-01	13:44	13:44	AWAR KM 20	100-300	Derek	NA	250	West	NA	4	7	30	NW	50
2022-08-01	14:02	14:32	AWAR KM 22	50-100	Derek	NA	150	East	No	37	7	30	NW	20
2022-08-01	14:48	15:24	AWAR KM 94	100-300	Jeff Dufour	NA	250	West	No	2	6	50	NW	60
2022-08-01	15:27	15:56	AWAR KM 93	50-100	Jeff Dufour	NA	100	East	No	1	6	50	NW	60
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	NB DN	NA	300	East	No	5	10	35	N	63
2022-08-02	17:21	17:39	AWAR KM 20	100-300	Jeff Dufour	NA	90	East	No	7	9	26	N	60

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	10	Precipitation: 0; overcast, foggy	300	1000	No
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	1	Precipitation: Snow	200	1500	NA
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	1	Precipitation: Snow	100	1600	NA
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	1	Precipitation: Snow	200	1600	NA
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	0	Precipitation: 0; sunny	100	2000	None
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	3	Precipitation: 0; sunny	0	2000	None
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	3	Precipitation: 0; sunny	0	2000	None
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	3	Precipitation: 0; sunny	0	2000	None
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	1	Precipitation: 0; sunny	200	2000	None
2022-04-22	12:24	12:58	AWAR KM 50	100-300	2	Precipitation: 0	200	1000	NA
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	1	Precipitation: 0; sunny	400	2500	None
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	3	Precipitation: 0; sunny	0	2000	No
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	1	Precipitation: 0; sunny	300	2500	None
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	3	Precipitation: 0	0	2000	None
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	9	Precipitation: 0	0	0	NA
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	1	Precipitation: 0; nada	100	1500	Nada
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	9	Precipitation: None	100	400	NA
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	5	Precipitation: 0; sunny	100	3000	None
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	10	Precipitation: 0	200	400	None
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	7	Precipitation: None	100	1500	NA
2022-04-29	10:41	11:18	AWAR KM 6	100-300	1	Precipitation: 0; nada	0	800	Nada
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	2	Precipitation: None	200	600	IVR WRSF
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	5	Precipitation: 0	200	700	Pad K on east side of road
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	4	Precipitation: None; few	100	1200	Airport
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	0	Precipitation: 0; windy, poor visibility	100	1000	Vent raise storage pile nearby
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	0	Precipitation: In the morning	300	1000	IVR WRSF; IVR att. Pond; IVR dike; Road 35; PAD K; fuel farm
2022-05-12	13:53	14:29	AWAR KM 104	50-100	1	Precipitation: None; cloudy	200	2000	None
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	5	Precipitation: 0; sunny	0	800	0
2022-05-19	15:23	20:56	AWAR KM 102	100-300	4	Precipitation: 0	300	2000	NA
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	13	Precipitation: 0; sunny, cloudy	0	1000	None
2022-07-31	14:33	15:10	AWAR KM 89	>1000	0	Precipitation: 0; windy, cloudy	100	700	NA
2022-07-31	15:17	15:56	AWAR KM 83	100-300	0	Precipitation: 0; windy, cloudy	-100	600	0
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	0	Precipitation: Light rain	500	1000	NA
2022-08-01	13:44	13:44	AWAR KM 20	100-300	1	Precipitation: Rain	100	1200	Zero
2022-08-01	14:02	14:32	AWAR KM 22	50-100	1	Precipitation: Rain, windy	100	1200	Zero
2022-08-01	14:48	15:24	AWAR KM 94	100-300	1	Precipitation: Light rain	100	1500	NA
2022-08-01	15:27	15:56	AWAR KM 93	50-100	1	Precipitation: Light rain	200	1500	NA
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	0	Precipitation: 10%; cloudy, rain	100	600	0
2022-08-02	17:21	17:39	AWAR KM 20	100-300	1	Precipitation: Light rain	400	1500	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	13	1	NA	NA	NA	NA	8	2	NA	NA	NA	NA
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	NA	NA	NA	2	NA	NA	NA	NA	NA	2	NA	NA
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	7	NA	NA	8	NA	NA	NA	NA	NA	16	NA	NA
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	11	NA	NA	11	NA	NA	11	NA	NA	11	NA	NA
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	7	0	0	10	1	0	10	0	2	6	0	0
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	25	34	4	0	1	0	45	6	0	13	0	0
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	30	34	0	0	0	0	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	0	0	0	67	0	0	5	0	0	10	0	0
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	9	NA	NA	12	NA	NA	21	NA	NA	NA	NA	NA
2022-04-22	12:24	12:58	AWAR KM 50	100-300	NA	12	NA	NA	NA	NA	NA	12	NA	NA	NA	NA
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	NA	8	2	NA	NA	NA	NA	7	3	NA	NA	NA
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	34	1	4	0	0	0	24	10	5	0	0	0
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	NA	9	1	NA	NA	NA	NA	10	NA	NA	NA	NA
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	14	0	0	0	0	0	9	0	0	5	0	0
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	7	NA	NA	NA	NA	NA	7	NA	NA	NA	NA	NA
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	0	0	9	9	9	0	3	0	9	1	2	0
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	NA	NA	NA	25	NA	NA	20	NA	NA	5	NA	NA
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	2	NA	NA	NA	NA	NA	2	NA	NA	NA	NA	NA
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	6	0	0	4	0	0	0	0	3	7	0	0
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	36	0	0	0	0	0	36	0	0	0	0	0
2022-04-29	10:41	11:18	AWAR KM 6	100-300	0	0	2	2	2	2	0	0	2	2	2	0
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	15	0	0	7	0	0	18	0	0	4	0	0
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	0	32	1	0	0	0	1	31	1	0	0	0
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	0	0	0	2	0	0	0	0	0	2	0	0
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	5	15	NA	NA	NA	NA	14	6	NA	NA	NA	NA
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	7	0	0	3	0	0	10	0	0	0	0	0
2022-05-12	13:53	14:29	AWAR KM 104	50-100	12	NA	NA	NA	NA	NA	8	NA	NA	NA	NA	NA
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2022-05-19	15:23	20:56	AWAR KM 102	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	0	7	5	6	0	0	0	7	5	7	0	0
2022-07-31	14:33	15:10	AWAR KM 89	>1000	0	8	2	0	0	0	0	9	1	0	0	0
2022-07-31	15:17	15:56	AWAR KM 83	100-300	11	0	0	0	0	0	8	0	0	3	0	0
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	10	0	0	0	0	0	10	0	0	0	0	0
2022-08-01	13:44	13:44	AWAR KM 20	100-300	4	0	4	4	4	0	4	0	4	4	0	0
2022-08-01	14:02	14:32	AWAR KM 22	50-100	15	6	24	24	0	7	24	6	24	24	4	6
2022-08-01	14:48	15:24	AWAR KM 94	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2022-08-01	15:27	15:56	AWAR KM 93	50-100	1	0	0	0	0	0	1	0	0	0	0	0
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	0	5	0	0	0	0	0	5	0	0	0	0
2022-08-02	17:21	17:39	AWAR KM 20	100-300	0	0	0	7	0	0	0	0	0	7	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	7	2	NA	NA	NA	NA	6	1	NA	NA	NA	NA
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	NA	NA	2	NA	NA	NA	NA	NA	NA	2	NA	NA
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	NA	NA	NA	16	NA	NA	NA	NA	NA	16	NA	NA
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	1	NA	2	NA	NA	NA	16	NA	NA	NA	NA	NA
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	1	0	0	3	0	0	5	0	0	3	0	0
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	30	21	0	13	0	0	25	22	0	4	0	0
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	0	0	0	15	0	0	0	0	0	0	0	0
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	21	NA	NA	NA	NA	NA	21	NA	NA	NA	NA	NA
2022-04-22	12:24	12:58	AWAR KM 50	100-300	NA	12	NA	NA	NA	NA	NA	12	NA	NA	NA	NA
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	NA	9	1	NA	NA	NA	NA	10	NA	NA	NA	NA
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	34	5	0	0	0	0	1	5	0	10	0	0
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	NA	10	NA	NA	NA	NA	NA	10	NA	NA	NA	NA
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	5	0	0	9	0	0	8	0	0	3	0	0
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	7	NA	NA	NA	NA	NA	7	NA	NA	NA	NA	NA
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	9	0	9	1	0	0	9	0	9	0	0	0
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	25	NA	NA	NA	NA	NA	19	NA	NA	NA	NA	NA
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	NA	NA	NA	2	NA	NA	1	NA	NA	NA	NA	NA
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	0	0	10	0	0	0	0	0	7	3	0	0
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	36	0	0	0	0	0	0	0	0	36	0	0
2022-04-29	10:41	11:18	AWAR KM 6	100-300	0	0	1	1	0	0	0	0	0	1	0	0
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	20	0	0	2	0	0	22	0	0	0	0	0
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	1	32	0	0	0	0	2	30	1	0	0	0
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	0	0	0	2	0	0	0	0	0	2	0	0
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	14	6	NA	NA	NA	NA	12	8	NA	NA	NA	NA
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	5	0	1	4	0	0	7	0	0	3	0	0
2022-05-12	13:53	14:29	AWAR KM 104	50-100	11	NA	NA	1	NA	NA	12	NA	NA	NA	NA	NA
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2022-05-19	15:23	20:56	AWAR KM 102	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	0	8	6	5	0	0	0	9	8	2	0	0
2022-07-31	14:33	15:10	AWAR KM 89	>1000	0	10	0	0	0	0	2	8	0	0	0	0
2022-07-31	15:17	15:56	AWAR KM 83	100-300	11	0	0	0	0	0	11	0	0	0	0	0
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	7	0	0	3	0	0	2	0	0	2	0	6
2022-08-01	13:44	13:44	AWAR KM 20	100-300	4	0	4	4	0	0	0	0	4	4	0	0
2022-08-01	14:02	14:32	AWAR KM 22	50-100	27	3	27	27	4	3	27	3	27	27	0	0
2022-08-01	14:48	15:24	AWAR KM 94	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2022-08-01	15:27	15:56	AWAR KM 93	50-100	1	0	0	0	0	0	1	0	0	0	0	0
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	0	5	0	0	0	0	0	5	0	0	0	0
2022-08-02	17:21	17:39	AWAR KM 20	100-300	7	0	0	0	0	0	2	0	0	5	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	6	1	NA	3	NA	NA	7	1	NA	1	NA
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	NA	NA	NA	2	NA	NA	NA	NA	NA	2	NA
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	13	NA	NA	3	NA	NA	13	NA	NA	3	NA
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	12	0	2	0	0	0	12	0	1	4	0
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	13	28	0	6	0	0	7	33	0	3	0
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	0	0	0	0	0	0	NA	NA	NA	NA	NA
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	21	NA	NA	NA	NA	NA	24	NA	NA	NA	NA
2022-04-22	12:24	12:58	AWAR KM 50	100-300	NA	12	NA	NA	NA	NA	NA	12	NA	NA	NA
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	NA	10	NA	NA	NA	NA	NA	10	NA	NA	NA
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	0	0	0	16	0	0	NA	NA	NA	NA	NA
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	NA	10	NA	NA	NA	NA	NA	10	NA	NA	NA
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	6	0	0	4	0	0	0	0	0	0	0
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	7	NA	NA	NA	NA	NA	6	NA	NA	NA	1
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	9	0	9	9	0	0	0	0	9	9	9
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	2	NA	NA	NA	NA	NA	2	NA	NA	NA	NA
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	0	0	8	2	0	0	0	0	0	10	0
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	0	0	0	36	0	0	26	0	0	10	0
2022-04-29	10:41	11:18	AWAR KM 6	100-300	0	0	0	2	0	0	0	0	0	2	0
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	20	0	0	2	0	0	21	0	0	1	0
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	1	30	1	0	1	0	4	29	0	0	0
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	0	0	2	0	0	0	0	0	2	0	0
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	12	8	NA	NA	NA	NA	13	7	NA	NA	NA
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	10	0	0	0	0	0	8	0	0	0	2
2022-05-12	13:53	14:29	AWAR KM 104	50-100	9	1	NA	NA	NA	NA	7	2	NA	NA	NA
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	2	0	0	0	0	0	2	0	0	0	0
2022-05-19	15:23	20:56	AWAR KM 102	100-300	2	0	0	0	0	0	2	0	0	0	0
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	0	9	9	1	0	0	0	9	10	0	0
2022-07-31	14:33	15:10	AWAR KM 89	>1000	3	7	0	0	0	0	2	8	0	0	0
2022-07-31	15:17	15:56	AWAR KM 83	100-300	11	0	0	0	0	0	11	0	0	0	0
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	0	0	0	10	0	0	10	0	0	0	0
2022-08-01	13:44	13:44	AWAR KM 20	100-300	0	0	4	4	4	0	0	0	4	4	4
2022-08-01	14:02	14:32	AWAR KM 22	50-100	6	0	30	30	2	1	10	0	19	19	2
2022-08-01	14:48	15:24	AWAR KM 94	100-300	2	0	0	0	0	0	1	0	0	1	0
2022-08-01	15:27	15:56	AWAR KM 93	50-100	1	0	0	0	0	0	1	0	0	0	0
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	0	5	0	0	0	0	0	5	0	0	0
2022-08-02	17:21	17:39	AWAR KM 20	100-300	7	0	0	0	0	0	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	NA	9	NA	NA	1	NA	NA	9	NA	1	NA
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	NA	NA	NA	NA	2	NA	NA	NA	NA	NA	2
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	NA	14	NA	NA	2	NA	NA	15	NA	NA	1
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	0	14	0	0	0	0	0	16	0	1	0
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	0	5	26	0	6	1	0	7	13	0	5
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	NA	24	NA	NA	NA	NA	NA	24	NA	NA	NA
2022-04-22	12:24	12:58	AWAR KM 50	100-300	NA	12	NA	NA	NA	NA	NA	NA	12	NA	NA
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	NA	NA	10	NA	NA	NA	NA	NA	10	NA	NA
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	NA	NA	10	NA	NA	NA	NA	NA	10	NA	NA
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	NA	4	NA	NA	NA	3	NA	6	NA	NA	1
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	0	0	0	9	9	9	0	0	0	9	9
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	NA	2	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	0	0	0	0	10	0	0	0	0	0	10
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	0	33	3	0	0	0	0	33	3	0	0
2022-04-29	10:41	11:18	AWAR KM 6	100-300	0	0	0	0	2	0	0	0	0	0	2
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	0	21	0	0	0	1	0	16	1	0	0
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	0	7	26	0	0	0	0	6	27	0	0
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	0	2	0	0	0	0	0	1	0	1	0
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	NA	15	5	NA	NA	NA	NA	15	4	NA	1
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	0	5	0	0	0	0	0	0	0	0	5
2022-05-12	13:53	14:29	AWAR KM 104	50-100	NA	2	5	NA	NA	NA	NA	2	5	NA	NA
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	0	1	0	1	0	0	0	1	0	0	1
2022-05-19	15:23	20:56	AWAR KM 102	100-300	0	2	0	0	0	0	0	2	0	0	0
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	0	0	9	10	0	0	0	0	9	10	0
2022-07-31	14:33	15:10	AWAR KM 89	>1000	0	4	6	0	0	0	0	2	8	0	0
2022-07-31	15:17	15:56	AWAR KM 83	100-300	0	8	0	0	3	0	0	10	0	0	1
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	0	10	0	0	0	0	0	7	0	0	3
2022-08-01	13:44	13:44	AWAR KM 20	100-300	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-01	14:02	14:32	AWAR KM 22	50-100	4	19	0	19	0	0	0	19	0	19	3
2022-08-01	14:48	15:24	AWAR KM 94	100-300	0	0	0	0	0	0	0	1	0	0	0
2022-08-01	15:27	15:56	AWAR KM 93	50-100	0	0	0	0	1	0	0	1	0	0	0
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	0	0	5	0	0	0	0	0	5	0	0
2022-08-02	17:21	17:39	AWAR KM 20	100-300	0	0	0	0	0	0	0	NA	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	NA	NA	5	NA	NA	6	NA	NA	3	NA	NA
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	NA	NA	NA	NA	NA	2	NA	NA	NA	NA	NA
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	NA	NA	15	NA	NA	NA	1	NA	16	NA	NA
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	0	0	16	0	1	0	0	0	12	0	0
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	NA	NA	24	NA	NA	NA	NA	NA	24	NA	NA
2022-04-22	12:24	12:58	AWAR KM 50	100-300	NA	NA	NA	12	NA	NA	NA	NA	NA	12	NA
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	NA	NA	NA	10	NA	NA	NA	NA	NA	10	NA
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	NA	NA	NA	10	NA	NA	NA	NA	NA	10	NA
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	7	NA	NA	NA	NA	NA
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	9	9	9	0	9	0	9	0	9	0	9
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	2	NA	2	NA	NA	NA	NA	NA	2	NA	NA
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	0	0	0	0	0	10	0	0	0	0	0
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	0	0	32	4	0	0	0	0	36	0	0
2022-04-29	10:41	11:18	AWAR KM 6	100-300	0	0	0	0	0	2	0	0	NA	NA	NA
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	5	0	21	1	0	0	0	0	21	1	0
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	0	0	6	27	0	0	0	0	5	27	0
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	0	0	0	0	1	1	0	0	1	0	1
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	NA	NA	14	6	NA	NA	NA	NA	14	6	NA
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	5	0	0	0	0	10	0	0	10	0	0
2022-05-12	13:53	14:29	AWAR KM 104	50-100	NA	NA	3	5	NA	NA	NA	NA	3	6	NA
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	0	0	0	0	0	2	0	0	1	0	0
2022-05-19	15:23	20:56	AWAR KM 102	100-300	0	0	2	0	0	0	0	0	3	0	0
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	0	0	0	9	10	0	0	0	0	9	10
2022-07-31	14:33	15:10	AWAR KM 89	>1000	0	0	0	5	0	3	0	0	3	5	0
2022-07-31	15:17	15:56	AWAR KM 83	100-300	0	0	11	0	0	0	0	0	11	0	0
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	0	0	9	0	0	1	0	0	5	0	0
2022-08-01	13:44	13:44	AWAR KM 20	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-01	14:02	14:32	AWAR KM 22	50-100	0	1	19	0	19	19	0	0	19	1	18
2022-08-01	14:48	15:24	AWAR KM 94	100-300	0	0	0	0	0	0	0	0	0	0	0
2022-08-01	15:27	15:56	AWAR KM 93	50-100	0	0	0	1	0	0	0	0	0	1	0
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	0	0	0	5	0	0	0	0	0	5	0
2022-08-02	17:21	17:39	AWAR KM 20	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	7	NA	NA	4	NA	NA	6	NA	NA
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	2	NA	NA	NA	NA	NA	2	NA	NA
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	0	0	0	17	4	0	0	0	0
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	NA	NA	NA	24	NA	NA	NA	NA	NA
2022-04-22	12:24	12:58	AWAR KM 50	100-300	NA	NA	NA	NA	12	NA	NA	NA	NA
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	NA	NA	NA	NA	10	NA	NA	NA	NA
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	NA	NA	NA	NA	10	NA	NA	NA	NA
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	4	3	NA	NA	NA	7	NA	NA	NA
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	0	0	0	0	0	9	9	9	7
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	NA	NA	NA	2	NA	NA	NA	NA	NA
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	10	0	0	0	0	0	10	0	0
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	0	0	0	36	0	0	0	0	0
2022-04-29	10:41	11:18	AWAR KM 6	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	0	0	0	16	1	0	4	1	0
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	1	0	0	6	27	0	0	0	0
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	0	0	0	2	0	0	0	0	0
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	NA	NA	NA	16	4	NA	NA	NA	NA
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	0	0	0	10	0	0	0	0	0
2022-05-12	13:53	14:29	AWAR KM 104	50-100	NA	NA	NA	NA	8	NA	NA	NA	NA
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	1	0	0	2	0	0	0	0	0
2022-05-19	15:23	20:56	AWAR KM 102	100-300	0	0	0	3	0	0	0	0	0
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	0	0	0	0	9	10	0	0	0
2022-07-31	14:33	15:10	AWAR KM 89	>1000	0	0	0	3	5	0	0	0	0
2022-07-31	15:17	15:56	AWAR KM 83	100-300	0	0	0	1	0	0	0	0	1
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	5	0	0	5	0	3	2	0	0
2022-08-01	13:44	13:44	AWAR KM 20	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-01	14:02	14:32	AWAR KM 22	50-100	18	0	0	19	0	19	18	2	1
2022-08-01	14:48	15:24	AWAR KM 94	100-300	0	0	0	0	0	0	0	0	0
2022-08-01	15:27	15:56	AWAR KM 93	50-100	0	0	0	0	1	0	0	0	0
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	0	0	0	0	5	0	0	0	0
2022-08-02	17:21	17:39	AWAR KM 20	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	NA	NA	NA	NA	NA	Convoy
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	NA	NA	NA	NA	NA	NA
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	NA	NA	Convoy	NA	NA	NA
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	NA	NA	NA	NA	Heavy equipment	NA
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	NA	Light truck	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	NA	Convoy	Convoy	NA	NA	NA
2022-04-22	12:24	12:58	AWAR KM 50	100-300	NA	NA	NA	NA	NA	NA
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	NA	NA	NA	NA	NA	NA
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	NA	NA	NA	NA	NA	NA
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	Convoy	NA	NA	NA	NA	NA
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	NA	NA	NA	NA	NA	NA
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	NA
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	NA	NA	NA	NA	NA	NA
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	NA	NA	Heavy equipment	NA	NA	NA
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	NA	NA	NA	NA	NA	NA
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	NA	NA	NA	NA	NA	NA
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	NA	NA	NA	NA	NA	NA
2022-04-29	10:41	11:18	AWAR KM 6	100-300	Light truck	NA	NA	NA	NA	NA
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	NA	NA	NA	NA	NA	NA
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	NA	NA	NA	NA	Blast	NA
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	NA
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	NA	NA	NA	NA	Blast	NA
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	NA	NA	Heavy equipment	NA	NA	NA
2022-05-12	13:53	14:29	AWAR KM 104	50-100	NA	NA	NA	Aircraft	NA	NA
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	NA	NA	NA	NA	NA	NA
2022-05-19	15:23	20:56	AWAR KM 102	100-300	NA	NA	NA	NA	NA	NA
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	NA	NA	NA	NA	NA	Blast
2022-07-31	14:33	15:10	AWAR KM 89	>1000	NA	NA	NA	NA	NA	NA
2022-07-31	15:17	15:56	AWAR KM 83	100-300	NA	NA	NA	NA	NA	NA
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	NA	NA	NA	NA	Heavy equipment	NA
2022-08-01	13:44	13:44	AWAR KM 20	100-300	NA	NA	NA	NA	NA	NA
2022-08-01	14:02	14:32	AWAR KM 22	50-100	NA	NA	NA	NA	NA	NA
2022-08-01	14:48	15:24	AWAR KM 94	100-300	NA	NA	NA	NA	NA	NA
2022-08-01	15:27	15:56	AWAR KM 93	50-100	NA	NA	NA	NA	NA	NA
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	NA	NA	NA	NA	NA	NA
2022-08-02	17:21	17:39	AWAR KM 20	100-300	Aircraft	NA	NA	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2022-04-21	8:44	9:48	Haul Road KM 179	100-300	NA	NA	NA	NA	NA	2022	-96.6602	65.40332	Yes
2022-04-21	8:54	9:24	Haul Road KM 130	100-300	NA	NA	NA	NA	NA	2022	-96.1621	65.18778	Yes
2022-04-21	9:43	10:30	Haul Road KM 128	>1000	Convoy	NA	NA	NA	NA	2022	-96.1453	65.16726	Yes
2022-04-21	10:29	10:59	Haul Road KM 125	300-1000	NA	NA	NA	NA	NA	2022	-96.1086	65.13459	No
2022-04-21	11:05	11:36	Haul Road KM 116	300-1000	NA	NA	NA	NA	NA	2022	-96.0303	65.08291	Yes
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	2022	-96.6666	65.40146	Yes
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	Convoy	NA	NA	2022	-96.6666	65.40146	Yes
2022-04-22	9:08	9:35	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	2022	-96.6666	65.40146	Yes
2022-04-22	11:07	11:48	Haul Road KM 111	0-50	NA	NA	NA	NA	NA	2022	-96.0187	65.04849	No
2022-04-22	12:24	12:58	AWAR KM 50	100-300	NA	NA	NA	NA	NA	2022	-96.3712	64.67302	Yes
2022-04-22	12:54	13:28	Haul Road KM 111	50-100	NA	NA	NA	NA	NA	2022	-96.0103	65.05026	Yes
2022-04-22	13:13	13:42	Haul Road KM 163	100-300	NA	NA	NA	NA	NA	2022	-96.4693	65.32378	No
2022-04-22	13:29	14:00	Haul Road KM 111	50-100	NA	NA	NA	NA	NA	2022	-96.0109	65.0501	Yes
2022-04-22	14:16	14:30	Haul Road KM 163	100-300	NA	NA	NA	NA	NA	2022	-96.4131	65.3078	No
2022-04-24	17:57	18:39	Amaruq KM (NA)	300-1000	Blast	NA	NA	NA	NA	2022	-96.7304	65.40066	No
2022-04-25	17:20	11:12	Haul Road KM 152	0-50	NA	NA	Heavy equipment	Convoy	NA	2022	-96.4743	65.24868	No
2022-04-26	9:10	9:10	Haul Road KM 163	300-1000	NA	NA	NA	NA	NA	2022	-96.4427	65.32069	No
2022-04-26	14:30	15:18	Haul Road KM 111	300-1000	NA	Aircraft	NA	NA	NA	2022	-96.032	65.0455	No
2022-04-27	6:17	6:50	Haul Road KM 151	0-50	NA	NA	NA	NA	NA	2022	-96.468	65.23631	No
2022-04-27	16:42	17:18	Haul Road KM 125	>1000	NA	NA	NA	NA	NA	2022	-96.1025	65.11987	Yes
2022-04-29	10:41	11:18	AWAR KM 6	100-300	NA	NA	NA	NA	NA	2022	-96.0113	64.37485	No
2022-04-30	17:25	18:30	Amaruq KM 143	100-300	NA	Blast	NA	NA	NA	2022	-96.6665	65.40176	No
2022-05-03	17:45	18:30	Haul Road KM 179	50-100	NA	NA	NA	NA	NA	2022	-96.6666	65.40144	No
2022-05-04	15:52	16:34	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	2022	-96.0711	65.02314	Yes
2022-05-05	17:35	18:26	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2022	-96.6964	65.39651	No
2022-05-07	17:35	18:15	Amaruq KM (NA)	100-300	NA	Blast	NA	NA	NA	2022	-96.6789	65.40644	No
2022-05-12	13:53	14:29	AWAR KM 104	50-100	NA	NA	Light Truck	NA	NA	2022	-96.0705	65.02217	No
2022-05-15	8:23	8:58	Haul Road KM 110	100-300	NA	NA	NA	NA	NA	2022	-96.0644	65.01537	Yes
2022-05-19	15:23	20:56	AWAR KM 102	100-300	NA	NA	NA	NA	NA	2022	-96.0732	65.02136	Yes
2022-06-14	17:37	18:23	Amaruq KM (NA)	300-1000	Aircraft	NA	NA	NA	NA	2022	-96.6654	65.40063	No
2022-07-31	14:33	15:10	AWAR KM 89	>1000	NA	NA	NA	NA	NA	2022	-96.22	64.96855	No
2022-07-31	15:17	15:56	AWAR KM 83	100-300	NA	NA	NA	NA	NA	2022	-96.2547	64.94287	Yes
2022-07-31	16:08	16:34	AWAR KM 52	300-1000	NA	NA	NA	NA	NA	2022	-96.3731	64.67993	Yes
2022-08-01	13:44	13:44	AWAR KM 20	100-300	NA	NA	NA	NA	NA	2022	-96.0719	64.45127	Yes
2022-08-01	14:02	14:32	AWAR KM 22	50-100	NA	NA	NA	NA	NA	2022	-96.1103	64.49172	Yes
2022-08-01	14:48	15:24	AWAR KM 94	100-300	NA	NA	NA	NA	NA	2022	-96.0713	65.02307	No
2022-08-01	15:27	15:56	AWAR KM 93	50-100	NA	NA	NA	NA	NA	2022	-96.215	65.0069	No
2022-08-02	11:02	11:36	Haul Road KM 139	300-1000	NA	NA	NA	NA	NA	2022	-96.2857	65.22579	Yes
2022-08-02	17:21	17:39	AWAR KM 20	100-300	NA	NA	NA	NA	NA	2022	-96.1145	64.49469	No

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2022-08-03	11:24	11:54	AWAR KM 12	50-100	Jeff Dufour	NA	85	East	No	2	12	17	N	60
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	JL NB	NA	270	East	No	3	10	26	NW	70
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	JL NB	NA	310	East	No	8	10	26	NW	70
2022-08-04	11:23	11:31	AWAR KM 79	100-300	Jeff Dufour	NA	90	East	No	5	9	26	NW	60
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	JL	NA	310	East	No	1	10	26	NW	70
2022-08-04	13:01	13:16	AWAR KM 32	100-300	Jeff Dufour	NA	100	East	No	5	13	26	NW	60
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	Jaden Vieveen Sylvain Singaqti	NA	0	East	No	1	22	8	S	44
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	Eric Leonard	NA	0	East	No	3	10	4	NE	82
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	Kathleen Newberry	NA	220	West	NA	4	3	40	SE	80
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	Louis D. Kristel B.	NA	50	West	No	5	6	17	NE	80
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	Eric Thomson	NA	70	East	No	6	1	17	NW	63
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	Laurence Archambault, Kevin Martee	NA	100	West	No	2	-1	45	NW	77
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	Laurence Archambault, Kevin Martee	NA	100	West	No	1	-1	45	NW	77
2022-10-04	13:17	13:53	AWAR KM 70	0-50	Sylvain Singaqti, Felix Quessy Savard	NA	0	East	No	26	-1	40	NW	70
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	Alex B. Kevin M.	NA	60	East	Yes	70	-3	50	W	0
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	Alex B. Kevin M.	NA	90	East	No	1	10	20	NW	100
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	Alex Blanchette	NA	270	East	No	300	-3	30	N	75
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	Derek Nateela	NA	40	East	No	199	-3	20	NW	10
2022-10-30	11:04	11:37	AWAR KM 59	100-300	Felix Quessy Savard	NA	90	East	No	NA	-16	5	NW	0
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	Alex B. Kevin M.	NA	270	East	No	NA	-20	20	E	0
2022-11-02	14:36	15:12	AWAR KM 81	0-50	Sylvain Singaqti	NA	0	East	Yes	338	-18	20	NW	60
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	Alex Blanchette	NA	270	East	No	65	-25	20	NE	100
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	Rowan Woodall, Kathleen Newberry	NA	60	East	No	35	-16	30	SW	77
2022-11-13	12:41	13:22	AWAR KM 32	>1000	Alex, Guillaume	NA	0	Both	No	2000	-9	30	NW	0
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	Kathleen Newberry	NA	250	West	No	2	-17	20	NW	77
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	Kathleen Newberry	NA	140	East	No	2	-16	20	NW	77
2022-11-17	14:07	14:44	AWAR KM 48	100-300	Eric Thomson	NA	0	East	No	100	-16	20	NE	70
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	Eric Thomson	NA	0	East	No	100	-22	36	NW	60
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	Derek	NA	45	East	No	96	-26	16	NE	1
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	Eric Leonard, Kathleen Newberry	NA	60	East	No	28	-18	20	E	95
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	Laurence Archambault, Kevin Martee	NA	270	West	No	1	-15	18	NW	79
2023-03-30	NA	NA	AWAR KM 87	100-300	Felix Quessy Savard	NA	270	West	No	100	-27	20	E	0
2023-03-31	NA	NA	AWAR KM 57	>1000	Kendra MacMillan	NA	150	West	No	56	-17	30	NE	0
2023-04-01	NA	NA	Haul Road KM 121	300-1000	Felix Quessy	NA	270	West	No	30	-21	10	NE	0
2023-04-01	NA	NA	Haul Road KM 129	>1000	Felix Quessy	NA	270	West	No	10	-21	10	E	0
2023-04-01	NA	NA	Haul Road KM 137	>1000	Felix Quessy	NA	180	West	Yes	NA	-19	10	E	0
2023-04-03	NA	NA	Haul Road KM 112	300-1000	Derek Nateela	NA	20	West	No	390	-16	20	NW	50
2023-04-04	NA	NA	AWAR KM 92	100-300	FQS DN	NA	215	West	Yes	40	-25	10	NW	0
2023-04-05	NA	NA	AWAR KM 87	100-300	Derek	NA	305	West	No	56	-16	10	N	20

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2022-08-03	11:24	11:54	AWAR KM 12	50-100	1	Precipitation: Periods of light rain	100	1500	NA
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	0	Precipitation: Small rain during the survey	200	800	NA
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	0	Precipitation: On and off rain	100	700	NA
2022-08-04	11:23	11:31	AWAR KM 79	100-300	1	Precipitation: Light rain intermitant	200	1500	NA
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	0	Precipitation: Rainy	300	600	NA
2022-08-04	13:01	13:16	AWAR KM 32	100-300	0	Precipitation: None	200	1500	NA
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	7	Precipitation: Sunny	200	2500	Long haul truck
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	4	Precipitation: 0; clear skies	200	500	Seaman's
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	0	Precipitation: None	300	1500	Berm
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	1	Precipitation: None	100	1400	Flag
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	0	Precipitation: 0; overcast	200	1000	0
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	0	Precipitation: 0; cloudy	200	1500	0
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	0	Precipitation: 0; cloudy	100	1500	0
2022-10-04	13:17	13:53	AWAR KM 70	0-50	1	Precipitation: Windy, Cloudy	100	700	0
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	1	Precipitation: None; overcast	200	1500	NA
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	1	Precipitation: Light rain, foggy	200	1000	NA
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	1	Precipitation: 0	200	1000	NA
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	1	Precipitation: Cloudy	200	1200	None
2022-10-30	11:04	11:37	AWAR KM 59	100-300	1	Precipitation: 0; cloudy	2000	700	None
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	3	Precipitation: None; overcast	200	700	None
2022-11-02	14:36	15:12	AWAR KM 81	0-50	1	Precipitation: Clear, Sunny with a bit of clouds	100	3000	0
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	5	Precipitation: None	0	1000	NA
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	0	Precipitation: None	100	500	NA
2022-11-13	12:41	13:22	AWAR KM 32	>1000	1	Precipitation: None	100	800	Road
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	1	Precipitation: 0	200	700	None
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	1	Precipitation: 0	100	800	None
2022-11-17	14:07	14:44	AWAR KM 48	100-300	0	Precipitation: 0 (NA)	300	1000	None
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	0	Precipitation: 0	0	1000	0
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	1	Precipitation: Shitty Shitty	0	1200	Nada
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	2	Precipitation: 0	200	800	Bridge
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	0	Precipitation: None; cloudy	100	2000	Tire stop near
2023-03-30	NA	NA	AWAR KM 87	100-300	1	Precipitation: 0; sunny	100	1000	None
2023-03-31	NA	NA	AWAR KM 57	>1000	3	Precipitation: 0	100	500	NA
2023-04-01	NA	NA	Haul Road KM 121	300-1000	1	Precipitation: 0; sunny	0	900	None
2023-04-01	NA	NA	Haul Road KM 129	>1000	1	Precipitation: 0; sunny	200	700	None
2023-04-01	NA	NA	Haul Road KM 137	>1000	1	Precipitation: 0; sunny	100	900	None
2023-04-03	NA	NA	Haul Road KM 112	300-1000	2	Precipitation: Sunny, clear	100	1500	None
2023-04-04	NA	NA	AWAR KM 92	100-300	1	Precipitation: 0; sunny	0	1000	None
2023-04-05	NA	NA	AWAR KM 87	100-300	1	Precipitation: 0; cloudy	200	1200	Nada

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2022-08-03	11:24	11:54	AWAR KM 12	50-100	2	0	0	0	0	0	2	0	0	0	0	0
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	3	0	0	0	0	0	2	0	0	1	0	0
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	7	0	0	1	0	0	2	0	0	0	0	0
2022-08-04	11:23	11:31	AWAR KM 79	100-300	0	0	0	5	0	0	0	0	0	5	0	0
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2022-08-04	13:01	13:16	AWAR KM 32	100-300	4	0	0	1	0	0	4	0	0	1	0	0
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	1	0	0	0	0	0	0	0	0	1	0	0
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	3	0	0	0	0	0	3	0	0	0	0	0
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	4	0	0	0	0	0	NA	NA	NA	NA	NA	NA
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	4	0	1	0	0	0	3	2	0	0	1	0
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	3	0	0	3	0	0	3	0	0	1	1	1
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	2	0	0	0	0	0	1	0	0	0	0	0
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	1	0	0	0	0	0	1	0	0	0	0	0
2022-10-04	13:17	13:53	AWAR KM 70	0-50	10	0	0	16	0	0	20	0	0	6	0	0
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	13	0	0	12	0	0	0	0	0	25	0	0
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	0	0	0	1	0	0	0	0	0	1	0	0
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	0	0	0	50	0	0	0	0	0	50	0	0
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	40	10	10	0	0	0	45	8	7	0	0	0
2022-10-30	11:04	11:37	AWAR KM 59	100-300	0	0	0	60	0	0	0	0	5	55	0	0
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	22	4	0	0	0	0	22	4	0	0	0	0
2022-11-02	14:36	15:12	AWAR KM 81	0-50	0	0	0	338	0	0	0	0	0	338	0	0
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	51	0	0	0	0	0	43	0	8	0	0	0
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	10	0	0	0	0	0	10	0	0	0	0	0
2022-11-13	12:41	13:22	AWAR KM 32	>1000	0	0	0	51	0	0	0	0	0	51	0	0
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	2	0	0	0	0	0	2	0	0	0	0	0
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2022-11-17	14:07	14:44	AWAR KM 48	100-300	0	0	0	50	0	0	0	0	0	50	0	0
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	3	0	2	0	0	0	2	0	3	0	0	0
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	0	0	0	96	96	0	0	0	0	96	0	0
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	26	2	1	0	0	0	25	2	0	2	0	0
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2023-03-30	NA	NA	AWAR KM 87	100-300	5	0	0	5	0	0	0	0	0	0	10	0
2023-03-31	NA	NA	AWAR KM 57	>1000	0	56	0	0	0	0	0	64	0	2	0	0
2023-04-01	NA	NA	Haul Road KM 121	300-1000	10	0	5	15	0	0	10	0	5	15	0	0
2023-04-01	NA	NA	Haul Road KM 129	>1000	0	0	0	10	0	0	0	0	0	10	0	0
2023-04-01	NA	NA	Haul Road KM 137	>1000	0	48	2	0	0	0	0	46	2	2	0	0
2023-04-03	NA	NA	Haul Road KM 112	300-1000	20	10	0	0	0	0	5	10	5	10	0	0
2023-04-04	NA	NA	AWAR KM 92	100-300	5	0	0	35	0	0	8	0	0	32	0	0
2023-04-05	NA	NA	AWAR KM 87	100-300	0	0	0	56	0	0	0	0	1	49	3	3

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2022-08-03	11:24	11:54	AWAR KM 12	50-100	1	0	0	1	0	0	2	0	0	0	0	0
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	1	0	0	0	0	0	0	0	0	8	0	0
2022-08-04	11:23	11:31	AWAR KM 79	100-300	0	0	0	5	0	0	0	0	0	5	0	0
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2022-08-04	13:01	13:16	AWAR KM 32	100-300	0	0	0	5	0	0	2	0	0	1	0	0
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	1	0	0	0	0	0	0	0	0	0	0	1
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	3	0	0	0	0	0	2	0	1	0	0	0
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	3	3	0	0	1	0	1	4	0	1	1	0
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	6	0	0	0	0	0	5	0	0	1	0	0
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	0	0	0	1	0	0	0	0	0	1	0	0
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	1	0	0	0	0	0	1	0	0	0	0	0
2022-10-04	13:17	13:53	AWAR KM 70	0-50	26	0	0	0	0	0	49	0	0	0	0	0
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	0	0	0	25	0	0	0	0	0	25	0	0
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	0	0	0	1	0	0	0	0	0	1	0	0
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	0	0	0	50	0	0	0	0	0	50	0	0
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	8	2	27	23	0	0	1	0	59	59	0	0
2022-10-30	11:04	11:37	AWAR KM 59	100-300	0	0	0	60	0	0	0	0	60	0	0	0
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	26	0	0	0	0	0	19	0	0	7	0	0
2022-11-02	14:36	15:12	AWAR KM 81	0-50	0	0	0	338	0	0	0	0	0	338	0	0
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	51	0	0	0	0	0	37	0	8	6	0	0
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	10	0	0	0	0	0	10	0	0	0	0	0
2022-11-13	12:41	13:22	AWAR KM 32	>1000	0	0	0	51	0	0	0	0	0	51	0	0
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	2	0	0	0	0	0	2	0	0	0	0	0
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2022-11-17	14:07	14:44	AWAR KM 48	100-300	0	0	0	50	0	0	0	0	0	50	0	0
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	4	0	1	0	0	0	5	0	0	0	0	0
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	0	0	0	96	0	0	0	0	0	96	0	0
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	25	4	0	0	0	0	25	4	0	0	0	0
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2023-03-30	NA	NA	AWAR KM 87	100-300	3	0	0	3	0	0	0	0	0	0	0	0
2023-03-31	NA	NA	AWAR KM 57	>1000	0	54	0	2	0	0	0	56	0	0	0	0
2023-04-01	NA	NA	Haul Road KM 121	300-1000	21	0	0	9	0	0	12	0	0	18	0	0
2023-04-01	NA	NA	Haul Road KM 129	>1000	0	7	3	0	0	0	5	0	0	2	0	0
2023-04-01	NA	NA	Haul Road KM 137	>1000	0	50	0	0	0	0	0	45	0	5	0	0
2023-04-03	NA	NA	Haul Road KM 112	300-1000	0	20	10	0	0	0	0	0	0	30	30	0
2023-04-04	NA	NA	AWAR KM 92	100-300	0	0	0	33	7	0	6	0	0	33	1	0
2023-04-05	NA	NA	AWAR KM 87	100-300	25	0	16	15	0	0	35	0	5	16	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2022-08-03	11:24	11:54	AWAR KM 12	50-100	2	0	0	4	0	0	0	0	0	6	0
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	1	0	0	0	0	0	0	0	0	0	0
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:23	11:31	AWAR KM 79	100-300	0	0	0	0	0	0	NA	NA	NA	NA	NA
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	1	0	0	0	0	0	1	0	0	0	0
2022-08-04	13:01	13:16	AWAR KM 32	100-300	2	0	0	0	0	0	1	0	0	1	0
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	0	0	0	0	0	1	0	0	1	0	0
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	3	0	0	0	0	0	3	0	0	0	0
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	3	4	0	0	0	0	2	5	0	0	0
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	6	0	0	0	0	0	6	0	0	0	0
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	1	0	0	1	0	0	0	0	0	0	0
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	1	0	0	0	0	0	0	0	0	1	0
2022-10-04	13:17	13:53	AWAR KM 70	0-50	39	0	0	10	0	0	47	0	0	2	0
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	0	0	0	25	0	0	0	0	0	25	0
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	0	0	0	1	0	0	0	0	0	1	0
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	0	0	0	50	0	0	0	0	0	50	0
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	0	0	60	60	0	0	50	0	10	10	0
2022-10-30	11:04	11:37	AWAR KM 59	100-300	0	0	0	60	0	0	0	0	0	60	0
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	12	0	0	13	0	0	0	0	0	26	0
2022-11-02	14:36	15:12	AWAR KM 81	0-50	0	0	1	337	0	0	0	0	0	338	0
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	46	0	0	5	0	0	42	0	7	2	0
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	35	0	0	0	0	0	35	0	0	0	0
2022-11-13	12:41	13:22	AWAR KM 32	>1000	0	0	0	51	0	0	0	0	0	51	0
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	2	0	0	0	0	0	2	0	0	0	0
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	2	0	0	0	0	0	0	0	0	0	1
2022-11-17	14:07	14:44	AWAR KM 48	100-300	0	0	0	50	0	0	0	0	0	50	0
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	5	0	0	0	0	0	3	0	2	0	0
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	0	0	0	88	0	8	0	0	2	90	0
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	21	4	0	0	4	0	0	0	0	29	0
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	1	0	0	0	0	0	1	0	0	0	0
2023-03-30	NA	NA	AWAR KM 87	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-03-31	NA	NA	AWAR KM 57	>1000	0	56	0	0	0	0	0	56	0	0	0
2023-04-01	NA	NA	Haul Road KM 121	300-1000	8	0	0	28	0	0	10	0	0	26	0
2023-04-01	NA	NA	Haul Road KM 129	>1000	3	0	0	3	0	0	0	0	0	6	0
2023-04-01	NA	NA	Haul Road KM 137	>1000	0	40	2	8	0	0	0	48	0	2	0
2023-04-03	NA	NA	Haul Road KM 112	300-1000	0	0	0	30	30	0	0	0	0	30	30
2023-04-04	NA	NA	AWAR KM 92	100-300	2	0	0	28	0	0	0	0	0	30	0
2023-04-05	NA	NA	AWAR KM 87	100-300	50	0	0	4	2	0	50	3	2	1	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2022-08-03	11:24	11:54	AWAR KM 12	50-100	0	2	0	0	4	0	0	6	0	0	0
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:23	11:31	AWAR KM 79	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	0	1	0	0	0	0	0	0	0	0	0
2022-08-04	13:01	13:16	AWAR KM 32	100-300	0	0	0	0	0	0	0	NA	NA	NA	NA
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	0	1	0	0	0	0	0	1	0	0	0
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	0	3	0	0	0	0	0	3	0	0	0
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	0	1	6	0	0	0	0	1	6	0	0
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	0	6	0	0	0	0	0	6	0	0	0
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	0	0	0	0	0	0	0	NA	NA	NA	NA
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	0	1	0	0	0	0	0	1	0	0	0
2022-10-04	13:17	13:53	AWAR KM 70	0-50	0	49	0	0	0	0	0	49	0	0	0
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	0	0	0	0	25	0	0	NA	NA	NA	NA
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	0	0	0	0	1	0	0	NA	NA	NA	NA
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	0	0	0	0	50	0	0	0	0	0	50
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	0	0	0	60	0	0	0	60	0	60	0
2022-10-30	11:04	11:37	AWAR KM 59	100-300	0	0	0	0	40	0	0	0	0	0	20
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	0	26	0	0	0	0	0	26	0	0	0
2022-11-02	14:36	15:12	AWAR KM 81	0-50	0	0	0	0	338	0	0	0	0	0	338
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	0	0	0	0	17	0	0	0	0	3	22
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	0	33	0	0	2	0	0	0	0	0	0
2022-11-13	12:41	13:22	AWAR KM 32	>1000	0	0	0	0	51	0	0	0	0	0	51
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	0	2	0	0	0	0	0	2	0	0	0
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	0	2	0	0	0	0	0	2	0	0	0
2022-11-17	14:07	14:44	AWAR KM 48	100-300	0	0	0	0	50	0	0	0	0	0	50
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	0	1	0	0	4	0	0	0	0	0	5
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	4	0	0	0	96	0	0	0	0	0	96
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	0	1	0	0	0	0	0	1	0	0	0
2023-03-30	NA	NA	AWAR KM 87	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-03-31	NA	NA	AWAR KM 57	>1000	0	0	55	1	0	0	0	0	56	0	0
2023-04-01	NA	NA	Haul Road KM 121	300-1000	0	15	0	0	21	0	0	18	0	0	32
2023-04-01	NA	NA	Haul Road KM 129	>1000	0	0	0	0	0	0	0	NA	NA	NA	NA
2023-04-01	NA	NA	Haul Road KM 137	>1000	0	0	46	4	0	0	0	0	30	10	10
2023-04-03	NA	NA	Haul Road KM 112	300-1000	0	30	0	30	0	0	0	0	0	0	30
2023-04-04	NA	NA	AWAR KM 92	100-300	0	0	0	0	0	0	30	0	0	0	0
2023-04-05	NA	NA	AWAR KM 87	100-300	0	53	3	0	0	0	0	31	0	5	20

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2022-08-03	11:24	11:54	AWAR KM 12	50-100	0	0	0	0	0	0	0	3	3	0	0
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:23	11:31	AWAR KM 79	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	0	0	1	0	0	0	0	0	1	0	0
2022-08-04	13:01	13:16	AWAR KM 32	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	0	0	1	0	0	0	0	0	0	0	1
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	0	0	1	1	0	1	0	0	1	1	0
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	0	0	1	6	0	0	0	0	1	6	0
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	0	0	6	0	0	0	0	0	6	0	0
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	0	0	1	0	0	0	0	0	0	0	0
2022-10-04	13:17	13:53	AWAR KM 70	0-50	0	0	47	0	0	2	0	0	43	0	0
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	0	0	34	0	11	5	0	0	35	0	15
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	0	0	60	0	60	0	0	0	60	0	60
2022-10-30	11:04	11:37	AWAR KM 59	100-300	0	0	0	0	0	60	0	0	0	0	0
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	0	0	26	0	0	0	0	0	26	0	0
2022-11-02	14:36	15:12	AWAR KM 81	0-50	0	0	0	0	0	338	0	0	0	0	0
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	0	0	40	0	0	11	0	0	11	0	0
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-11-13	12:41	13:22	AWAR KM 32	>1000	0	0	0	0	0	51	0	0	0	0	0
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	0	0	2	0	0	0	0	0	2	0	0
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	0	0	2	0	0	0	0	0	2	0	0
2022-11-17	14:07	14:44	AWAR KM 48	100-300	0	0	0	0	0	50	0	0	15	0	5
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	0	0	0	0	2	3	0	0	1	0	3
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	0	0	1	0	0	0	0	0	1	0	0
2023-03-30	NA	NA	AWAR KM 87	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-03-31	NA	NA	AWAR KM 57	>1000	0	0	0	56	0	0	0	0	0	56	0
2023-04-01	NA	NA	Haul Road KM 121	300-1000	0	0	24	0	0	26	0	0	12	0	0
2023-04-01	NA	NA	Haul Road KM 129	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-01	NA	NA	Haul Road KM 137	>1000	0	0	0	40	10	0	0	0	0	35	5
2023-04-03	NA	NA	Haul Road KM 112	300-1000	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-04	NA	NA	AWAR KM 92	100-300	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-05	NA	NA	AWAR KM 87	100-300	0	0	45	0	4	7	0	0	50	0	6

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2022-08-03	11:24	11:54	AWAR KM 12	50-100	3	0	0	0	0	0	3	0	0
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:23	11:31	AWAR KM 79	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	0	0	0	1	0	0	0	0	0
2022-08-04	13:01	13:16	AWAR KM 32	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	0	0	0	0	0	0	0	1	0
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	0	0	0	0	0	0	2	0	0
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	0	0	0	0	7	0	0	0	0
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	0	0	0	6	0	0	0	0	0
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	1	0	0	1	0	0	0	0	0
2022-10-04	13:17	13:53	AWAR KM 70	0-50	6	0	0	45	4	0	0	0	0
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	0	0	0	40	0	10	0	0	0
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	0	0	0	60	0	60	0	0	0
2022-10-30	11:04	11:37	AWAR KM 59	100-300	60	0	0	0	0	0	60	0	0
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	0	0	0	26	0	0	0	0	0
2022-11-02	14:36	15:12	AWAR KM 81	0-50	338	0	0	0	0	0	338	0	0
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	40	0	0	6	0	0	45	0	0
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-11-13	12:41	13:22	AWAR KM 32	>1000	51	0	0	0	0	0	51	0	0
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	0	0	0	2	0	0	0	0	0
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	0	0	0	2	0	0	0	0	0
2022-11-17	14:07	14:44	AWAR KM 48	100-300	30	0	0	17	0	8	25	0	0
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	1	0	0	5	0	0	0	0	0
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	0	0	0	1	0	0	0	0	0
2023-03-30	NA	NA	AWAR KM 87	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-03-31	NA	NA	AWAR KM 57	>1000	0	0	0	0	56	0	0	0	0
2023-04-01	NA	NA	Haul Road KM 121	300-1000	38	0	0	25	0	0	25	0	0
2023-04-01	NA	NA	Haul Road KM 129	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-01	NA	NA	Haul Road KM 137	>1000	10	0	0	0	40	5	5	0	0
2023-04-03	NA	NA	Haul Road KM 112	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-04	NA	NA	AWAR KM 92	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-05	NA	NA	AWAR KM 87	100-300	0	0	0	54	0	0	2	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2022-08-03	11:24	11:54	AWAR KM 12	50-100	NA	NA	NA	Convoy	Heavy equipment	NA
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	NA	Heavy equipment	NA	NA	NA	NA
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	NA	NA	NA	NA	NA	NA
2022-08-04	11:23	11:31	AWAR KM 79	100-300	NA	NA	NA	NA	NA	NA
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	NA	NA	NA	NA	NA	NA
2022-08-04	13:01	13:16	AWAR KM 32	100-300	NA	NA	NA	NA	NA	NA
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	Heavy equipment	NA	NA	NA	NA	Heavy equipment
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	NA	Heavy equipment	NA	NA	NA	Blast
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	NA	Heavy equipment	Heavy equipment	Heavy equipment	NA	Heavy equipment
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	NA	Heavy equipment	NA	NA	NA	NA
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	Light truck	NA	NA	NA	Heavy equipment	Heavy equipment
2022-10-04	13:17	13:53	AWAR KM 70	0-50	NA	NA	NA	NA	NA	NA
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	NA	NA	NA	NA	NA	NA
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	NA	NA	NA	NA	NA	NA
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	NA	NA	NA	NA	NA	NA
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	NA	NA	NA	NA	NA	NA
2022-10-30	11:04	11:37	AWAR KM 59	100-300	NA	NA	NA	NA	NA	NA
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	NA	NA	NA	NA	NA	NA
2022-11-02	14:36	15:12	AWAR KM 81	0-50	NA	NA	NA	NA	NA	NA
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	NA	NA	NA	NA	NA	NA
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	NA	Heavy equipment	Heavy equipment	NA	Heavy equipment	Heavy equipment
2022-11-13	12:41	13:22	AWAR KM 32	>1000	NA	NA	NA	NA	NA	NA
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	NA	Heavy equipment	Heavy equipment	NA	NA	NA
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	NA	Heavy equipment	NA	NA	Heavy equipment	NA
2022-11-17	14:07	14:44	AWAR KM 48	100-300	NA	NA	NA	NA	NA	NA
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	NA	NA	NA	NA	NA	NA
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	NA	NA	NA	NA	NA	NA
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	NA	NA	Heavy equipment	NA	Light truck	NA
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	Heavy equipment	Heavy equipment	Heavy equipment	NA	Heavy equipment	NA
2023-03-30	NA	NA	AWAR KM 87	100-300	NA	NA	NA	NA	NA	NA
2023-03-31	NA	NA	AWAR KM 57	>1000	NA	NA	NA	NA	NA	NA
2023-04-01	NA	NA	Haul Road KM 121	300-1000	NA	NA	NA	NA	NA	NA
2023-04-01	NA	NA	Haul Road KM 129	>1000	NA	NA	NA	NA	NA	NA
2023-04-01	NA	NA	Haul Road KM 137	>1000	NA	NA	NA	NA	NA	NA
2023-04-03	NA	NA	Haul Road KM 112	300-1000	NA	NA	NA	NA	Convoy	Convoy
2023-04-04	NA	NA	AWAR KM 92	100-300	NA	NA	NA	NA	NA	NA
2023-04-05	NA	NA	AWAR KM 87	100-300	NA	NA	NA	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2022-08-03	11:24	11:54	AWAR KM 12	50-100	NA	NA	NA	NA	NA	2022	-96.0329	64.41809	No
2022-08-04	10:30	10:48	Haul Road KM 159	100-300	NA	NA	NA	NA	NA	2022	-96.4143	65.29303	No
2022-08-04	11:03	11:16	Haul Road KM 150	>1000	NA	NA	NA	NA	NA	2022	-96.414	65.27142	No
2022-08-04	11:23	11:31	AWAR KM 79	100-300	NA	NA	NA	NA	NA	2022	-96.3064	64.91907	No
2022-08-04	11:33	12:04	Haul Road KM 140	100-300	NA	NA	NA	NA	NA	2022	-96.467	65.2356	No
2022-08-04	13:01	13:16	AWAR KM 32	100-300	NA	NA	NA	NA	NA	2022	-96.3324	64.89911	No
2022-08-09	11:34	12:18	Haul Road KM 171	100-300	NA	NA	Heavy equipment	NA	Convoy	2022	-96.604	65.36115	Yes
2022-08-26	16:57	18:18	Amaruq KM (NA)	300-1000	NA	Aircraft	NA	NA	NA	2022	-96.6664	65.40173	No
2022-09-23	17:03	17:03	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	2022	-96.6666	65.40143	No
2022-09-24	13:33	14:10	Haul Road KM 174	100-300	Heavy equipment	Heavy equipment	NA	NA	Heavy equipment	2022	-96.6024	65.37714	No
2022-09-26	16:41	18:20	Amaruq KM (NA)	50-100	Blast	NA	NA	NA	NA	2022	-96.6665	65.40167	No
2022-10-04	11:23	11:44	Haul Road KM 130	50-100	NA	NA	NA	NA	NA	2022	-96.1526	65.17786	No
2022-10-04	11:50	12:22	Haul Road KM 127	300-1000	NA	NA	NA	NA	NA	2022	-96.1262	65.15405	No
2022-10-04	13:17	13:53	AWAR KM 70	0-50	NA	NA	NA	NA	NA	2022	-96.3153	64.8338	Yes
2022-10-07	15:11	15:40	Haul Road KM 170	100-300	NA	NA	NA	NA	NA	2022	-96.5436	65.34235	No
2022-10-08	16:23	16:42	Haul Road KM 166	100-300	NA	NA	NA	NA	NA	2022	-96.5121	65.32971	No
2022-10-15	6:24	16:20	Haul Road KM 149	0-50	NA	NA	NA	NA	NA	2022	-96.4545	65.23167	No
2022-10-21	16:36	17:15	AWAR KM 41	300-1000	NA	NA	NA	NA	NA	2022	-96.0733	65.0213	Yes
2022-10-30	11:04	11:37	AWAR KM 59	100-300	NA	NA	NA	NA	NA	2022	-96.0734	65.0213	No
2022-11-02	11:31	14:57	AWAR KM 87	300-1000	NA	NA	NA	NA	NA	2022	-96.2468	64.95233	Yes
2022-11-02	14:36	15:12	AWAR KM 81	0-50	NA	NA	NA	NA	NA	2022	-96.3395	64.88263	Yes
2022-11-10	14:38	15:03	AWAR KM 51	300-1000	NA	NA	NA	NA	NA	2022	-96.3763	64.68787	No
2022-11-12	9:25	9:48	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	2022	-96.6023	65.38239	No
2022-11-13	12:41	13:22	AWAR KM 32	>1000	NA	NA	NA	NA	NA	2022	-96.2228	64.56903	Yes
2022-11-17	10:20	10:53	Haul Road KM 158	50-100	Light truck	Heavy equipment	Heavy equipment	Light truck	NA	2022	-96.4089	65.2843	No
2022-11-17	11:10	11:40	Haul Road KM 147	300-1000	NA	NA	Light truck	Heavy equipment	NA	2022	-96.4285	65.21997	No
2022-11-17	14:07	14:44	AWAR KM 48	100-300	NA	NA	NA	NA	NA	2022	-96.3715	64.67334	Yes
2022-11-18	13:32	14:03	AWAR KM 49	300-1000	NA	NA	NA	NA	NA	2022	-96.3261	64.65607	Yes
2022-11-20	10:25	10:51	AWAR KM 66	300-1000	NA	NA	NA	NA	NA	2022	-96.3273	64.81128	No
2022-11-23	9:26	9:43	Haul Road KM 139	300-1000	NA	NA	NA	NA	NA	2022	-96.2831	65.22668	No
2022-11-26	9:20	9:53	Haul Road KM 177	100-300	Heavy equipment	Heavy equipment	Tanker	Heavy equipment	NA	2022	-96.6286	65.40332	No
2023-03-30	NA	NA	AWAR KM 87	100-300	NA	NA	NA	NA	NA	2023	-96.2387	64.95483	Yes
2023-03-31	NA	NA	AWAR KM 57	>1000	NA	NA	NA	NA	NA	2023	-96.3558	64.73645	Yes
2023-04-01	NA	NA	Haul Road KM 121	300-1000	NA	NA	NA	NA	NA	2023	-96.0618	65.09125	Yes
2023-04-01	NA	NA	Haul Road KM 129	>1000	NA	NA	NA	NA	NA	2023	-96.145	65.16675	No
2023-04-01	NA	NA	Haul Road KM 137	>1000	NA	NA	NA	NA	NA	2023	-96.2437	65.21967	Yes
2023-04-03	NA	NA	Haul Road KM 112	300-1000	Convoy	NA	NA	NA	NA	2023	-95.9945	65.05688	Yes
2023-04-04	NA	NA	AWAR KM 92	100-300	NA	NA	NA	NA	NA	2023	-96.2246	64.98718	Yes
2023-04-05	NA	NA	AWAR KM 87	100-300	NA	NA	NA	NA	NA	2023	-96.2516	64.94891	No

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2023-03-30	NA	NA	Haul Road KM 169	300-1000	Guillaume Baril, Rowan Woodall	NA	330	East	Yes	2	-22	20	NW	45
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	Sylvain Singaqti	NA	90	West	NA	50	-7	30	SW	0
2023-04-07	NA	NA	AWAR KM 93	300-1000	Eric Thomson	NA	340	West	No	NA	-18	10	SW	0
2023-04-14	NA	NA	AWAR KM 93	300-1000	Louis Dubois	NA	0	West	No	93	-21	5	NW	80
2023-04-12	NA	NA	Haul Road KM 130	300-1000	Louis Dubois	NA	300	East	No	34	-20	5	W	80
2023-04-10	NA	NA	Haul Road KM 111	100-300	Eric Thomson	NA	300	West	No	NA	-11	20	N	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	Thomas Dahl	NA	360	West	No	18	-17	15	N	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	Thomas Dahl	NA	360	West	No	18	-17	15	N	0
2023-04-14	NA	NA	Haul Road KM 118	300-1000	Eric Thomson	NA	300	West	No	47	-16	10	N	0
2023-04-14	NA	NA	Haul Road KM 112	300-1000	Eric Thomson	NA	300	East	No	47	-14	10	N	0
2023-04-14	NA	NA	Haul Road KM 112	>1000	Eric Thomson	NA	360	West	No	247	-14	10	N	0
2023-04-15	NA	NA	AWAR KM 101	300-1000	Eric Thomson	NA	300	West	No	4	-13	10	N	0
2023-04-12	NA	NA	AWAR KM 51	50-100	Sylvain Singaqti	NA	0	West	No	433	-13	9	NE	0
2023-04-09	NA	NA	Haul Road KM 122	>1000	Eric Thomson	NA	330	West	No	NA	-7	10	NW	0
2023-04-10	NA	NA	Haul Road KM 178	100-300	Guillaume Baril, Kathleen Newberry	NA	252	East	Yes	3	-8	20	N	77
2023-04-10	NA	NA	Haul Road KM 175	>1000	Guillaume Baril, Kathleen Newberry	NA	110	West	No	55	-9	20	N	77
2023-04-11	NA	NA	Haul Road KM 176	100-300	Guillaume Baril, Kathleen Newberry	NA	55	West	No	47	-7	11	NW	70
2023-04-11	NA	NA	Haul Road KM 178	300-1000	Guillaume Baril, Kathleen Newberry	NA	120	West	No	48	-13	13	NW	68
2023-04-14	NA	NA	Haul Road KM 176	300-1000	Kathleen Newberry	NA	150	West	No	16	-20	20	N	67
2023-04-14	NA	NA	Haul Road KM 174	300-1000	Laurence Archambault, Kathleen Newberry	NA	270	West	No	16	-17	18	NW	71
2023-04-14	NA	NA	Haul Road KM 165	>1000	Laurence Archambault, Kathleen Newberry	NA	180	West	No	NA	-11	18	NW	71
2023-04-15	NA	NA	Haul Road KM 171	>1000	Thomas Dahm	NA	360	West	No	8	-14	15	S	0
2023-04-16	NA	NA	AWAR KM 96	100-300	Eric Thomson	NA	360	West	No	2	-7	5	W	0
2023-04-16	NA	NA	AWAR KM 81	>1000	Eric Thomson	NA	360	West	No	1	-12	12	S	0
2023-04-18	NA	NA	Haul Road KM 177	300-1000	Thomas Dahm, Kendra MacMillan, Leonard Sweeting	NA	360	West	No	102	-12	9	SE	0
2023-04-17	NA	NA	Haul Road KM 154	300-1000	Kendra MacMillan, Sylvain Singaqti	NA	45	West	NA	31	-8	15	SE	89
2023-04-19	NA	NA	AWAR KM 95	100-300	Kendra MacMillan, Sylvain Singaqti	NA	45	West	No	7	-18	30	NW	20
2023-04-19	NA	NA	AWAR KM 93	>1000	Kendra MacMillan, Sylvain Singaqti	NA	30	West	No	3	-18	30	NW	30
2023-04-30	NA	NA	AWAR KM 68	>1000	Derek Nateela	NA	245	West	No	2	-14	5	S	50
2023-05-23	NA	NA	AWAR KM 83	>1000	Thomas Dahm	NA	270	West	No	2	-8	40	NW	0
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	Felix Quessy	NA	0	East	No	4	15	10	E	0
2023-10-24	NA	NA	Haul Road KM 172	100-300	Eric Leonard	NA	90	East	No	11	-5	5	E	98
2023-10-22	NA	NA	Haul Road KM 116	100-300	GUI Baril Eric Leonard	NA	10	East	No	8	-5	50	W	90
2023-10-24	NA	NA	Haul Road KM 133	100-300	Eric Leonard Guillaume Baril	NA	0	East	No	2	-5	25	E	98
2023-10-27	NA	NA	Haul Road KM 173	100-300	Laurence Archambault	NA	90	East	No	87	-12	12	NW	93
2023-10-27	NA	NA	Haul Road KM 171	100-300	Laurence Archambault	NA	55	East	No	NA	-8	12	NW	93
2023-10-27	NA	NA	Haul Road KM 171	100-300	Laurence Archambault	NA	55	East	No	NA	-8	12	NW	93

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2023-03-30	NA	NA	Haul Road KM 169	300-1000	1	Precipitation: None	100	500	NA
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	0	Precipitation: Blowing snow	0	1600	None
2023-04-07	NA	NA	AWAR KM 93	300-1000	0	Precipitation: 0; sunny	500	600	0
2023-04-14	NA	NA	AWAR KM 93	300-1000	9	Precipitation: 0; sunny	0	1200	Flags
2023-04-12	NA	NA	Haul Road KM 130	300-1000	7	Precipitation: 0; sunny	0	1800	Flags
2023-04-10	NA	NA	Haul Road KM 111	100-300	0	Precipitation: 0; sunny	0	1000	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	Precipitation: 0; sunny	300	300	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	Precipitation: 0; sunny	300	300	0
2023-04-14	NA	NA	Haul Road KM 118	300-1000	0	Precipitation: 0; sunny	1000	800	0
2023-04-14	NA	NA	Haul Road KM 112	300-1000	0	Precipitation: 0	1000	800	Vault
2023-04-14	NA	NA	Haul Road KM 112	>1000	0	Precipitation: 0; sunny	1500	1200	Vault
2023-04-15	NA	NA	AWAR KM 101	300-1000	0	Precipitation: 0; sunny	100	600	0
2023-04-12	NA	NA	AWAR KM 51	50-100	4	Precipitation: 0; sunny	0	1500	0
2023-04-09	NA	NA	Haul Road KM 122	>1000	0	Precipitation: 0; cloudy	3000	800	0
2023-04-10	NA	NA	Haul Road KM 178	100-300	0	Precipitation: 0	100	900	Tower light; flags
2023-04-10	NA	NA	Haul Road KM 175	>1000	0	Precipitation: 0	100	800	None
2023-04-11	NA	NA	Haul Road KM 176	100-300	0	Precipitation: None	100	900	None
2023-04-11	NA	NA	Haul Road KM 178	300-1000	1	Precipitation: None	100	900	NA
2023-04-14	NA	NA	Haul Road KM 176	300-1000	0	Precipitation: 0	100	900	None
2023-04-14	NA	NA	Haul Road KM 174	300-1000	0	Precipitation: 0; sunny	0	2000	None
2023-04-14	NA	NA	Haul Road KM 165	>1000	0	Precipitation: 0; sunny	0	2500	None
2023-04-15	NA	NA	Haul Road KM 171	>1000	0	Precipitation: 0; sunny, clear	2000	1000	0
2023-04-16	NA	NA	AWAR KM 96	100-300	0	Precipitation: 0; cloudy	0	800	0
2023-04-16	NA	NA	AWAR KM 81	>1000	0	Precipitation: 0; cloudy	0	800	0
2023-04-18	NA	NA	Haul Road KM 177	300-1000	0	Precipitation: 0; sunny, cloudy	500	1500	0
2023-04-17	NA	NA	Haul Road KM 154	300-1000	8	Precipitation: 0; cloudy	0	0	0
2023-04-19	NA	NA	AWAR KM 95	100-300	9	Precipitation: Light snow	400	400	NA
2023-04-19	NA	NA	AWAR KM 93	>1000	9	Precipitation: Light snow	400	400	NA
2023-04-30	NA	NA	AWAR KM 68	>1000	1	Precipitation: Foggy, cloudy	100	1200	Ridge, can
2023-05-23	NA	NA	AWAR KM 83	>1000	0	Precipitation: 0; cold, windy, some light snow that didn't stay on the ground	200	1000	0
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	3	Precipitation: 0 Sunny	100	800	None
2023-10-24	NA	NA	Haul Road KM 172	100-300	0	Precipitation: Light snow	200	1000	None
2023-10-22	NA	NA	Haul Road KM 116	100-300	0	Precipitation: 0; windy, blowing snow, visibility 2 km	300	1000	Road
2023-10-24	NA	NA	Haul Road KM 133	100-300	0	Precipitation: None; sun/cloud	200	1000	None
2023-10-27	NA	NA	Haul Road KM 173	100-300	0	Precipitation: None; sun/cloud	0	2000	None
2023-10-27	NA	NA	Haul Road KM 171	100-300	0	Precipitation: Light snow, cloudy	100	2000	None
2023-10-27	NA	NA	Haul Road KM 171	100-300	0	Precipitation: Light snow, cloudy	200	2000	None

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2023-03-30	NA	NA	Haul Road KM 169	300-1000	0	0	0	2	0	0	0	0	0	2	0	0
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	46	4	0	0	0	0	38	12	0	0	0	0
2023-04-07	NA	NA	AWAR KM 93	300-1000	0	0	0	30	0	0	0	0	0	30	0	0
2023-04-14	NA	NA	AWAR KM 93	300-1000	0	0	0	93	0	0	0	0	0	93	0	0
2023-04-12	NA	NA	Haul Road KM 130	300-1000	0	0	0	34	0	0	0	0	0	34	0	0
2023-04-10	NA	NA	Haul Road KM 111	100-300	1	0	4	0	0	0	5	0	0	0	0	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	18	0	0	0	0	0	18	0	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	18	0	0	0	0	0	18	0	0
2023-04-14	NA	NA	Haul Road KM 118	300-1000	0	0	0	47	0	0	0	0	0	47	0	0
2023-04-14	NA	NA	Haul Road KM 112	300-1000	0	0	0	2	0	0	0	0	0	2	0	0
2023-04-14	NA	NA	Haul Road KM 112	>1000	3	7	0	0	0	0	1	7	2	0	0	0
2023-04-15	NA	NA	AWAR KM 101	300-1000	4	0	0	0	0	0	2	0	2	0	0	0
2023-04-12	NA	NA	AWAR KM 51	50-100	7	73	0	0	0	0	5	75	0	0	0	0
2023-04-09	NA	NA	Haul Road KM 122	>1000	0	0	5	5	0	0	0	0	2	8	0	0
2023-04-10	NA	NA	Haul Road KM 178	100-300	3	0	0	0	0	0	3	0	0	0	0	0
2023-04-10	NA	NA	Haul Road KM 175	>1000	55	0	0	0	0	0	44	0	0	11	0	0
2023-04-11	NA	NA	Haul Road KM 176	100-300	44	0	0	3	0	0	46	0	0	1	0	0
2023-04-11	NA	NA	Haul Road KM 178	300-1000	0	3	45	0	0	0	0	13	29	6	0	0
2023-04-14	NA	NA	Haul Road KM 176	300-1000	10	0	4	2	0	0	7	0	0	5	0	0
2023-04-14	NA	NA	Haul Road KM 174	300-1000	16	0	0	0	0	0	14	0	2	0	0	0
2023-04-14	NA	NA	Haul Road KM 165	>1000	3	0	0	0	0	0	1	0	0	0	2	0
2023-04-15	NA	NA	Haul Road KM 171	>1000	0	0	0	8	0	0	0	0	0	18	0	0
2023-04-16	NA	NA	AWAR KM 96	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2023-04-16	NA	NA	AWAR KM 81	>1000	0	0	0	1	0	0	0	0	0	1	0	0
2023-04-18	NA	NA	Haul Road KM 177	300-1000	88	0	0	18	0	0	88	0	0	18	0	0
2023-04-17	NA	NA	Haul Road KM 154	300-1000	0	0	0	31	0	0	29	0	0	0	2	0
2023-04-19	NA	NA	AWAR KM 95	100-300	0	0	0	2	0	0	0	0	2	0	0	0
2023-04-19	NA	NA	AWAR KM 93	>1000	0	1	0	0	0	0	0	1	0	0	0	0
2023-04-30	NA	NA	AWAR KM 68	>1000	0	0	2	0	2	0	0	0	0	2	2	0
2023-05-23	NA	NA	AWAR KM 83	>1000	0	0	0	2	0	0	0	0	0	2	0	0
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	0	4	0	0	0	0	0	4	0	0	0	0
2023-10-24	NA	NA	Haul Road KM 172	100-300	10	0	0	0	1	0	10	0	0	1	0	0
2023-10-22	NA	NA	Haul Road KM 116	100-300	0	0	8	0	0	0	0	0	7	1	0	0
2023-10-24	NA	NA	Haul Road KM 133	100-300	2	0	0	0	0	0	1	0	0	1	0	0
2023-10-27	NA	NA	Haul Road KM 173	100-300	24	0	1	1	0	0	18	0	0	8	0	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	10	10	0	0	0	0	12	8	0	2	0	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	8	16	0	1	0	0	7	18	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2023-03-30	NA	NA	Haul Road KM 169	300-1000	0	0	0	2	0	0	0	0	0	2	0	0
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	30	10	10	0	0	0	0	10	0	10	30	0
2023-04-07	NA	NA	AWAR KM 93	300-1000	0	0	1	25	3	1	0	0	0	30	0	0
2023-04-14	NA	NA	AWAR KM 93	300-1000	0	0	0	93	0	0	0	0	0	93	0	0
2023-04-12	NA	NA	Haul Road KM 130	300-1000	0	0	0	34	0	0	0	0	0	34	0	0
2023-04-10	NA	NA	Haul Road KM 111	100-300	5	0	0	0	0	0	5	0	0	0	0	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	18	0	0	0	0	0	18	0	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	18	0	0	0	0	0	18	0	0
2023-04-14	NA	NA	Haul Road KM 118	300-1000	0	0	0	47	0	0	0	0	0	47	0	0
2023-04-14	NA	NA	Haul Road KM 112	300-1000	0	0	0	2	0	0	2	0	0	0	0	0
2023-04-14	NA	NA	Haul Road KM 112	>1000	4	6	0	0	0	0	4	6	0	0	0	0
2023-04-15	NA	NA	AWAR KM 101	300-1000	3	0	0	1	0	0	4	0	0	0	0	0
2023-04-12	NA	NA	AWAR KM 51	50-100	5	75	0	0	0	0	4	76	0	0	0	0
2023-04-09	NA	NA	Haul Road KM 122	>1000	0	0	0	10	0	0	0	0	0	10	0	0
2023-04-10	NA	NA	Haul Road KM 178	100-300	3	0	0	0	0	0	3	0	0	0	0	0
2023-04-10	NA	NA	Haul Road KM 175	>1000	38	0	0	14	0	0	41	0	0	11	0	0
2023-04-11	NA	NA	Haul Road KM 176	100-300	46	1	0	1	0	0	38	2	0	8	0	0
2023-04-11	NA	NA	Haul Road KM 178	300-1000	0	44	4	0	0	0	0	48	0	0	0	0
2023-04-14	NA	NA	Haul Road KM 176	300-1000	4	0	0	6	2	0	0	0	1	19	0	0
2023-04-14	NA	NA	Haul Road KM 174	300-1000	14	0	0	0	0	0	13	0	0	0	1	0
2023-04-14	NA	NA	Haul Road KM 165	>1000	2	0	0	0	1	0	3	0	0	0	0	0
2023-04-15	NA	NA	Haul Road KM 171	>1000	0	0	0	8	0	0	0	0	0	8	0	0
2023-04-16	NA	NA	AWAR KM 96	100-300	2	0	0	0	0	0	1	0	1	0	0	0
2023-04-16	NA	NA	AWAR KM 81	>1000	1	0	0	0	0	0	1	0	0	0	0	0
2023-04-18	NA	NA	Haul Road KM 177	300-1000	94	0	0	8	0	0	92	0	0	10	0	0
2023-04-17	NA	NA	Haul Road KM 154	300-1000	0	0	0	0	31	0	0	0	0	30	1	0
2023-04-19	NA	NA	AWAR KM 95	100-300	0	0	0	2	0	0	0	0	0	2	0	0
2023-04-19	NA	NA	AWAR KM 93	>1000	0	1	0	0	0	0	0	1	0	0	0	0
2023-04-30	NA	NA	AWAR KM 68	>1000	0	0	2	0	0	0	0	0	2	0	0	0
2023-05-23	NA	NA	AWAR KM 83	>1000	0	0	0	2	0	0	0	0	0	2	0	0
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	0	4	0	0	0	0	0	2	2	0	0	0
2023-10-24	NA	NA	Haul Road KM 172	100-300	11	0	0	0	0	0	11	0	0	0	0	0
2023-10-22	NA	NA	Haul Road KM 116	100-300	0	0	0	8	0	0	0	0	7	0	0	0
2023-10-24	NA	NA	Haul Road KM 133	100-300	1	0	1	0	0	0	0	0	0	2	0	0
2023-10-27	NA	NA	Haul Road KM 173	100-300	25	0	0	0	0	0	13	0	0	0	0	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	11	9	0	0	0	0	7	13	0	0	0	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	7	18	0	0	0	0	0	2	0	23	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2023-03-30	NA	NA	Haul Road KM 169	300-1000	0	0	0	2	0	0	0	0	0	2	0
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	0	0	0	0	0	50	0	0	0	0	0
2023-04-07	NA	NA	AWAR KM 93	300-1000	0	0	0	28	2	0	0	0	0	30	0
2023-04-14	NA	NA	AWAR KM 93	300-1000	0	0	0	93	0	0	0	0	0	93	0
2023-04-12	NA	NA	Haul Road KM 130	300-1000	0	0	0	34	0	0	0	0	0	0	0
2023-04-10	NA	NA	Haul Road KM 111	100-300	5	0	0	0	0	0	4	0	1	0	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	18	0	0	0	0	0	18	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	18	0	0	0	0	0	18	0
2023-04-14	NA	NA	Haul Road KM 118	300-1000	0	0	0	47	0	0	0	0	0	47	0
2023-04-14	NA	NA	Haul Road KM 112	300-1000	2	0	0	0	0	0	2	0	0	0	0
2023-04-14	NA	NA	Haul Road KM 112	>1000	0	4	6	0	0	0	1	2	5	2	0
2023-04-15	NA	NA	AWAR KM 101	300-1000	1	0	3	0	0	0	0	0	3	1	0
2023-04-12	NA	NA	AWAR KM 51	50-100	0	79	1	0	0	0	1	79	0	0	0
2023-04-09	NA	NA	Haul Road KM 122	>1000	0	0	0	10	0	0	0	0	0	10	0
2023-04-10	NA	NA	Haul Road KM 178	100-300	3	0	0	0	0	0	2	0	0	1	0
2023-04-10	NA	NA	Haul Road KM 175	>1000	37	0	0	12	0	0	42	0	0	3	0
2023-04-11	NA	NA	Haul Road KM 176	100-300	34	2	11	1	0	0	24	13	8	3	0
2023-04-11	NA	NA	Haul Road KM 178	300-1000	0	48	0	0	0	0	0	20	0	0	28
2023-04-14	NA	NA	Haul Road KM 176	300-1000	10	0	4	5	0	0	4	0	1	4	0
2023-04-14	NA	NA	Haul Road KM 174	300-1000	13	1	0	0	0	0	13	1	0	0	0
2023-04-14	NA	NA	Haul Road KM 165	>1000	0	0	1	0	0	0	0	0	0	0	0
2023-04-15	NA	NA	Haul Road KM 171	>1000	0	0	0	8	0	0	0	0	0	18	0
2023-04-16	NA	NA	AWAR KM 96	100-300	2	0	0	0	0	0	0	0	2	0	0
2023-04-16	NA	NA	AWAR KM 81	>1000	1	0	0	0	0	0	1	0	0	0	0
2023-04-18	NA	NA	Haul Road KM 177	300-1000	90	0	0	12	0	0	89	0	0	13	0
2023-04-17	NA	NA	Haul Road KM 154	300-1000	0	0	0	0	0	0	NA	NA	NA	NA	NA
2023-04-19	NA	NA	AWAR KM 95	100-300	0	0	0	2	0	0	0	0	0	2	0
2023-04-19	NA	NA	AWAR KM 93	>1000	0	0	1	0	0	0	0	0	0	1	0
2023-04-30	NA	NA	AWAR KM 68	>1000	0	0	0	2	0	0	0	0	0	2	0
2023-05-23	NA	NA	AWAR KM 83	>1000	0	0	0	2	0	0	0	0	0	2	0
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	0	3	1	0	0	0	0	3	1	0	0
2023-10-24	NA	NA	Haul Road KM 172	100-300	9	0	2	0	0	0	10	0	1	0	0
2023-10-22	NA	NA	Haul Road KM 116	100-300	0	0	5	2	0	0	6	0	0	0	0
2023-10-24	NA	NA	Haul Road KM 133	100-300	2	0	0	0	0	0	2	0	0	0	0
2023-10-27	NA	NA	Haul Road KM 173	100-300	12	0	0	0	0	0	3	0	0	3	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	3	17	0	0	0	0	2	18	0	0	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	18	2	5	0	0	0	21	4	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2023-03-30	NA	NA	Haul Road KM 169	300-1000	0	2	0	0	0	0	0	2	0	0	0
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-07	NA	NA	AWAR KM 93	300-1000	0	0	0	0	30	0	0	0	0	3	27
2023-04-14	NA	NA	AWAR KM 93	300-1000	0	0	0	0	76	0	0	0	0	0	38
2023-04-12	NA	NA	Haul Road KM 130	300-1000	34	0	0	0	34	0	0	0	0	0	34
2023-04-10	NA	NA	Haul Road KM 111	100-300	0	2	0	0	3	0	0	3	0	0	2
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	0	18	0	0	0	0	0	18
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	0	18	0	0	0	0	0	18
2023-04-14	NA	NA	Haul Road KM 118	300-1000	0	0	0	0	47	0	0	0	0	0	47
2023-04-14	NA	NA	Haul Road KM 112	300-1000	0	2	0	0	0	0	0	2	0	0	0
2023-04-14	NA	NA	Haul Road KM 112	>1000	0	NA	NA	NA	NA	NA	NA	4	3	2	1
2023-04-15	NA	NA	AWAR KM 101	300-1000	0	4	0	0	0	0	0	4	0	0	0
2023-04-12	NA	NA	AWAR KM 51	50-100	0	2	78	0	0	0	0	1	79	0	0
2023-04-09	NA	NA	Haul Road KM 122	>1000	0	0	0	0	10	0	0	0	0	0	10
2023-04-10	NA	NA	Haul Road KM 178	100-300	0	3	0	0	0	0	0	3	0	0	0
2023-04-10	NA	NA	Haul Road KM 175	>1000	0	38	0	0	4	0	0	40	0	0	2
2023-04-11	NA	NA	Haul Road KM 176	100-300	0	28	18	1	1	0	0	22	20	6	0
2023-04-11	NA	NA	Haul Road KM 178	300-1000	0	8	37	3	0	0	0	1	46	1	0
2023-04-14	NA	NA	Haul Road KM 176	300-1000	0	0	0	0	8	0	0	0	0	0	4
2023-04-14	NA	NA	Haul Road KM 174	300-1000	0	12	1	0	1	0	0	11	1	0	0
2023-04-14	NA	NA	Haul Road KM 165	>1000	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-15	NA	NA	Haul Road KM 171	>1000	0	0	0	0	8	0	0	0	0	0	8
2023-04-16	NA	NA	AWAR KM 96	100-300	0	1	0	1	0	0	0	2	0	0	0
2023-04-16	NA	NA	AWAR KM 81	>1000	0	0	0	0	1	0	0	1	0	0	0
2023-04-18	NA	NA	Haul Road KM 177	300-1000	0	87	0	0	15	0	0	98	0	0	4
2023-04-17	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-19	NA	NA	AWAR KM 95	100-300	0	0	0	0	2	0	0	0	0	2	0
2023-04-19	NA	NA	AWAR KM 93	>1000	0	0	0	0	1	0	0	0	0	1	0
2023-04-30	NA	NA	AWAR KM 68	>1000	0	0	0	1	1	0	0	0	0	0	2
2023-05-23	NA	NA	AWAR KM 83	>1000	0	0	0	0	2	0	0	0	0	0	2
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	0	1	3	0	0	0	0	0	4	0	0
2023-10-24	NA	NA	Haul Road KM 172	100-300	0	8	0	4	2	0	0	14	0	1	0
2023-10-22	NA	NA	Haul Road KM 116	100-300	0	0	1	5	0	1	0	0	1	6	0
2023-10-24	NA	NA	Haul Road KM 133	100-300	0	0	0	0	2	0	0	2	0	0	0
2023-10-27	NA	NA	Haul Road KM 173	100-300	0	5	0	0	0	0	0	1	0	0	2
2023-10-27	NA	NA	Haul Road KM 171	100-300	0	3	16	1	0	0	0	2	18	0	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	0	14	11	0	0	0	0	14	11	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2023-03-30	NA	NA	Haul Road KM 169	300-1000	0	0	2	0	0	0	0	0	0	0	0
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-07	NA	NA	AWAR KM 93	300-1000	0	0	0	0	1	29	0	0	0	0	0
2023-04-14	NA	NA	AWAR KM 93	300-1000	0	0	0	0	0	21	0	0	0	0	0
2023-04-12	NA	NA	Haul Road KM 130	300-1000	0	0	0	0	0	34	0	0	0	0	0
2023-04-10	NA	NA	Haul Road KM 111	100-300	0	0	5	0	0	0	0	0	5	0	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	0	0	18	0	0	0	0	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	0	0	0	0	0	18	0	0	0	0	0
2023-04-14	NA	NA	Haul Road KM 118	300-1000	0	0	0	0	0	47	0	0	0	0	0
2023-04-14	NA	NA	Haul Road KM 112	300-1000	0	0	0	0	0	2	0	0	0	0	0
2023-04-14	NA	NA	Haul Road KM 112	>1000	0	0	4	6	0	0	0	0	2	0	0
2023-04-15	NA	NA	AWAR KM 101	300-1000	0	0	2	0	2	0	0	0	0	0	4
2023-04-12	NA	NA	AWAR KM 51	50-100	0	0	1	79	0	0	0	0	1	79	0
2023-04-09	NA	NA	Haul Road KM 122	>1000	0	0	0	0	0	8	0	2	0	0	0
2023-04-10	NA	NA	Haul Road KM 178	100-300	0	0	2	0	0	1	0	0	2	0	0
2023-04-10	NA	NA	Haul Road KM 175	>1000	0	0	37	1	0	4	0	0	35	0	0
2023-04-11	NA	NA	Haul Road KM 176	100-300	0	0	17	22	0	9	0	0	20	27	0
2023-04-11	NA	NA	Haul Road KM 178	300-1000	0	0	0	48	0	0	0	0	0	48	0
2023-04-14	NA	NA	Haul Road KM 176	300-1000	1	0	0	0	0	0	0	0	NA	NA	NA
2023-04-14	NA	NA	Haul Road KM 174	300-1000	0	0	10	1	0	0	0	0	7	1	2
2023-04-14	NA	NA	Haul Road KM 165	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-15	NA	NA	Haul Road KM 171	>1000	0	0	0	0	0	8	0	0	0	0	0
2023-04-16	NA	NA	AWAR KM 96	100-300	0	0	1	0	0	1	0	0	0	0	0
2023-04-16	NA	NA	AWAR KM 81	>1000	0	0	1	0	0	0	0	0	1	0	0
2023-04-18	NA	NA	Haul Road KM 177	300-1000	0	0	67	0	0	0	9	26	82	0	0
2023-04-17	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-19	NA	NA	AWAR KM 95	100-300	0	0	0	0	0	2	0	0	0	0	0
2023-04-19	NA	NA	AWAR KM 93	>1000	0	0	0	0	0	1	0	0	1	0	0
2023-04-30	NA	NA	AWAR KM 68	>1000	0	0	0	0	0	2	0	0	0	0	0
2023-05-23	NA	NA	AWAR KM 83	>1000	0	0	0	0	0	2	0	0	0	0	0
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	0	0	0	4	0	0	0	0	0	4	0
2023-10-24	NA	NA	Haul Road KM 172	100-300	0	0	6	0	0	9	0	0	15	0	0
2023-10-22	NA	NA	Haul Road KM 116	100-300	0	0	0	0	7	0	0	0	5	0	0
2023-10-24	NA	NA	Haul Road KM 133	100-300	0	0	2	0	0	0	0	0	2	0	0
2023-10-27	NA	NA	Haul Road KM 173	100-300	0	0	0	0	0	1	0	0	12	0	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	0	0	2	18	0	0	0	0	3	21	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	0	0	9	16	0	0	0	0	5	15	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2023-03-30	NA	NA	Haul Road KM 169	300-1000	2	0	0	0	0	0	2	0	0
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-07	NA	NA	AWAR KM 93	300-1000	30	0	0	0	0	0	30	0	0
2023-04-14	NA	NA	AWAR KM 93	300-1000	36	0	0	0	0	0	69	0	0
2023-04-12	NA	NA	Haul Road KM 130	300-1000	34	0	0	0	0	0	0	0	0
2023-04-10	NA	NA	Haul Road KM 111	100-300	0	0	0	5	0	0	0	0	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	18	0	0	0	0	0	18	0	0
2023-04-15	NA	NA	Haul Road KM 174	>1000	18	0	0	0	0	0	18	0	0
2023-04-14	NA	NA	Haul Road KM 118	300-1000	47	0	0	0	0	0	47	0	0
2023-04-14	NA	NA	Haul Road KM 112	300-1000	0	0	0	0	0	0	2	0	0
2023-04-14	NA	NA	Haul Road KM 112	>1000	8	0	0	0	0	0	10	0	0
2023-04-15	NA	NA	AWAR KM 101	300-1000	0	0	0	0	0	3	1	0	0
2023-04-12	NA	NA	AWAR KM 51	50-100	0	0	0	1	79	0	0	0	0
2023-04-09	NA	NA	Haul Road KM 122	>1000	10	0	0	0	0	0	10	0	0
2023-04-10	NA	NA	Haul Road KM 178	100-300	0	1	0	0	0	0	3	0	0
2023-04-10	NA	NA	Haul Road KM 175	>1000	5	0	0	36	0	0	1	0	0
2023-04-11	NA	NA	Haul Road KM 176	100-300	1	0	0	20	27	0	1	0	0
2023-04-11	NA	NA	Haul Road KM 178	300-1000	0	0	0	0	48	0	0	0	0
2023-04-14	NA	NA	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-14	NA	NA	Haul Road KM 174	300-1000	0	0	0	7	2	0	0	0	0
2023-04-14	NA	NA	Haul Road KM 165	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-15	NA	NA	Haul Road KM 171	>1000	8	0	0	0	0	0	8	0	0
2023-04-16	NA	NA	AWAR KM 96	100-300	2	0	0	2	0	0	0	0	0
2023-04-16	NA	NA	AWAR KM 81	>1000	0	0	0	0	0	0	1	0	0
2023-04-18	NA	NA	Haul Road KM 177	300-1000	10	0	0	72	0	0	20	0	0
2023-04-17	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-04-19	NA	NA	AWAR KM 95	100-300	2	0	0	0	0	0	2	0	0
2023-04-19	NA	NA	AWAR KM 93	>1000	0	0	0	0	0	0	1	0	0
2023-04-30	NA	NA	AWAR KM 68	>1000	2	0	0	0	0	0	2	0	0
2023-05-23	NA	NA	AWAR KM 83	>1000	2	0	0	0	0	0	2	0	0
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	0	0	0	2	2	0	0	0	0
2023-10-24	NA	NA	Haul Road KM 172	100-300	0	0	0	14	0	1	0	0	0
2023-10-22	NA	NA	Haul Road KM 116	100-300	0	0	2	7	0	0	0	0	0
2023-10-24	NA	NA	Haul Road KM 133	100-300	0	0	0	1	0	1	0	0	0
2023-10-27	NA	NA	Haul Road KM 173	100-300	0	0	0	18	0	0	5	0	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	0	0	5	2	18	5	0	0	0
2023-10-27	NA	NA	Haul Road KM 171	100-300	5	0	0	4	18	3	0	0	0

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2023-03-30	NA	NA	Haul Road KM 169	300-1000	NA	Heavy equipment	NA	Heavy equipment	NA	Heavy equipment
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	NA	NA	NA	NA	Light truck	Light truck
2023-04-07	NA	NA	AWAR KM 93	300-1000	NA	NA	Light truck	NA	NA	NA
2023-04-14	NA	NA	AWAR KM 93	300-1000	NA	NA	NA	NA	NA	NA
2023-04-12	NA	NA	Haul Road KM 130	300-1000	NA	NA	NA	NA	Light truck	NA
2023-04-10	NA	NA	Haul Road KM 111	100-300	NA	NA	NA	NA	NA	NA
2023-04-15	NA	NA	Haul Road KM 174	>1000	NA	NA	NA	NA	NA	NA
2023-04-15	NA	NA	Haul Road KM 174	>1000	NA	NA	NA	NA	NA	NA
2023-04-14	NA	NA	Haul Road KM 118	300-1000	NA	NA	NA	NA	NA	NA
2023-04-14	NA	NA	Haul Road KM 112	300-1000	NA	NA	NA	NA	NA	NA
2023-04-14	NA	NA	Haul Road KM 112	>1000	NA	NA	NA	NA	NA	NA
2023-04-15	NA	NA	AWAR KM 101	300-1000	NA	NA	NA	NA	NA	NA
2023-04-12	NA	NA	AWAR KM 51	50-100	NA	NA	NA	NA	NA	NA
2023-04-09	NA	NA	Haul Road KM 122	>1000	NA	NA	NA	NA	NA	NA
2023-04-10	NA	NA	Haul Road KM 178	100-300	NA	NA	NA	NA	NA	NA
2023-04-10	NA	NA	Haul Road KM 175	>1000	NA	NA	NA	NA	NA	NA
2023-04-11	NA	NA	Haul Road KM 176	100-300	NA	NA	NA	NA	NA	NA
2023-04-11	NA	NA	Haul Road KM 178	300-1000	NA	NA	NA	NA	NA	NA
2023-04-14	NA	NA	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	NA
2023-04-14	NA	NA	Haul Road KM 174	300-1000	NA	NA	NA	NA	NA	NA
2023-04-14	NA	NA	Haul Road KM 165	>1000	NA	NA	NA	NA	Convoy	Convoy
2023-04-15	NA	NA	Haul Road KM 171	>1000	NA	NA	NA	NA	NA	NA
2023-04-16	NA	NA	AWAR KM 96	100-300	NA	NA	NA	NA	NA	NA
2023-04-16	NA	NA	AWAR KM 81	>1000	NA	NA	NA	NA	NA	NA
2023-04-18	NA	NA	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	NA
2023-04-17	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	NA	NA	NA
2023-04-19	NA	NA	AWAR KM 95	100-300	NA	NA	NA	NA	NA	NA
2023-04-19	NA	NA	AWAR KM 93	>1000	NA	NA	NA	NA	NA	NA
2023-04-30	NA	NA	AWAR KM 68	>1000	NA	Light truck	NA	NA	NA	NA
2023-05-23	NA	NA	AWAR KM 83	>1000	NA	NA	NA	NA	NA	NA
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	NA	Aircraft	NA	NA	NA	NA
2023-10-24	NA	NA	Haul Road KM 172	100-300	NA	NA	Heavy equipment	Heavy equipment	NA	Tanker
2023-10-22	NA	NA	Haul Road KM 116	100-300	Tanker	NA	NA	NA	Heavy equipment	Heavy equipment
2023-10-24	NA	NA	Haul Road KM 133	100-300	Heavy equipment	NA	NA	NA	NA	Light truck
2023-10-27	NA	NA	Haul Road KM 173	100-300	NA	NA	NA	NA	NA	NA
2023-10-27	NA	NA	Haul Road KM 171	100-300	NA	NA	NA	NA	NA	NA
2023-10-27	NA	NA	Haul Road KM 171	100-300	NA	NA	NA	NA	NA	NA

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2023-03-30	NA	NA	Haul Road KM 169	300-1000	Heavy equipment	NA	NA	NA	NA	2023	-96.5463	65.34369	Yes
2023-04-08	NA	NA	AWAR KM 95.5	300-1000	NA	NA	NA	NA	NA	2023	-96.1869	65.01471	No
2023-04-07	NA	NA	AWAR KM 93	300-1000	NA	NA	NA	NA	NA	2023	-96.6666	65.40149	No
2023-04-14	NA	NA	AWAR KM 93	300-1000	NA	NA	NA	NA	NA	2023	-96.6666	65.40149	No
2023-04-12	NA	NA	Haul Road KM 130	300-1000	NA	NA	NA	NA	NA	2023	-96.6666	65.40149	Yes
2023-04-10	NA	NA	Haul Road KM 111	100-300	Convoy	NA	NA	NA	NA	2023	-96.0301	65.04633	Yes
2023-04-15	NA	NA	Haul Road KM 174	>1000	NA	NA	NA	NA	NA	2023	-96.6024	65.37683	Yes
2023-04-15	NA	NA	Haul Road KM 174	>1000	NA	NA	NA	NA	NA	2023	-96.6026	65.3656	Yes
2023-04-14	NA	NA	Haul Road KM 118	300-1000	NA	NA	NA	NA	NA	2023	-96.6666	65.40149	Yes
2023-04-14	NA	NA	Haul Road KM 112	300-1000	NA	NA	NA	NA	NA	2023	-96.0206	65.08026	Yes
2023-04-14	NA	NA	Haul Road KM 112	>1000	NA	NA	NA	NA	NA	2023	-96.0206	65.08026	Yes
2023-04-15	NA	NA	AWAR KM 101	300-1000	NA	NA	NA	NA	NA	2023	-96.1435	65.05554	Yes
2023-04-12	NA	NA	AWAR KM 51	50-100	NA	NA	NA	NA	NA	2023	-96.3783	64.69147	Yes
2023-04-09	NA	NA	Haul Road KM 122	>1000	NA	NA	Convoy	NA	NA	2023	-96.0973	65.11499	Yes
2023-04-10	NA	NA	Haul Road KM 178	100-300	NA	NA	NA	Light truck	NA	2023	-96.6324	65.40478	No
2023-04-10	NA	NA	Haul Road KM 175	>1000	NA	NA	NA	NA	NA	2023	-96.6068	65.39319	Yes
2023-04-11	NA	NA	Haul Road KM 176	100-300	NA	NA	NA	NA	NA	2023	-96.6329	65.40411	No
2023-04-11	NA	NA	Haul Road KM 178	300-1000	NA	NA	NA	NA	NA	2023	-96.633	65.40411	Yes
2023-04-14	NA	NA	Haul Road KM 176	300-1000	NA	NA	NA	NA	NA	2023	-96.6208	65.40021	No
2023-04-14	NA	NA	Haul Road KM 174	300-1000	NA	NA	NA	NA	NA	2023	-96.6023	65.37716	No
2023-04-14	NA	NA	Haul Road KM 165	>1000	NA	NA	NA	NA	NA	2023	-96.4455	65.32178	No
2023-04-15	NA	NA	Haul Road KM 171	>1000	NA	NA	NA	NA	NA	2023	-96.0734	65.02124	No
2023-04-16	NA	NA	AWAR KM 96	100-300	NA	NA	NA	NA	NA	2023	-96.1864	65.01501	Yes
2023-04-16	NA	NA	AWAR KM 81	>1000	NA	NA	NA	NA	NA	2023	-96.3018	64.92462	No
2023-04-18	NA	NA	Haul Road KM 177	300-1000	NA	NA	NA	NA	NA	2023	-96.633	65.40411	No
2023-04-17	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	NA	NA	2023	-96.3219	64.84723	Yes
2023-04-19	NA	NA	AWAR KM 95	100-300	NA	NA	NA	NA	NA	2023	-96.0734	65.02124	No
2023-04-19	NA	NA	AWAR KM 93	>1000	NA	NA	NA	NA	NA	2023	-96.0734	65.02124	No
2023-04-30	NA	NA	AWAR KM 68	>1000	NA	NA	NA	NA	NA	2023	-96.3151	64.83319	No
2023-05-23	NA	NA	AWAR KM 83	>1000	NA	NA	NA	NA	Convoy	2023	-96.0923	65.03778	No
2023-06-21	NA	NA	Meadowbank KM (NA)	50-100	NA	NA	NA	NA	NA	2023	-96.0737	65.02118	No
2023-10-24	NA	NA	Haul Road KM 172	100-300	NA	NA	Tanker	Heavy equipment	NA	2023	-96.6	65.35797	No
2023-10-22	NA	NA	Haul Road KM 116	100-300	Heavy equipment	NA	NA	Heavy equipment	NA	2023	-96.6666	65.40143	Yes
2023-10-24	NA	NA	Haul Road KM 133	100-300	NA	NA	NA	NA	NA	2023	-96.6666	65.40137	No
2023-10-27	NA	NA	Haul Road KM 173	100-300	NA	NA	NA	NA	NA	2023	-96.6027	65.36505	Yes
2023-10-27	NA	NA	Haul Road KM 171	100-300	NA	NA	NA	NA	NA	2023	-96.5926	65.35596	No
2023-10-27	NA	NA	Haul Road KM 171	100-300	NA	NA	NA	NA	NA	2023	-96.5922	65.35596	No

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2023-10-28	NA	NA	AWAR KM 9	50-100	Brandon Ipkarnerk	NA	45	West	No	25	-7	15	NW	93
2023-10-28	NA	NA	AWAR KM 9	300-1000	Brandon Ipkarnerk	NA	280	West	No	20	7	15	NW	93
2023-10-31	NA	NA	AWAR KM 50	100-300	Brandon Ipkarnerk	NA	225	East	NA	100	11	40	NW	0
2023-11-02	NA	NA	AWAR KM 50	100-300	Brandon Ipkarnerk, Brendan Mannik	NA	70	East	No	6	11	50	NW	0
2023-11-02	NA	NA	AWAR KM 47	0-50	Brandon Ipkarnerk, Brendan Mannik	NA	45	East	No	4	11	50	NW	0
2023-10-29	NA	NA	Haul Road KM 154	300-1000	Eric Leonard	NA	335	East	No	8	-13	2	NE	92
2023-11-07	NA	NA	AWAR KM 60	100-300	Kelly Habib Brenden Mannik	NA	60	West	No	276	-8	15	NW	30
2023-11-06	NA	NA	AWAR KM 77	100-300	TD	NA	90	East	No	2	-17	20	NW	90
2023-11-09	NA	NA	AWAR KM 40	300-1000	Kelly Habib Brendan Mannik	NA	90	East	NA	100	-15	20	NW	30
2023-11-12	NA	NA	AWAR KM 64	300-1000	Derek	NA	285	West	No	100	-4	15	N	10
2023-11-08	NA	NA	AWAR KM 63	50-100	Brandon Ipkarnerk	NA	330	West	No	200	15	20	NW	75
2023-11-11	NA	NA	AWAR KM 8	300-1000	Renee Pudnak	NA	15	East	No	3	-12	20	NE	1
2023-11-11	NA	NA	AWAR KM 17	>1000	Renee Pudnak	NA	30	West	NA	600	-12	20	NE	1
2023-11-11	NA	NA	AWAR KM 60	300-1000	Renee Pudnak	NA	35	West	NA	27	-12	20	NE	1
2023-11-01	NA	NA	Haul Road KM 117	100-300	Kate Walker, Laurence Archambault, Felix Quessy S.	NA	80	East	No	1	-11	50	NW	83
2023-11-17	NA	NA	AWAR KM 93	>1000	Derek	NA	215	East	No	100	-14	30	N	40
2023-11-18	NA	NA	AWAR KM 55	>1000	Derek	NA	10	East	No	150	-20	30	NW	40
2023-12-06	NA	NA	AWAR KM 49	100-300	Brendan Mannik	NA	45	West	No	5	-12	20	E	50
2023-12-06	NA	NA	AWAR KM 19	>1000	Brendan Mannik	NA	90	West	No	2	-13	15	E	50
2023-12-01	NA	NA	AWAR KM 57	0-50	Brendan Mannik	NA	355	East	Yes	37	-18	0	N	0
2023-12-08	NA	NA	AWAR KM 17	>1000	Kelly Habib, Brendon Mannik	NA	270	West	No	13	-20	15	NW	50
2023-12-12	NA	NA	AWAR KM 56	300-1000	Kelly Habib, Brendon Mannik	NA	90	East	No	12	-27	15	NW	75
2023-12-16	NA	NA	AWAR KM 73	300-1000	Renee	NA	280	East	No	1	-28	50	NW	0
2023-12-17	NA	NA	AWAR KM 67	>1000	Renee Pudnak	NA	20	East	No	43	-24	30	W	0
2023-12-18	NA	NA	AWAR KM 65	300-1000	Renee Pudnak	NA	0	East	No	187	-24	15	W	1
2024-01-01	NA	NA	AWAR KM 53	300-1000	Kelly Habib	NA	270	West	No	70	-28	40	NW	50
2024-01-02	NA	NA	AWAR KM 68	300-1000	TD	NA	90	East	No	44	-20	50	NW	90
2024-01-04	NA	NA	AWAR KM 61	300-1000	Kelly Habib	NA	270	West	No	25	-34	30	NW	70
2024-01-06	NA	NA	AWAR KM 67	300-1000	Derek	NA	220	East	No	89	-27	50	NW	5
2024-01-11	NA	NA	AWAR KM 17	>1000	Renee Pudnak	NA	0	West	NA	43	-28	20	N	0
2024-02-10	NA	NA	AWAR KM 57	100-300	Derek	NA	295	Both	No	27	-26	15	E	50
2024-02-21	NA	NA	AWAR KM 97	100-300	Ella Stables, Thomas Dahm	NA	280	West	No	4	-35	20	NW	95
2024-03-09	NA	NA	AWAR KM 55	100-300	Derek	NA	290	West	No	12	-19	10	N	78
2024-04-06	NA	NA	Haul Road KM 139	50-100	Eric Leonard, JF DubÃ©	NA	180	West	No	22	-12	10	SE	95
2024-04-06	NA	NA	Haul Road KM 147	300-1000	Eric Leonard, JF DubÃ©	NA	225	West	No	9	-12	10	SE	95
2024-04-08	NA	NA	Haul Road KM 115	300-1000	Eric Leonard, JF DubÃ©	NA	270	West	No	45	-7	30	S	86
2024-04-11	NA	NA	Haul Road KM 139	300-1000	Laurence Archambault, Jean-FranÃ§ois DubÃ©	NA	33	West	No	56	-19	27	NW	83
2024-04-15	NA	NA	AWAR KM 102	100-300	Ella Stables	NA	180	East	No	12	-8	20	SE	90

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2023-10-28	NA	NA	AWAR KM 9	50-100	0	Precipitation: 0	200	800	NA
2023-10-28	NA	NA	AWAR KM 9	300-1000	0	Precipitation: 0	100	900	Bridge
2023-10-31	NA	NA	AWAR KM 50	100-300	1	Precipitation: 0	100	1000	0
2023-11-02	NA	NA	AWAR KM 50	100-300	1	Precipitation: 50	100	900	Barrel
2023-11-02	NA	NA	AWAR KM 47	0-50	1	Precipitation: 50	0	1000	Sea cans
2023-10-29	NA	NA	Haul Road KM 154	300-1000	0	Precipitation: Light snow, overcast	100	1000	None
2023-11-07	NA	NA	AWAR KM 60	100-300	1	Precipitation: 0	200	600	0
2023-11-06	NA	NA	AWAR KM 77	100-300	5	Precipitation: 0; no wind, sunny	500	1000	NA
2023-11-09	NA	NA	AWAR KM 40	300-1000	0	Precipitation: 0; overcast	100	500	None
2023-11-12	NA	NA	AWAR KM 64	300-1000	1	Precipitation: White out	200	1000	P
2023-11-08	NA	NA	AWAR KM 63	50-100	1	Precipitation: 0	100	1000	Emergency seaman
2023-11-11	NA	NA	AWAR KM 8	300-1000	1	Precipitation: 1; cold	300	300	No
2023-11-11	NA	NA	AWAR KM 17	>1000	1	Precipitation: 1; cold	300	200	0
2023-11-11	NA	NA	AWAR KM 60	300-1000	1	Precipitation: 1; cold	3000	200	0
2023-11-01	NA	NA	Haul Road KM 117	100-300	1	Precipitation: 0; foggy	0	2000	None
2023-11-17	NA	NA	AWAR KM 93	>1000	1	Precipitation: White out	200	1000	None
2023-11-18	NA	NA	AWAR KM 55	>1000	1	Precipitation: Clear	0	1200	None
2023-12-06	NA	NA	AWAR KM 49	100-300	1	Precipitation: Snow	100	500	NA
2023-12-06	NA	NA	AWAR KM 19	>1000	1	Precipitation: Snow	100	400	NA
2023-12-01	NA	NA	AWAR KM 57	0-50	1	Precipitation: 50; foggy	100	1000	0
2023-12-08	NA	NA	AWAR KM 17	>1000	1	Precipitation: 0; overcast	0	1000	None
2023-12-12	NA	NA	AWAR KM 56	300-1000	0	Precipitation: 0; sunny	0	1000	None
2023-12-16	NA	NA	AWAR KM 73	300-1000	2	Precipitation: 0	70000	200	0
2023-12-17	NA	NA	AWAR KM 67	>1000	3	Precipitation: 0	2000	200	0
2023-12-18	NA	NA	AWAR KM 65	300-1000	4	Precipitation: 1	500	200	0
2024-01-01	NA	NA	AWAR KM 53	300-1000	4	Precipitation: 0; sunny	100	1000	NA
2024-01-02	NA	NA	AWAR KM 68	300-1000	3	Precipitation: 0; windy	-1000	1000	0
2024-01-04	NA	NA	AWAR KM 61	300-1000	1	Precipitation: 0; sunny	100	2000	NA
2024-01-06	NA	NA	AWAR KM 67	300-1000	1	Precipitation: 0; clear	100	1200	None
2024-01-11	NA	NA	AWAR KM 17	>1000	0	Precipitation: 0	0	200	0
2024-02-10	NA	NA	AWAR KM 57	100-300	3	Precipitation: Cloudy	0	1200	Zero
2024-02-21	NA	NA	AWAR KM 97	100-300	2	Precipitation: 0 ; sunny	1000	1000	None
2024-03-09	NA	NA	AWAR KM 55	100-300	1	Precipitation: Foggy	0	1200	None
2024-04-06	NA	NA	Haul Road KM 139	50-100	2	Precipitation: 0; overcast	300	1600	0
2024-04-06	NA	NA	Haul Road KM 147	300-1000	2	Precipitation: 0; overcast	300	1600	None
2024-04-08	NA	NA	Haul Road KM 115	300-1000	4	Precipitation: 0; overcast	0	1600	None
2024-04-11	NA	NA	Haul Road KM 139	300-1000	0	Precipitation: 0; very foggy	300	2000	Bridge
2024-04-15	NA	NA	AWAR KM 102	100-300	0	Precipitation: Light snow, windy and overcast	5000	300	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2023-10-28	NA	NA	AWAR KM 9	50-100	23	0	2	0	0	0	0	0	0	0	0	0
2023-10-28	NA	NA	AWAR KM 9	300-1000	0	0	0	20	0	0	NA	NA	NA	NA	NA	NA
2023-10-31	NA	NA	AWAR KM 50	100-300	16	0	0	3	0	0	19	0	0	0	0	0
2023-11-02	NA	NA	AWAR KM 50	100-300	6	0	0	0	0	0	7	3	0	3	0	0
2023-11-02	NA	NA	AWAR KM 47	0-50	0	4	0	0	0	0	0	4	0	0	0	0
2023-10-29	NA	NA	Haul Road KM 154	300-1000	3	0	0	4	0	0	8	0	0	0	0	0
2023-11-07	NA	NA	AWAR KM 60	100-300	0	0	0	100	0	0	0	0	0	100	0	0
2023-11-06	NA	NA	AWAR KM 77	100-300	0	0	0	2	0	0	0	0	0	2	0	0
2023-11-09	NA	NA	AWAR KM 40	300-1000	100	0	0	0	0	0	100	0	0	0	0	0
2023-11-12	NA	NA	AWAR KM 64	300-1000	26	0	0	0	0	0	25	0	0	1	0	0
2023-11-08	NA	NA	AWAR KM 63	50-100	15	0	15	0	0	0	12	0	14	0	0	0
2023-11-11	NA	NA	AWAR KM 8	300-1000	3	0	3	0	3	0	3	0	3	0	3	0
2023-11-11	NA	NA	AWAR KM 17	>1000	100	0	100	100	100	0	0	0	100	100	100	100
2023-11-11	NA	NA	AWAR KM 60	300-1000	13	15	15	0	27	0	15	4	15	15	15	0
2023-11-01	NA	NA	Haul Road KM 117	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2023-11-17	NA	NA	AWAR KM 93	>1000	0	0	0	50	0	0	0	0	1	49	0	0
2023-11-18	NA	NA	AWAR KM 55	>1000	9	9	2	5	0	0	20	0	5	0	0	0
2023-12-06	NA	NA	AWAR KM 49	100-300	5	0	0	0	0	0	5	0	0	0	0	0
2023-12-06	NA	NA	AWAR KM 19	>1000	1	1	0	0	0	0	0	2	0	0	0	0
2023-12-01	NA	NA	AWAR KM 57	0-50	0	0	0	4	0	0	4	0	0	0	0	0
2023-12-08	NA	NA	AWAR KM 17	>1000	0	0	13	0	0	0	0	0	13	0	0	0
2023-12-12	NA	NA	AWAR KM 56	300-1000	12	0	0	0	0	0	9	0	0	3	0	0
2023-12-16	NA	NA	AWAR KM 73	300-1000	0	0	1	0	1	0	1	0	1	0	1	0
2023-12-17	NA	NA	AWAR KM 67	>1000	43	0	43	0	0	0	43	0	43	0	0	0
2023-12-18	NA	NA	AWAR KM 65	300-1000	187	0	187	0	0	0	187	0	187	0	0	0
2024-01-01	NA	NA	AWAR KM 53	300-1000	60	0	0	0	0	0	60	0	0	0	0	0
2024-01-02	NA	NA	AWAR KM 68	300-1000	35	9	0	0	0	0	39	9	0	0	0	0
2024-01-04	NA	NA	AWAR KM 61	300-1000	21	0	0	4	0	0	21	0	0	4	0	0
2024-01-06	NA	NA	AWAR KM 67	300-1000	27	0	0	0	0	0	17	0	5	5	0	0
2024-01-11	NA	NA	AWAR KM 17	>1000	0	0	43	43	0	0	0	0	0	43	0	0
2024-02-10	NA	NA	AWAR KM 57	100-300	19	6	2	0	0	0	8	10	2	7	0	0
2024-02-21	NA	NA	AWAR KM 97	100-300	2	2	0	0	0	0	2	2	0	0	0	0
2024-03-09	NA	NA	AWAR KM 55	100-300	9	2	0	1	0	0	8	2	2	0	0	0
2024-04-06	NA	NA	Haul Road KM 139	50-100	2	0	0	0	0	0	2	0	0	0	0	0
2024-04-06	NA	NA	Haul Road KM 147	300-1000	0	5	2	2	0	0	0	4	0	5	0	0
2024-04-08	NA	NA	Haul Road KM 115	300-1000	45	0	0	0	0	0	0	0	0	45	0	0
2024-04-11	NA	NA	Haul Road KM 139	300-1000	0	56	0	0	0	0	0	56	0	0	0	0
2024-04-15	NA	NA	AWAR KM 102	100-300	4	8	0	0	0	0	3	9	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2023-10-28	NA	NA	AWAR KM 9	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-28	NA	NA	AWAR KM 9	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-31	NA	NA	AWAR KM 50	100-300	19	0	0	0	0	0	19	0	0	0	0	0
2023-11-02	NA	NA	AWAR KM 50	100-300	8	0	0	5	0	0	0	0	0	13	0	0
2023-11-02	NA	NA	AWAR KM 47	0-50	0	4	0	0	0	0	0	3	0	1	0	0
2023-10-29	NA	NA	Haul Road KM 154	300-1000	0	0	0	1	0	0	0	0	1	5	0	0
2023-11-07	NA	NA	AWAR KM 60	100-300	0	0	0	100	0	0	0	0	0	100	0	0
2023-11-06	NA	NA	AWAR KM 77	100-300	0	0	0	2	0	0	2	0	0	0	0	0
2023-11-09	NA	NA	AWAR KM 40	300-1000	0	100	0	0	0	0	0	100	0	0	0	0
2023-11-12	NA	NA	AWAR KM 64	300-1000	0	0	0	26	0	0	0	0	0	25	0	1
2023-11-08	NA	NA	AWAR KM 63	50-100	14	0	14	2	0	0	15	0	15	3	0	0
2023-11-11	NA	NA	AWAR KM 8	300-1000	3	0	3	0	3	0	3	0	3	0	3	0
2023-11-11	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 60	300-1000	0	0	27	27	27	0	NA	NA	NA	NA	NA	NA
2023-11-01	NA	NA	Haul Road KM 117	100-300	1	0	0	0	0	0	1	0	0	0	0	0
2023-11-17	NA	NA	AWAR KM 93	>1000	2	2	7	39	0	0	40	6	4	0	0	0
2023-11-18	NA	NA	AWAR KM 55	>1000	13	0	10	2	0	0	20	0	3	2	0	0
2023-12-06	NA	NA	AWAR KM 49	100-300	5	0	0	0	0	0	0	0	0	5	0	0
2023-12-06	NA	NA	AWAR KM 19	>1000	0	2	0	0	0	0	0	2	0	0	0	0
2023-12-01	NA	NA	AWAR KM 57	0-50	4	0	0	0	0	0	4	0	0	0	0	0
2023-12-08	NA	NA	AWAR KM 17	>1000	0	0	13	0	0	0	0	0	0	13	0	0
2023-12-12	NA	NA	AWAR KM 56	300-1000	9	0	0	3	0	0	9	0	0	3	0	0
2023-12-16	NA	NA	AWAR KM 73	300-1000	1	0	1	0	1	0	1	0	1	0	1	0
2023-12-17	NA	NA	AWAR KM 67	>1000	43	0	43	0	0	0	43	0	43	0	0	0
2023-12-18	NA	NA	AWAR KM 65	300-1000	187	0	187	0	0	0	187	0	187	0	0	0
2024-01-01	NA	NA	AWAR KM 53	300-1000	60	0	0	0	0	0	60	0	0	0	0	0
2024-01-02	NA	NA	AWAR KM 68	300-1000	35	9	0	0	0	0	30	12	0	2	0	0
2024-01-04	NA	NA	AWAR KM 61	300-1000	25	0	0	0	0	0	2	0	0	23	0	0
2024-01-06	NA	NA	AWAR KM 67	300-1000	5	0	5	5	13	0	25	0	0	0	0	2
2024-01-11	NA	NA	AWAR KM 17	>1000	0	0	0	43	0	0	0	0	0	43	0	0
2024-02-10	NA	NA	AWAR KM 57	100-300	9	10	3	0	0	0	14	8	4	1	0	0
2024-02-21	NA	NA	AWAR KM 97	100-300	1	3	0	0	0	0	1	3	0	0	0	0
2024-03-09	NA	NA	AWAR KM 55	100-300	7	2	3	0	0	0	10	2	0	0	0	0
2024-04-06	NA	NA	Haul Road KM 139	50-100	0	0	0	2	0	0	0	0	0	0	0	0
2024-04-06	NA	NA	Haul Road KM 147	300-1000	0	2	0	7	0	0	7	0	0	2	0	0
2024-04-08	NA	NA	Haul Road KM 115	300-1000	0	0	0	45	0	0	45	0	0	0	0	0
2024-04-11	NA	NA	Haul Road KM 139	300-1000	0	56	0	0	0	0	0	56	0	0	0	0
2024-04-15	NA	NA	AWAR KM 102	100-300	2	10	0	0	0	0	2	10	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2023-10-28	NA	NA	AWAR KM 9	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-28	NA	NA	AWAR KM 9	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-31	NA	NA	AWAR KM 50	100-300	19	0	0	0	0	0	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 50	100-300	0	0	0	0	0	0	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 47	0-50	0	3	0	1	0	0	0	3	0	1	0
2023-10-29	NA	NA	Haul Road KM 154	300-1000	6	0	0	0	0	0	NA	NA	NA	NA	NA
2023-11-07	NA	NA	AWAR KM 60	100-300	0	0	0	0	0	100	0	0	0	0	0
2023-11-06	NA	NA	AWAR KM 77	100-300	0	0	0	2	0	0	2	0	0	0	0
2023-11-09	NA	NA	AWAR KM 40	300-1000	0	100	0	0	0	0	0	100	0	0	0
2023-11-12	NA	NA	AWAR KM 64	300-1000	0	0	0	26	0	0	0	0	3	23	0
2023-11-08	NA	NA	AWAR KM 63	50-100	15	0	15	4	0	0	15	0	15	1	0
2023-11-11	NA	NA	AWAR KM 8	300-1000	3	0	3	0	3	0	0	0	3	3	3
2023-11-11	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 60	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-01	NA	NA	Haul Road KM 117	100-300	1	0	0	0	0	0	1	0	0	0	0
2023-11-17	NA	NA	AWAR KM 93	>1000	40	6	4	0	0	0	45	5	0	0	0
2023-11-18	NA	NA	AWAR KM 55	>1000	25	0	0	0	0	0	5	0	3	17	0
2023-12-06	NA	NA	AWAR KM 49	100-300	0	0	0	5	0	0	0	0	5	0	0
2023-12-06	NA	NA	AWAR KM 19	>1000	0	2	0	0	0	0	0	2	0	0	0
2023-12-01	NA	NA	AWAR KM 57	0-50	3	0	0	1	0	0	4	0	0	0	0
2023-12-08	NA	NA	AWAR KM 17	>1000	0	0	0	13	0	0	0	0	0	13	0
2023-12-12	NA	NA	AWAR KM 56	300-1000	8	0	0	4	0	0	8	0	0	4	0
2023-12-16	NA	NA	AWAR KM 73	300-1000	1	0	1	0	1	0	1	0	1	0	1
2023-12-17	NA	NA	AWAR KM 67	>1000	43	0	43	0	0	0	43	0	43	0	0
2023-12-18	NA	NA	AWAR KM 65	300-1000	187	0	187	0	0	0	187	0	187	0	0
2024-01-01	NA	NA	AWAR KM 53	300-1000	60	0	0	0	0	0	60	0	0	0	0
2024-01-02	NA	NA	AWAR KM 68	300-1000	32	12	0	0	0	0	32	12	0	0	0
2024-01-04	NA	NA	AWAR KM 61	300-1000	0	0	0	25	0	0	25	0	0	0	0
2024-01-06	NA	NA	AWAR KM 67	300-1000	23	0	2	0	0	2	27	0	0	0	0
2024-01-11	NA	NA	AWAR KM 17	>1000	0	0	0	43	0	0	19	0	43	24	0
2024-02-10	NA	NA	AWAR KM 57	100-300	19	8	0	0	0	0	13	8	2	4	0
2024-02-21	NA	NA	AWAR KM 97	100-300	1	3	0	0	0	0	1	3	0	0	0
2024-03-09	NA	NA	AWAR KM 55	100-300	9	2	1	0	0	0	10	2	0	0	0
2024-04-06	NA	NA	Haul Road KM 139	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-04-06	NA	NA	Haul Road KM 147	300-1000	9	0	0	0	0	0	9	0	0	0	0
2024-04-08	NA	NA	Haul Road KM 115	300-1000	25	0	0	20	0	0	20	0	25	0	0
2024-04-11	NA	NA	Haul Road KM 139	300-1000	0	56	0	0	0	0	0	56	0	0	0
2024-04-15	NA	NA	AWAR KM 102	100-300	2	10	0	0	0	0	2	10	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2023-10-28	NA	NA	AWAR KM 9	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-28	NA	NA	AWAR KM 9	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-31	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 47	0-50	0	0	0	0	4	0	0	NA	NA	NA	NA
2023-10-29	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-07	NA	NA	AWAR KM 60	100-300	100	0	0	0	100	0	0	0	0	0	100
2023-11-06	NA	NA	AWAR KM 77	100-300	0	2	0	0	0	0	0	0	0	0	2
2023-11-09	NA	NA	AWAR KM 40	300-1000	0	0	100	0	0	0	0	0	100	0	0
2023-11-12	NA	NA	AWAR KM 64	300-1000	0	0	0	0	26	0	0	NA	NA	NA	NA
2023-11-08	NA	NA	AWAR KM 63	50-100	0	15	0	15	6	0	0	15	0	15	2
2023-11-11	NA	NA	AWAR KM 8	300-1000	3	0	0	0	3	3	0	3	0	3	0
2023-11-11	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 60	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-01	NA	NA	Haul Road KM 117	100-300	0	1	0	0	0	0	0	1	0	0	0
2023-11-17	NA	NA	AWAR KM 93	>1000	0	43	7	0	0	0	0	44	6	0	0
2023-11-18	NA	NA	AWAR KM 55	>1000	0	25	0	0	0	0	0	25	0	0	0
2023-12-06	NA	NA	AWAR KM 49	100-300	0	0	0	0	5	0	0	0	0	0	5
2023-12-06	NA	NA	AWAR KM 19	>1000	0	0	2	0	0	0	0	0	2	0	0
2023-12-01	NA	NA	AWAR KM 57	0-50	0	3	0	1	0	0	0	3	0	0	0
2023-12-08	NA	NA	AWAR KM 17	>1000	0	0	0	13	0	0	0	0	0	0	13
2023-12-12	NA	NA	AWAR KM 56	300-1000	0	5	0	0	7	0	0	0	0	0	12
2023-12-16	NA	NA	AWAR KM 73	300-1000	0	1	0	1	0	1	0	1	0	1	0
2023-12-17	NA	NA	AWAR KM 67	>1000	0	43	0	43	0	0	0	43	0	43	0
2023-12-18	NA	NA	AWAR KM 65	300-1000	0	187	0	187	0	0	0	187	0	187	0
2024-01-01	NA	NA	AWAR KM 53	300-1000	0	60	0	0	0	0	0	60	0	0	0
2024-01-02	NA	NA	AWAR KM 68	300-1000	0	32	12	0	0	0	0	32	12	0	0
2024-01-04	NA	NA	AWAR KM 61	300-1000	0	25	0	0	0	0	0	25	0	0	0
2024-01-06	NA	NA	AWAR KM 67	300-1000	0	24	0	0	0	0	3	0	0	0	0
2024-01-11	NA	NA	AWAR KM 17	>1000	0	13	0	43	30	0	0	0	0	0	43
2024-02-10	NA	NA	AWAR KM 57	100-300	0	19	8	0	0	0	0	12	8	2	5
2024-02-21	NA	NA	AWAR KM 97	100-300	0	1	3	0	0	0	0	0	4	0	0
2024-03-09	NA	NA	AWAR KM 55	100-300	0	8	2	1	1	0	0	10	2	0	0
2024-04-06	NA	NA	Haul Road KM 139	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-04-06	NA	NA	Haul Road KM 147	300-1000	0	9	0	0	0	0	0	9	0	0	0
2024-04-08	NA	NA	Haul Road KM 115	300-1000	0	0	0	0	0	0	45	15	0	0	0
2024-04-11	NA	NA	Haul Road KM 139	300-1000	0	0	56	0	0	0	0	0	56	0	0
2024-04-15	NA	NA	AWAR KM 102	100-300	0	2	10	0	0	0	0	2	10	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2023-10-28	NA	NA	AWAR KM 9	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-28	NA	NA	AWAR KM 9	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-31	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 47	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-29	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-07	NA	NA	AWAR KM 60	100-300	0	0	0	0	0	100	0	0	0	0	0
2023-11-06	NA	NA	AWAR KM 77	100-300	0	0	0	0	0	2	0	0	0	0	0
2023-11-09	NA	NA	AWAR KM 40	300-1000	0	0	0	100	0	0	0	0	0	100	0
2023-11-12	NA	NA	AWAR KM 64	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-08	NA	NA	AWAR KM 63	50-100	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 8	300-1000	3	0	3	0	3	0	3	0	3	0	3
2023-11-11	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 60	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-01	NA	NA	Haul Road KM 117	100-300	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-17	NA	NA	AWAR KM 93	>1000	0	0	39	6	5	0	0	0	44	6	0
2023-11-18	NA	NA	AWAR KM 55	>1000	0	0	23	0	2	0	0	0	25	0	0
2023-12-06	NA	NA	AWAR KM 49	100-300	0	0	0	0	0	5	0	0	0	0	0
2023-12-06	NA	NA	AWAR KM 19	>1000	0	0	0	2	0	0	0	0	0	2	0
2023-12-01	NA	NA	AWAR KM 57	0-50	0	0	3	0	0	1	0	0	4	0	0
2023-12-08	NA	NA	AWAR KM 17	>1000	0	0	0	0	0	13	0	0	0	0	13
2023-12-12	NA	NA	AWAR KM 56	300-1000	0	0	0	0	0	12	0	0	0	0	0
2023-12-16	NA	NA	AWAR KM 73	300-1000	1	0	0	1	0	0	1	0	0	1	0
2023-12-17	NA	NA	AWAR KM 67	>1000	0	0	43	0	43	0	0	0	43	0	43
2023-12-18	NA	NA	AWAR KM 65	300-1000	0	0	187	0	187	0	0	0	187	0	187
2024-01-01	NA	NA	AWAR KM 53	300-1000	0	0	60	0	0	0	0	0	60	0	0
2024-01-02	NA	NA	AWAR KM 68	300-1000	0	0	32	12	0	0	0	0	32	12	0
2024-01-04	NA	NA	AWAR KM 61	300-1000	0	0	0	0	0	25	0	0	0	0	0
2024-01-06	NA	NA	AWAR KM 67	300-1000	0	0	27	0	0	0	0	0	26	0	0
2024-01-11	NA	NA	AWAR KM 17	>1000	0	0	0	0	0	43	0	0	NA	NA	NA
2024-02-10	NA	NA	AWAR KM 57	100-300	0	0	11	9	4	3	0	0	15	9	3
2024-02-21	NA	NA	AWAR KM 97	100-300	0	0	1	3	0	0	0	0	1	3	0
2024-03-09	NA	NA	AWAR KM 55	100-300	0	0	5	2	0	5	0	0	10	2	0
2024-04-06	NA	NA	Haul Road KM 139	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-04-06	NA	NA	Haul Road KM 147	300-1000	0	0	9	0	0	0	0	0	9	0	0
2024-04-08	NA	NA	Haul Road KM 115	300-1000	0	0	15	0	0	0	0	0	15	0	0
2024-04-11	NA	NA	Haul Road KM 139	300-1000	0	0	0	56	0	0	0	0	0	56	0
2024-04-15	NA	NA	AWAR KM 102	100-300	0	0	1	11	0	0	0	0	1	11	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2023-10-28	NA	NA	AWAR KM 9	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-28	NA	NA	AWAR KM 9	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-31	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 47	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-10-29	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-07	NA	NA	AWAR KM 60	100-300	100	0	0	0	0	0	100	0	0
2023-11-06	NA	NA	AWAR KM 77	100-300	2	0	0	0	0	0	2	0	0
2023-11-09	NA	NA	AWAR KM 40	300-1000	0	0	0	0	100	0	0	0	0
2023-11-12	NA	NA	AWAR KM 64	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-08	NA	NA	AWAR KM 63	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 8	300-1000	0	3	0	3	0	3	3	3	0
2023-11-11	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 60	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-01	NA	NA	Haul Road KM 117	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2023-11-17	NA	NA	AWAR KM 93	>1000	0	0	0	43	7	0	0	0	0
2023-11-18	NA	NA	AWAR KM 55	>1000	0	0	0	20	0	1	4	0	0
2023-12-06	NA	NA	AWAR KM 49	100-300	5	0	0	0	0	0	5	0	0
2023-12-06	NA	NA	AWAR KM 19	>1000	0	0	0	0	0	0	0	0	0
2023-12-01	NA	NA	AWAR KM 57	0-50	0	0	0	4	0	0	0	0	0
2023-12-08	NA	NA	AWAR KM 17	>1000	0	0	0	0	0	0	13	0	0
2023-12-12	NA	NA	AWAR KM 56	300-1000	12	0	0	0	0	0	12	0	0
2023-12-16	NA	NA	AWAR KM 73	300-1000	0	1	0	0	1	0	0	1	0
2023-12-17	NA	NA	AWAR KM 67	>1000	0	0	0	43	0	43	0	0	0
2023-12-18	NA	NA	AWAR KM 65	300-1000	0	0	0	187	0	187	0	0	0
2024-01-01	NA	NA	AWAR KM 53	300-1000	0	0	0	60	0	0	0	0	0
2024-01-02	NA	NA	AWAR KM 68	300-1000	0	0	0	32	12	0	0	0	0
2024-01-04	NA	NA	AWAR KM 61	300-1000	25	0	0	25	0	0	0	0	0
2024-01-06	NA	NA	AWAR KM 67	300-1000	1	0	0	27	0	0	0	0	0
2024-01-11	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-02-10	NA	NA	AWAR KM 57	100-300	0	0	0	8	9	6	4	0	0
2024-02-21	NA	NA	AWAR KM 97	100-300	0	0	0	1	3	0	0	0	0
2024-03-09	NA	NA	AWAR KM 55	100-300	0	0	0	10	2	0	0	0	0
2024-04-06	NA	NA	Haul Road KM 139	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-04-06	NA	NA	Haul Road KM 147	300-1000	0	0	0	9	0	0	0	0	0
2024-04-08	NA	NA	Haul Road KM 115	300-1000	0	0	0	15	0	0	0	0	0
2024-04-11	NA	NA	Haul Road KM 139	300-1000	0	0	0	0	56	0	0	0	0
2024-04-15	NA	NA	AWAR KM 102	100-300	0	0	0	0	12	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2023-10-28	NA	NA	AWAR KM 9	50-100	Aircraft	NA	NA	NA	NA	NA
2023-10-28	NA	NA	AWAR KM 9	300-1000	NA	NA	NA	NA	NA	NA
2023-10-31	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	NA
2023-11-02	NA	NA	AWAR KM 47	0-50	NA	NA	NA	NA	NA	NA
2023-10-29	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	Heavy equipment	NA	NA
2023-11-07	NA	NA	AWAR KM 60	100-300	NA	NA	NA	NA	NA	NA
2023-11-06	NA	NA	AWAR KM 77	100-300	NA	NA	NA	NA	NA	NA
2023-11-09	NA	NA	AWAR KM 40	300-1000	NA	NA	NA	NA	NA	NA
2023-11-12	NA	NA	AWAR KM 64	300-1000	NA	NA	NA	NA	NA	NA
2023-11-08	NA	NA	AWAR KM 63	50-100	NA	NA	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 8	300-1000	NA	NA	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 17	>1000	Aircraft	Aircraft	NA	NA	NA	NA
2023-11-11	NA	NA	AWAR KM 60	300-1000	NA	NA	NA	NA	NA	NA
2023-11-01	NA	NA	Haul Road KM 117	100-300	Convoy	NA	Heavy equipment	NA	Heavy equipment	Light truck
2023-11-17	NA	NA	AWAR KM 93	>1000	NA	NA	NA	NA	NA	NA
2023-11-18	NA	NA	AWAR KM 55	>1000	NA	NA	NA	NA	NA	NA
2023-12-06	NA	NA	AWAR KM 49	100-300	NA	NA	NA	NA	NA	NA
2023-12-06	NA	NA	AWAR KM 19	>1000	NA	NA	NA	NA	NA	NA
2023-12-01	NA	NA	AWAR KM 57	0-50	NA	NA	NA	NA	NA	NA
2023-12-08	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	NA
2023-12-12	NA	NA	AWAR KM 56	300-1000	NA	NA	NA	NA	NA	NA
2023-12-16	NA	NA	AWAR KM 73	300-1000	NA	NA	NA	NA	NA	NA
2023-12-17	NA	NA	AWAR KM 67	>1000	NA	NA	NA	NA	NA	NA
2023-12-18	NA	NA	AWAR KM 65	300-1000	NA	NA	NA	NA	NA	NA
2024-01-01	NA	NA	AWAR KM 53	300-1000	NA	NA	NA	NA	NA	NA
2024-01-02	NA	NA	AWAR KM 68	300-1000	NA	NA	NA	NA	NA	NA
2024-01-04	NA	NA	AWAR KM 61	300-1000	NA	NA	NA	NA	NA	NA
2024-01-06	NA	NA	AWAR KM 67	300-1000	NA	NA	Tanker	NA	NA	NA
2024-01-11	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	NA
2024-02-10	NA	NA	AWAR KM 57	100-300	NA	NA	NA	NA	NA	NA
2024-02-21	NA	NA	AWAR KM 97	100-300	NA	NA	Tanker	NA	Maintenance vehicle	NA
2024-03-09	NA	NA	AWAR KM 55	100-300	NA	NA	NA	NA	NA	NA
2024-04-06	NA	NA	Haul Road KM 139	50-100	NA	Heavy equipment	NA	NA	NA	NA
2024-04-06	NA	NA	Haul Road KM 147	300-1000	Heavy equipment	NA	Heavy equipment	Heavy equipment	NA	NA
2024-04-08	NA	NA	Haul Road KM 115	300-1000	NA	NA	NA	NA	NA	NA
2024-04-11	NA	NA	Haul Road KM 139	300-1000	NA	NA	NA	NA	NA	NA
2024-04-15	NA	NA	AWAR KM 102	100-300	NA	NA	Convoy	NA	NA	NA

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2023-10-28	NA	NA	AWAR KM 9	50-100	NA	NA	NA	NA	NA	2023	-96.0737	65.02118	Yes
2023-10-28	NA	NA	AWAR KM 9	300-1000	NA	NA	NA	NA	NA	2023	-96.0149	64.38831	No
2023-10-31	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	2023	-96.3733	64.67999	No
2023-11-02	NA	NA	AWAR KM 50	100-300	NA	NA	NA	NA	NA	2023	-96.372	64.67627	No
2023-11-02	NA	NA	AWAR KM 47	0-50	NA	NA	NA	NA	NA	2023	-96.3344	64.65619	No
2023-10-29	NA	NA	Haul Road KM 154	300-1000	NA	NA	NA	NA	NA	2023	-96.6666	65.40143	Yes
2023-11-07	NA	NA	AWAR KM 60	100-300	NA	NA	NA	NA	NA	2023	-96.3709	64.74805	Yes
2023-11-06	NA	NA	AWAR KM 77	100-300	NA	NA	NA	NA	NA	2023	-96.3381	64.89557	No
2023-11-09	NA	NA	AWAR KM 40	300-1000	NA	NA	NA	NA	NA	2023	-96.2801	64.61932	No
2023-11-12	NA	NA	AWAR KM 64	300-1000	NA	NA	NA	NA	NA	2023	-96.3378	64.78827	Yes
2023-11-08	NA	NA	AWAR KM 63	50-100	NA	NA	NA	NA	NA	2023	-96.3471	64.76984	No
2023-11-11	NA	NA	AWAR KM 8	300-1000	NA	NA	NA	NA	NA	2023	-96.0158	64.38208	No
2023-11-11	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	2023	-96.0802	64.45459	No
2023-11-11	NA	NA	AWAR KM 60	300-1000	NA	NA	NA	NA	NA	2023	-96.362	64.75671	No
2023-11-01	NA	NA	Haul Road KM 117	100-300	NA	NA	NA	NA	NA	2023	-96.0322	65.08325	Yes
2023-11-17	NA	NA	AWAR KM 93	>1000	NA	NA	NA	NA	NA	2023	-96.2207	64.99854	Yes
2023-11-18	NA	NA	AWAR KM 55	>1000	NA	NA	NA	NA	NA	2023	-96.3419	64.72253	Yes
2023-12-06	NA	NA	AWAR KM 49	100-300	NA	NA	NA	NA	NA	2023	-96.3707	64.66748	No
2023-12-06	NA	NA	AWAR KM 19	>1000	NA	NA	NA	NA	NA	2023	-96.0852	64.46765	No
2023-12-01	NA	NA	AWAR KM 57	0-50	NA	NA	NA	NA	NA	2023	-96.358	64.72729	No
2023-12-08	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	2023	-96.0776	64.45355	Yes
2023-12-12	NA	NA	AWAR KM 56	300-1000	NA	NA	NA	NA	NA	2023	-96.3592	64.72797	Yes
2023-12-16	NA	NA	AWAR KM 73	300-1000	NA	NA	NA	NA	NA	2023	-96.3238	64.85175	No
2023-12-17	NA	NA	AWAR KM 67	>1000	NA	NA	NA	NA	NA	2023	-96.3248	64.8139	No
2023-12-18	NA	NA	AWAR KM 65	300-1000	NA	NA	NA	NA	NA	2023	-96.3368	64.78894	No
2024-01-01	NA	NA	AWAR KM 53	300-1000	NA	NA	NA	NA	NA	2024	-96.3731	64.70605	Yes
2024-01-02	NA	NA	AWAR KM 68	300-1000	NA	NA	NA	NA	NA	2024	-96.3265	64.82104	No
2024-01-04	NA	NA	AWAR KM 61	300-1000	NA	NA	NA	NA	NA	2024	-96.3539	64.76385	Yes
2024-01-06	NA	NA	AWAR KM 67	300-1000	NA	NA	NA	NA	NA	2024	-96.3247	64.81409	Yes
2024-01-11	NA	NA	AWAR KM 17	>1000	NA	NA	NA	NA	NA	2024	-96.0707	64.45087	No
2024-02-10	NA	NA	AWAR KM 57	100-300	NA	NA	NA	NA	NA	2024	-96.3582	64.72717	Yes
2024-02-21	NA	NA	AWAR KM 97	100-300	NA	NA	NA	Maintenance vehicle	NA	2024	-96.1676	65.0271	No
2024-03-09	NA	NA	AWAR KM 55	100-300	NA	NA	NA	NA	NA	2024	-96.3467	64.71832	Yes
2024-04-06	NA	NA	Haul Road KM 139	50-100	NA	NA	NA	NA	NA	2024	-96.2113	65.20966	No
2024-04-06	NA	NA	Haul Road KM 147	300-1000	Heavy equipment	NA	Heavy equipment	Heavy equipment	NA	2024	-96.4263	65.22235	Yes
2024-04-08	NA	NA	Haul Road KM 115	300-1000	NA	NA	NA	Heavy equipment	NA	2024	-96.0052	65.06836	Yes
2024-04-11	NA	NA	Haul Road KM 139	300-1000	NA	NA	NA	NA	NA	2024	-96.2819	65.22687	No
2024-04-15	NA	NA	AWAR KM 102	100-300	NA	Light truck	NA	NA	NA	2024	-96.1291	65.05353	Yes

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2024-04-16	NA	NA	AWAR KM 78	300-1000	Ella Stables	NA	250	West	No	11	-10	30	SE	90
2024-04-18	NA	NA	AWAR KM 97	100-300	Ella Stables	NA	300	East	No	3	-21	15	SE	0
2024-04-18	NA	NA	AWAR KM 93	>1000	Ella Stables	NA	180	West	No	97	-21	15	SE	0
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	Laurence Archambault, Guillaume Baril	NA	260	West	NA	10	-9	9	N	81
2024-04-23	NA	NA	AWAR KM 56	100-300	Ella Stables	NA	0	East	No	2	-19	20	SW	0
2024-04-22	NA	NA	AWAR KM 54	100-300	Ella Stables	NA	90	West	No	2	-19	15	N	0
2024-04-22	NA	NA	AWAR KM 97	100-300	Jeffrey Pratt	NA	190	East	No	7	-19	15	N	85
2024-04-25	NA	NA	AWAR KM 36	100-300	Ella Stables	NA	270	West	No	2	-15	20	NW	0
2024-04-24	NA	NA	AWAR KM 37	100-300	JP	NA	90	East	No	2	-12	15	N	1
2024-04-22	NA	NA	Haul Road KM 123	300-1000	Thomas Dahm	NA	180	West	No	144	-17	15	NW	73
2024-04-22	NA	NA	Haul Road KM 121	300-1000	Thomas Dahm	NA	200	West	No	46	-17	15	NW	73
2024-04-23	NA	NA	AWAR KM 93	300-1000	Jeff Pratt, Thomas Dahm	NA	270	West	No	80	-17	20	SW	65
2024-04-25	NA	NA	Haul Road KM 123	50-100	Ella Stables	NA	300	West	Yes	2	-10	20	W	90
2024-04-19	NA	NA	AWAR KM 86	300-1000	Ella Stables	NA	180	West	No	55	-19	15	SW	88
2024-04-19	NA	NA	AWAR KM 86	300-1000	Ella Stables	NA	260	West	No	26	-19	15	SW	87
2024-04-19	NA	NA	AWAR KM 86	300-1000	Ella Stables	NA	300	West	No	6	-14	15	SW	88
2024-05-05	NA	NA	AWAR KM 100	300-1000	Derek	NA	200	West	No	42	4	30	E	60
2024-04-23	NA	NA	Haul Road KM 177	>1000	Laurence Archambault	NA	200	West	No	NA	-18	16	NW	81
2024-04-23	NA	NA	Haul Road KM 175	>1000	Laurence Archambault	NA	200	West	No	53	-13	16	NW	81
2024-05-09	NA	NA	AWAR KM 65	300-1000	Thomas Dahm	NA	230	West	No	2	0	5	NW	87
2024-05-12	NA	NA	AWAR KM 100	>1000	Ella Stables	NA	180	West	No	32	-4	20	W	0
2024-05-09	NA	NA	AWAR KM 74	300-1000	Thomas, Derek	NA	200	West	No	2	0	15	N	50
2024-05-08	NA	NA	AWAR KM 82	300-1000	Derek	NA	0	West	No	34	0	6	N	60
2024-05-09	NA	NA	AWAR KM 107	100-300	LJ, JC	NA	66	East	No	17	0	6	N	20
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	Jeff Pratt	NA	350	West	No	3	10	11	NW	0
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	Laurence Archambault, Nicholas Andreotte	NA	300	West	No	3	10	20	NE	96
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	Laurence Archambault, Nicholas Andreotte	NA	180	West	No	2	13	25	NW	74
2024-05-09	NA	NA	Haul Road KM 177	100-300	LA EL	NA	260	West	NA	40	1	31	W	80
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	GB, NA, JZ	NA	20	East	No	1	19	20	NE	37
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	Laurence Archambault, Jeffrey Pratt	NA	25	East	NA	1	23	30	W	74
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	Laurence Archambault, Nicholas Andreotte	NA	255	West	No	1	9	17	SE	100
2024-10-05	NA	NA	AWAR KM 19	>1000	Thomas Dahm	NA	90	East	No	38	0	30	NW	75
2024-10-15	NA	NA	AWAR KM 33	300-1000	Renee Pudnak	NA	5	East	NA	12	6	50	SW	10
2024-10-17	NA	NA	AWAR KM 76	300-1000	Jessica Crook	NA	165	Both	No	148	0	40	SW	100
2024-10-20	NA	NA	AWAR KM 59	100-300	Renee Pudnak	NA	10	East	No	41	-3	70	W	0
2024-10-22	NA	NA	AWAR KM 59	0-50	Jessica Crook	NA	25	West	NA	3	-9	5	NW	90
2024-10-27	NA	NA	AWAR KM 14	>1000	Thomas Dahm	NA	90	East	No	94	-8	8	W	67
2024-10-27	NA	NA	AWAR KM 13	>1000	Thomas Dahm	NA	135	West	Yes	100	-8	20	W	0
2024-10-28	NA	NA	AWAR KM 80	300-1000	Eric Leonard	NA	285	West	No	16	-2	20	S	89

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2024-04-16	NA	NA	AWAR KM 78	300-1000	0	Precipitation: Snowing in the mornng and early afternoon, just stopped approximately 1 h ago; strong winds, likely more than 30 km/h, probably closer to 40-50 km/h at least; a lot of blowing snow; visibility is only at maximum 1000 m	100	300	NA
2024-04-18	NA	NA	AWAR KM 97	100-300	1	Precipitation: 0; sunny, clear	100	500	NA
2024-04-18	NA	NA	AWAR KM 93	>1000	1	Precipitation: 0; sunny, clear	1500	500	NA
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	0	Precipitation: Snow blow snow due to high wind, started around 17:30, making the visibility worse	0	2000	None
2024-04-23	NA	NA	AWAR KM 56	100-300	0	Precipitation: 0; light snow last night	100	600	NA
2024-04-22	NA	NA	AWAR KM 54	100-300	2	Precipitation: 0; sunny, clear	0	500	NA
2024-04-22	NA	NA	AWAR KM 97	100-300	3	Precipitation: No	100	500	None
2024-04-25	NA	NA	AWAR KM 36	100-300	0	Precipitation: Overcast and snow last night; overcast	0	600	NA
2024-04-24	NA	NA	AWAR KM 37	100-300	1	Precipitation: 0; overcast	100	500	None
2024-04-22	NA	NA	Haul Road KM 123	300-1000	2	Precipitation: 0; sunny, clear	200	1000	0
2024-04-22	NA	NA	Haul Road KM 121	300-1000	2	Precipitation: 0; sunny, clear	300	1000	0
2024-04-23	NA	NA	AWAR KM 93	300-1000	4	Precipitation: 0	200	1000	0
2024-04-25	NA	NA	Haul Road KM 123	50-100	0	Precipitation: 0; cloudy	1000	1000	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	Precipitation: 0; clear	0	700	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	Precipitation: 0; clear	0	700	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	Precipitation: 0; clear	0	700	0
2024-05-05	NA	NA	AWAR KM 100	300-1000	1	Precipitation: Sunny	200	1400	None
2024-04-23	NA	NA	Haul Road KM 177	>1000	0	Precipitation: 0; sunny, cloudy	100	2500	None
2024-04-23	NA	NA	Haul Road KM 175	>1000	0	Precipitation: 0; cloudy	100	2500	None
2024-05-09	NA	NA	AWAR KM 65	300-1000	7	Precipitation: 0; overcast	1000	1000	0
2024-05-12	NA	NA	AWAR KM 100	>1000	1	Precipitation: No precipitation, wind was 50 km/h yesterday; today clear skies and sunny	1500	1000	NA
2024-05-09	NA	NA	AWAR KM 74	300-1000	1	Precipitation: Cloudy	100	1600	None
2024-05-08	NA	NA	AWAR KM 82	300-1000	2	Precipitation: Cloudy	100	1500	None
2024-05-09	NA	NA	AWAR KM 107	100-300	4	Precipitation: 0; overcast with a drizzle	400	900	NA
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	1	Precipitation: 0	100	800	NA
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	0	Precipitation: 0; overcast	300	2500	0
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	0	Precipitation: Light rain in AM	300	2500	None
2024-05-09	NA	NA	Haul Road KM 177	100-300	0	Precipitation: 0	300	2500	None
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	0	Precipitation: 0; sunny	200	1000	NA
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	0	Precipitation: 0; Smoky	100	1000	NA
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	0	Precipitation: None	0	1000	WT WRSF
2024-10-05	NA	NA	AWAR KM 19	>1000	1	Precipitation: 0; clear, windy	500	1000	0
2024-10-15	NA	NA	AWAR KM 33	300-1000	2	Precipitation: Rain	100	200	NA
2024-10-17	NA	NA	AWAR KM 76	300-1000	4	Precipitation: 0; weather was sunny with some wind and high of 2°C	200	1000	0
2024-10-20	NA	NA	AWAR KM 59	100-300	1	Precipitation: Windy	100	200	0
2024-10-22	NA	NA	AWAR KM 59	0-50	2	Precipitation: Sunny, partly cloudy	0	1000	0
2024-10-27	NA	NA	AWAR KM 14	>1000	0	Precipitation: 0; overcast	1000	1500	0
2024-10-27	NA	NA	AWAR KM 13	>1000	0	Precipitation: 0; overcast	1000	1500	0
2024-10-28	NA	NA	AWAR KM 80	300-1000	0	Precipitation: 0; windy, overcast	0	1500	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2024-04-16	NA	NA	AWAR KM 78	300-1000	0	11	0	0	0	0	0	11	0	0	0	0
2024-04-18	NA	NA	AWAR KM 97	100-300	3	0	0	0	0	0	2	0	0	0	1	0
2024-04-18	NA	NA	AWAR KM 93	>1000	28	12	2	8	0	0	30	12	0	8	0	0
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	10	0	0	0	0	0	10	0	0	0	0	0
2024-04-23	NA	NA	AWAR KM 56	100-300	2	0	0	0	0	0	1	0	0	1	0	0
2024-04-22	NA	NA	AWAR KM 54	100-300	2	0	0	0	0	0	1	0	0	1	0	0
2024-04-22	NA	NA	AWAR KM 97	100-300	7	0	0	0	0	0	6	0	0	0	0	0
2024-04-25	NA	NA	AWAR KM 36	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2024-04-24	NA	NA	AWAR KM 37	100-300	0	2	0	0	0	0	0	2	0	0	0	0
2024-04-22	NA	NA	Haul Road KM 123	300-1000	144	0	0	0	0	0	144	0	0	0	0	0
2024-04-22	NA	NA	Haul Road KM 121	300-1000	46	0	0	0	0	0	46	0	0	0	0	0
2024-04-23	NA	NA	AWAR KM 93	300-1000	0	8	0	72	0	0	81	5	0	24	0	0
2024-04-25	NA	NA	Haul Road KM 123	50-100	0	0	0	2	0	0	0	0	0	2	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	42	7	4	2	0	0	NA	NA	NA	NA	NA	NA
2024-04-19	NA	NA	AWAR KM 86	300-1000	10	0	5	11	0	0	12	0	2	12	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	0	6	0	0	0	0	0	6	0	0
2024-05-05	NA	NA	AWAR KM 100	300-1000	42	0	0	0	0	0	42	0	0	0	0	0
2024-04-23	NA	NA	Haul Road KM 177	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-04-23	NA	NA	Haul Road KM 175	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-09	NA	NA	AWAR KM 65	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2024-05-12	NA	NA	AWAR KM 100	>1000	7	15	0	10	0	0	7	15	2	8	0	0
2024-05-09	NA	NA	AWAR KM 74	300-1000	0	0	2	0	0	0	0	0	0	2	0	0
2024-05-08	NA	NA	AWAR KM 82	300-1000	0	0	0	34	0	0	8	0	3	23	0	0
2024-05-09	NA	NA	AWAR KM 107	100-300	3	14	0	0	0	0	1	16	0	0	0	0
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	3	0	0	0	0	0	3	0	0	0	0	0
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-09	NA	NA	Haul Road KM 177	100-300	40	0	0	0	0	0	40	0	0	0	0	0
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	0	0	1	0	0	0	0	0	1	0	0	0
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	0	0	0	0	0	1	NA	NA	NA	NA	NA	NA
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-05	NA	NA	AWAR KM 19	>1000	13	0	0	25	0	0	38	0	0	0	0	0
2024-10-15	NA	NA	AWAR KM 33	300-1000	8	0	8	0	8	0	8	0	8	0	0	0
2024-10-17	NA	NA	AWAR KM 76	300-1000	33	20	20	16	0	0	40	10	29	10	0	0
2024-10-20	NA	NA	AWAR KM 59	100-300	0	33	0	0	0	0	0	33	0	0	0	0
2024-10-22	NA	NA	AWAR KM 59	0-50	1	0	0	1	0	0	NA	NA	NA	NA	NA	NA
2024-10-27	NA	NA	AWAR KM 14	>1000	75	10	9	0	0	0	85	5	4	0	0	0
2024-10-27	NA	NA	AWAR KM 13	>1000	0	0	0	100	0	0	0	0	0	100	0	0
2024-10-28	NA	NA	AWAR KM 80	300-1000	16	0	0	0	0	0	12	0	0	4	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2024-04-16	NA	NA	AWAR KM 78	300-1000	0	11	0	0	0	0	0	11	0	0	0	0
2024-04-18	NA	NA	AWAR KM 97	100-300	3	0	0	0	0	0	3	0	0	0	0	0
2024-04-18	NA	NA	AWAR KM 93	>1000	30	12	6	2	0	0	35	13	2	0	0	0
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	0	0	0	0	0	0	0	0	0	0	0	0
2024-04-23	NA	NA	AWAR KM 56	100-300	1	0	0	1	0	0	NA	NA	NA	NA	NA	NA
2024-04-22	NA	NA	AWAR KM 54	100-300	2	0	0	0	0	0	1	0	0	1	0	0
2024-04-22	NA	NA	AWAR KM 97	100-300	6	0	0	0	0	0	2	4	0	0	0	0
2024-04-25	NA	NA	AWAR KM 36	100-300	2	0	0	0	0	0	2	0	0	0	0	0
2024-04-24	NA	NA	AWAR KM 37	100-300	0	2	0	0	0	0	0	2	0	0	0	0
2024-04-22	NA	NA	Haul Road KM 123	300-1000	131	0	0	13	0	0	124	0	0	20	0	0
2024-04-22	NA	NA	Haul Road KM 121	300-1000	46	0	0	0	0	0	46	0	0	0	0	0
2024-04-23	NA	NA	AWAR KM 93	300-1000	78	2	0	7	0	0	79	4	0	10	0	0
2024-04-25	NA	NA	Haul Road KM 123	50-100	2	0	0	0	0	0	0	0	0	2	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	37	5	1	12	0	0	39	5	1	10	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	7	0	0	13	0	0	5	0	0	13	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	0	4	0	0	0	0	0	3	0	0
2024-05-05	NA	NA	AWAR KM 100	300-1000	42	0	0	0	0	0	41	1	0	0	0	0
2024-04-23	NA	NA	Haul Road KM 177	>1000	10	0	0	0	0	0	10	0	0	0	0	0
2024-04-23	NA	NA	Haul Road KM 175	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-09	NA	NA	AWAR KM 65	300-1000	2	0	0	0	0	0	2	0	0	0	0	0
2024-05-12	NA	NA	AWAR KM 100	>1000	10	15	0	7	0	0	8	12	2	10	0	0
2024-05-09	NA	NA	AWAR KM 74	300-1000	0	0	2	0	0	0	0	0	0	2	0	0
2024-05-08	NA	NA	AWAR KM 82	300-1000	8	0	5	21	0	0	15	0	6	12	0	0
2024-05-09	NA	NA	AWAR KM 107	100-300	0	15	2	0	2	0	1	16	0	0	0	0
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	3	0	0	0	0	0	0	0	0	0	0	0
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-09	NA	NA	Haul Road KM 177	100-300	40	0	0	0	0	0	0	0	0	0	0	0
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	0	0	1	0	0	0	0	0	1	0	0	0
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-05	NA	NA	AWAR KM 19	>1000	38	0	0	39	0	0	43	0	0	34	0	0
2024-10-15	NA	NA	AWAR KM 33	300-1000	0	0	0	8	8	0	12	0	0	0	0	0
2024-10-17	NA	NA	AWAR KM 76	300-1000	25	0	20	29	15	0	54	0	20	15	0	0
2024-10-20	NA	NA	AWAR KM 59	100-300	0	33	0	0	0	0	0	33	0	0	0	0
2024-10-22	NA	NA	AWAR KM 59	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-27	NA	NA	AWAR KM 14	>1000	94	0	0	0	0	0	94	0	0	0	0	0
2024-10-27	NA	NA	AWAR KM 13	>1000	0	0	0	100	0	0	0	0	0	100	0	0
2024-10-28	NA	NA	AWAR KM 80	300-1000	12	0	4	0	0	0	12	0	4	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2024-04-16	NA	NA	AWAR KM 78	300-1000	0	11	0	0	0	0	0	11	0	0	0
2024-04-18	NA	NA	AWAR KM 97	100-300	2	0	1	0	0	0	3	0	0	0	0
2024-04-18	NA	NA	AWAR KM 93	>1000	35	13	2	0	0	0	33	17	0	0	0
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-04-23	NA	NA	AWAR KM 56	100-300	2	0	0	0	0	0	2	0	0	0	0
2024-04-22	NA	NA	AWAR KM 54	100-300	2	0	0	0	0	0	1	0	0	1	0
2024-04-22	NA	NA	AWAR KM 97	100-300	1	4	0	1	0	0	2	4	0	0	0
2024-04-25	NA	NA	AWAR KM 36	100-300	2	0	0	0	0	0	2	0	0	0	0
2024-04-24	NA	NA	AWAR KM 37	100-300	0	2	0	0	0	0	0	2	0	0	0
2024-04-22	NA	NA	Haul Road KM 123	300-1000	112	0	0	32	0	0	80	0	0	64	0
2024-04-22	NA	NA	Haul Road KM 121	300-1000	46	0	0	0	0	0	30	0	0	16	0
2024-04-23	NA	NA	AWAR KM 93	300-1000	82	3	0	0	0	0	97	6	0	2	0
2024-04-25	NA	NA	Haul Road KM 123	50-100	0	0	0	2	0	0	0	0	0	2	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	30	4	6	15	0	0	36	4	8	7	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	3	0	0	12	0	0	2	0	0	9	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	0	1	0	0	0	0	0	0	0
2024-05-05	NA	NA	AWAR KM 100	300-1000	41	1	0	0	0	0	37	2	0	3	0
2024-04-23	NA	NA	Haul Road KM 177	>1000	10	0	0	0	0	0	5	0	0	5	0
2024-04-23	NA	NA	Haul Road KM 175	>1000	0	0	0	15	0	0	0	0	5	10	0
2024-05-09	NA	NA	AWAR KM 65	300-1000	2	0	0	0	0	0	2	0	0	0	0
2024-05-12	NA	NA	AWAR KM 100	>1000	8	12	0	12	0	0	5	12	0	15	0
2024-05-09	NA	NA	AWAR KM 74	300-1000	0	0	0	2	0	0	NA	NA	NA	NA	NA
2024-05-08	NA	NA	AWAR KM 82	300-1000	15	0	0	18	0	0	15	0	4	14	0
2024-05-09	NA	NA	AWAR KM 107	100-300	1	16	0	0	0	0	1	16	0	0	0
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	0	0	0	0	0	0	0	0	0	2	0
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-09	NA	NA	Haul Road KM 177	100-300	40	0	0	0	0	0	0	0	0	40	0
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	0	0	1	0	0	0	0	0	1	0	0
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-05	NA	NA	AWAR KM 19	>1000	33	0	0	44	0	0	17	0	0	60	0
2024-10-15	NA	NA	AWAR KM 33	300-1000	12	0	0	0	0	0	12	0	0	0	0
2024-10-17	NA	NA	AWAR KM 76	300-1000	54	0	20	15	0	0	70	0	14	5	0
2024-10-20	NA	NA	AWAR KM 59	100-300	0	33	0	0	0	0	0	33	0	0	0
2024-10-22	NA	NA	AWAR KM 59	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-27	NA	NA	AWAR KM 14	>1000	85	0	9	0	0	0	90	0	0	4	0
2024-10-27	NA	NA	AWAR KM 13	>1000	0	0	0	100	0	0	0	0	0	100	0
2024-10-28	NA	NA	AWAR KM 80	300-1000	12	2	2	0	0	0	15	1	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2024-04-16	NA	NA	AWAR KM 78	300-1000	0	0	11	0	0	0	0	0	9	2	0
2024-04-18	NA	NA	AWAR KM 97	100-300	0	3	0	0	0	0	0	3	0	0	0
2024-04-18	NA	NA	AWAR KM 93	>1000	0	33	17	0	0	0	0	29	17	0	4
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-04-23	NA	NA	AWAR KM 56	100-300	0	2	0	0	0	0	0	2	0	0	0
2024-04-22	NA	NA	AWAR KM 54	100-300	0	0	0	0	0	0	0	1	0	0	1
2024-04-22	NA	NA	AWAR KM 97	100-300	0	2	4	0	0	0	0	2	4	0	0
2024-04-25	NA	NA	AWAR KM 36	100-300	0	NA	NA	NA	NA	NA	NA	2	0	0	0
2024-04-24	NA	NA	AWAR KM 37	100-300	0	0	2	0	0	0	0	0	2	0	0
2024-04-22	NA	NA	Haul Road KM 123	300-1000	0	43	0	0	101	0	0	3	0	0	141
2024-04-22	NA	NA	Haul Road KM 121	300-1000	0	15	0	0	31	0	0	9	0	0	37
2024-04-23	NA	NA	AWAR KM 93	300-1000	0	78	7	0	0	0	0	75	6	0	0
2024-04-25	NA	NA	Haul Road KM 123	50-100	0	0	0	0	2	0	0	0	0	0	2
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	31	2	12	10	0	0	17	1	12	25
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	0	0	8	0	0	0	0	0	5
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	0	0	0	0	0	0	0	0	0
2024-05-05	NA	NA	AWAR KM 100	300-1000	0	37	3	0	2	0	0	32	4	3	0
2024-04-23	NA	NA	Haul Road KM 177	>1000	0	3	0	0	7	0	0	5	0	0	5
2024-04-23	NA	NA	Haul Road KM 175	>1000	0	0	0	2	13	0	0	15	0	0	0
2024-05-09	NA	NA	AWAR KM 65	300-1000	0	2	0	0	0	0	0	2	0	0	0
2024-05-12	NA	NA	AWAR KM 100	>1000	0	3	12	0	14	0	0	3	12	0	10
2024-05-09	NA	NA	AWAR KM 74	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-08	NA	NA	AWAR KM 82	300-1000	0	16	0	0	17	0	0	18	0	0	15
2024-05-09	NA	NA	AWAR KM 107	100-300	0	2	15	0	0	0	0	2	15	0	0
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	0	0	1	0	1	0	0	0	1	2	0
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	NA	0	0	2	0	0	0	NA	NA	NA	NA
2024-05-09	NA	NA	Haul Road KM 177	100-300	0	5	0	0	15	0	0	0	0	0	0
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	0	0	0	1	0	0	0	0	0	1	0
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-05	NA	NA	AWAR KM 19	>1000	0	62	0	0	15	0	0	77	0	0	0
2024-10-15	NA	NA	AWAR KM 33	300-1000	0	12	0	0	0	0	0	0	0	0	12
2024-10-17	NA	NA	AWAR KM 76	300-1000	0	70	0	14	5	0	0	70	0	14	5
2024-10-20	NA	NA	AWAR KM 59	100-300	0	0	0	0	41	41	0	0	0	0	0
2024-10-22	NA	NA	AWAR KM 59	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-27	NA	NA	AWAR KM 14	>1000	0	80	0	0	14	0	0	84	0	0	10
2024-10-27	NA	NA	AWAR KM 13	>1000	0	0	0	0	100	0	0	0	0	0	100
2024-10-28	NA	NA	AWAR KM 80	300-1000	0	15	0	1	0	0	0	15	0	0	1

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2024-04-16	NA	NA	AWAR KM 78	300-1000	0	0	0	7	4	0	0	0	0	5	4
2024-04-18	NA	NA	AWAR KM 97	100-300	0	0	0	0	0	3	0	0	2	1	0
2024-04-18	NA	NA	AWAR KM 93	>1000	0	0	28	17	0	5	0	0	32	14	3
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-04-23	NA	NA	AWAR KM 56	100-300	0	0	2	0	0	0	0	0	1	0	0
2024-04-22	NA	NA	AWAR KM 54	100-300	0	0	1	0	0	0	1	0	2	0	0
2024-04-22	NA	NA	AWAR KM 97	100-300	0	0	2	4	0	0	0	0	1	5	0
2024-04-25	NA	NA	AWAR KM 36	100-300	0	0	2	0	0	0	0	0	2	0	0
2024-04-24	NA	NA	AWAR KM 37	100-300	0	0	0	2	0	0	0	0	0	2	0
2024-04-22	NA	NA	Haul Road KM 123	300-1000	0	0	0	0	0	144	0	0	0	0	0
2024-04-22	NA	NA	Haul Road KM 121	300-1000	0	0	9	0	0	37	0	0	6	0	0
2024-04-23	NA	NA	AWAR KM 93	300-1000	0	0	87	14	0	2	0	0	76	8	0
2024-04-25	NA	NA	Haul Road KM 123	50-100	0	0	0	0	0	2	0	0	0	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	34	1	11	9	0	0	30	0	10
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	0	0	0	1	0	0	0	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	0	0	0	0	0	0	0	0	0
2024-05-05	NA	NA	AWAR KM 100	300-1000	3	0	28	4	6	4	0	0	35	3	1
2024-04-23	NA	NA	Haul Road KM 177	>1000	0	0	5	0	0	5	0	0	10	0	0
2024-04-23	NA	NA	Haul Road KM 175	>1000	0	0	15	0	0	0	0	0	15	0	0
2024-05-09	NA	NA	AWAR KM 65	300-1000	0	0	2	0	0	0	0	0	2	0	0
2024-05-12	NA	NA	AWAR KM 100	>1000	0	0	5	12	0	5	0	0	5	12	0
2024-05-09	NA	NA	AWAR KM 74	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-08	NA	NA	AWAR KM 82	300-1000	0	0	15	0	0	18	0	0	15	0	0
2024-05-09	NA	NA	AWAR KM 107	100-300	0	0	2	15	0	0	0	0	NA	NA	NA
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	0	0	1	2	0	0	0	0	1	2	0
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-09	NA	NA	Haul Road KM 177	100-300	0	0	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	0	0	0	0	1	0	0	0	0	0	1
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-05	NA	NA	AWAR KM 19	>1000	0	0	63	0	0	14	0	0	77	0	0
2024-10-15	NA	NA	AWAR KM 33	300-1000	12	0	0	0	0	12	12	0	0	0	0
2024-10-17	NA	NA	AWAR KM 76	300-1000	0	0	70	0	14	5	0	0	70	0	14
2024-10-20	NA	NA	AWAR KM 59	100-300	41	41	0	0	0	41	41	0	0	0	0
2024-10-22	NA	NA	AWAR KM 59	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-27	NA	NA	AWAR KM 14	>1000	0	0	94	0	0	0	0	0	80	0	14
2024-10-27	NA	NA	AWAR KM 13	>1000	0	0	0	0	0	100	0	0	0	0	0
2024-10-28	NA	NA	AWAR KM 80	300-1000	0	0	15	0	0	1	0	0	13	0	1

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2024-04-16	NA	NA	AWAR KM 78	300-1000	2	0	0	0	0	2	9	0	0
2024-04-18	NA	NA	AWAR KM 97	100-300	0	0	0	1	2	0	0	0	0
2024-04-18	NA	NA	AWAR KM 93	>1000	1	0	0	35	11	3	1	0	0
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-04-23	NA	NA	AWAR KM 56	100-300	1	0	0	0	0	0	2	0	0
2024-04-22	NA	NA	AWAR KM 54	100-300	0	0	0	2	0	0	0	0	0
2024-04-22	NA	NA	AWAR KM 97	100-300	0	0	0	1	5	0	0	0	0
2024-04-25	NA	NA	AWAR KM 36	100-300	0	0	0	2	0	0	0	0	0
2024-04-24	NA	NA	AWAR KM 37	100-300	0	0	0	0	2	0	0	0	0
2024-04-22	NA	NA	Haul Road KM 123	300-1000	144	0	0	0	0	0	144	0	0
2024-04-22	NA	NA	Haul Road KM 121	300-1000	40	0	0	6	0	0	40	0	0
2024-04-23	NA	NA	AWAR KM 93	300-1000	1	0	0	87	6	0	10	0	0
2024-04-25	NA	NA	Haul Road KM 123	50-100	2	0	0	0	0	0	2	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	15	0	0	31	0	5	19	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	0	0	0	0	0	0	0
2024-04-19	NA	NA	AWAR KM 86	300-1000	0	0	0	0	0	0	0	0	0
2024-05-05	NA	NA	AWAR KM 100	300-1000	3	0	0	38	4	0	0	0	0
2024-04-23	NA	NA	Haul Road KM 177	>1000	0	0	0	6	0	2	2	0	0
2024-04-23	NA	NA	Haul Road KM 175	>1000	0	0	0	15	0	0	0	0	0
2024-05-09	NA	NA	AWAR KM 65	300-1000	0	0	0	2	0	0	0	0	0
2024-05-12	NA	NA	AWAR KM 100	>1000	2	0	0	5	12	0	2	0	0
2024-05-09	NA	NA	AWAR KM 74	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-08	NA	NA	AWAR KM 82	300-1000	0	0	0	10	0	0	5	0	0
2024-05-09	NA	NA	AWAR KM 107	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	0	0	0	1	2	0	0	0	0
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-05-09	NA	NA	Haul Road KM 177	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	0	0	0	0	0	1	0	0	0
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-05	NA	NA	AWAR KM 19	>1000	0	0	0	77	0	0	0	0	0
2024-10-15	NA	NA	AWAR KM 33	300-1000	12	12	12	NA	NA	NA	NA	NA	NA
2024-10-17	NA	NA	AWAR KM 76	300-1000	5	0	0	0	0	0	20	5	64
2024-10-20	NA	NA	AWAR KM 59	100-300	41	41	0	NA	NA	NA	NA	NA	NA
2024-10-22	NA	NA	AWAR KM 59	0-50	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-10-27	NA	NA	AWAR KM 14	>1000	0	0	0	55	0	10	29	0	0
2024-10-27	NA	NA	AWAR KM 13	>1000	100	0	0	0	0	0	100	0	0
2024-10-28	NA	NA	AWAR KM 80	300-1000	2	0	0	14	0	0	0	2	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2024-04-16	NA	NA	AWAR KM 78	300-1000	NA	NA	NA	Maintenance vehicle	NA	NA
2024-04-18	NA	NA	AWAR KM 97	100-300	NA	Light truck	NA	NA	NA	NA
2024-04-18	NA	NA	AWAR KM 93	>1000	Light truck	NA	NA	NA	NA	NA
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	Blast	NA	NA	NA	NA	NA
2024-04-23	NA	NA	AWAR KM 56	100-300	NA	NA	Tanker	Maintenance vehicle	NA	NA
2024-04-22	NA	NA	AWAR KM 54	100-300	NA	NA	Tanker	NA	NA	NA
2024-04-22	NA	NA	AWAR KM 97	100-300	NA	NA	NA	NA	NA	Tanker
2024-04-25	NA	NA	AWAR KM 36	100-300	NA	NA	NA	Light truck	NA	NA
2024-04-24	NA	NA	AWAR KM 37	100-300	NA	NA	NA	NA	Tanker	Convoy
2024-04-22	NA	NA	Haul Road KM 123	300-1000	NA	NA	NA	NA	NA	NA
2024-04-22	NA	NA	Haul Road KM 121	300-1000	NA	NA	NA	NA	NA	NA
2024-04-23	NA	NA	AWAR KM 93	300-1000	NA	NA	NA	NA	NA	NA
2024-04-25	NA	NA	Haul Road KM 123	50-100	NA	NA	NA	NA	NA	NA
2024-04-19	NA	NA	AWAR KM 86	300-1000	NA	NA	NA	NA	NA	NA
2024-04-19	NA	NA	AWAR KM 86	300-1000	NA	NA	NA	NA	Convoy	NA
2024-04-19	NA	NA	AWAR KM 86	300-1000	NA	NA	NA	NA	NA	NA
2024-05-05	NA	NA	AWAR KM 100	300-1000	NA	NA	NA	NA	NA	NA
2024-04-23	NA	NA	Haul Road KM 177	>1000	NA	NA	NA	Convoy	NA	NA
2024-04-23	NA	NA	Haul Road KM 175	>1000	NA	NA	Convoy	NA	NA	NA
2024-05-09	NA	NA	AWAR KM 65	300-1000	NA	NA	NA	NA	NA	NA
2024-05-12	NA	NA	AWAR KM 100	>1000	NA	NA	NA	NA	NA	NA
2024-05-09	NA	NA	AWAR KM 74	300-1000	NA	NA	NA	NA	NA	NA
2024-05-08	NA	NA	AWAR KM 82	300-1000	NA	NA	NA	NA	NA	NA
2024-05-09	NA	NA	AWAR KM 107	100-300	NA	NA	NA	NA	NA	NA
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	NA	NA	NA	NA	NA	Blast
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	NA	Heavy equipment	NA	NA	NA	NA
2024-05-09	NA	NA	Haul Road KM 177	100-300	NA	NA	NA	NA	NA	NA
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	Convoy	NA	NA	NA	NA	NA
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	NA
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	NA
2024-10-05	NA	NA	AWAR KM 19	>1000	NA	NA	NA	NA	NA	NA
2024-10-15	NA	NA	AWAR KM 33	300-1000	NA	NA	NA	NA	NA	NA
2024-10-17	NA	NA	AWAR KM 76	300-1000	NA	NA	NA	NA	NA	NA
2024-10-20	NA	NA	AWAR KM 59	100-300	NA	NA	NA	NA	NA	NA
2024-10-22	NA	NA	AWAR KM 59	0-50	NA	Convoy	NA	NA	NA	NA
2024-10-27	NA	NA	AWAR KM 14	>1000	NA	NA	NA	NA	NA	NA
2024-10-27	NA	NA	AWAR KM 13	>1000	NA	NA	NA	NA	NA	NA
2024-10-28	NA	NA	AWAR KM 80	300-1000	NA	NA	NA	NA	NA	NA

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2024-04-16	NA	NA	AWAR KM 78	300-1000	NA	Maintenance vehicle	NA	Maintenance vehicle	NA	2024	-96.3264	64.90192	Yes
2024-04-18	NA	NA	AWAR KM 97	100-300	NA	NA	NA	NA	NA	2024	-96.1687	65.02673	No
2024-04-18	NA	NA	AWAR KM 93	>1000	NA	NA	NA	NA	NA	2024	-96.2229	65.00238	No
2024-04-19	NA	NA	Amaruq KM (NA)	>1000	NA	NA	NA	NA	NA	2024	-96.6659	65.4021	Yes
2024-04-23	NA	NA	AWAR KM 56	100-300	NA	Light truck	NA	Light truck	NA	2024	-96.36	64.73151	No
2024-04-22	NA	NA	AWAR KM 54	100-300	NA	NA	NA	NA	Heavy equipment	2024	-96.3503	64.71716	No
2024-04-22	NA	NA	AWAR KM 97	100-300	NA	NA	NA	NA	NA	2024	-96.0702	65.02185	No
2024-04-25	NA	NA	AWAR KM 36	100-300	NA	NA	NA	NA	NA	2024	-96.2614	64.58002	No
2024-04-24	NA	NA	AWAR KM 37	100-300	NA	NA	NA	NA	NA	2024	-96.07	65.02179	No
2024-04-22	NA	NA	Haul Road KM 123	300-1000	NA	NA	NA	NA	NA	2024	-96.07	65.02185	No
2024-04-22	NA	NA	Haul Road KM 121	300-1000	NA	NA	NA	NA	NA	2024	-96.0702	65.02179	No
2024-04-23	NA	NA	AWAR KM 93	300-1000	NA	NA	NA	NA	NA	2024	-96.0703	65.02185	No
2024-04-25	NA	NA	Haul Road KM 123	50-100	NA	NA	NA	NA	NA	2024	-96.0702	65.02185	No
2024-04-19	NA	NA	AWAR KM 86	300-1000	NA	NA	NA	NA	NA	2024	-96.0702	65.02185	No
2024-04-19	NA	NA	AWAR KM 86	300-1000	NA	NA	NA	NA	NA	2024	-96.0703	65.02173	Yes
2024-04-19	NA	NA	AWAR KM 86	300-1000	NA	NA	NA	NA	NA	2024	-96.0703	65.02179	Yes
2024-05-05	NA	NA	AWAR KM 100	300-1000	NA	NA	NA	NA	NA	2024	-96.0706	65.02185	Yes
2024-04-23	NA	NA	Haul Road KM 177	>1000	Convoy	NA	NA	NA	NA	2024	-96.6329	65.40399	No
2024-04-23	NA	NA	Haul Road KM 175	>1000	NA	NA	NA	NA	NA	2024	-96.6332	65.40393	No
2024-05-09	NA	NA	AWAR KM 65	300-1000	NA	NA	NA	NA	NA	2024	-96.3384	64.79083	No
2024-05-12	NA	NA	AWAR KM 100	>1000	NA	NA	NA	NA	NA	2024	-96.1443	65.05518	Yes
2024-05-09	NA	NA	AWAR KM 74	300-1000	NA	NA	NA	NA	NA	2024	-96.3282	64.87384	Yes
2024-05-08	NA	NA	AWAR KM 82	300-1000	NA	NA	NA	NA	NA	2024	-96.3057	64.93494	Yes
2024-05-09	NA	NA	AWAR KM 107	100-300	NA	NA	NA	NA	Convoy	2024	-96.0635	65.01917	No
2024-06-25	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	NA	NA	2024	-96.6915	65.41681	No
2024-07-05	NA	NA	Amaruq KM (NA)	0-50	Blast	Convoy	Light truck	NA	Heavy equipment	2024	-96.6865	65.41437	Yes
2024-07-08	NA	NA	Amaruq KM (NA)	50-100	NA	Blast	NA	NA	NA	2024	-96.6822	65.41425	Yes
2024-05-09	NA	NA	Haul Road KM 177	100-300	NA	NA	NA	NA	NA	2024	-96.0701	65.02185	No
2024-07-26	NA	NA	Amaruq KM (NA)	0-50	NA	NA	NA	NA	Convoy	2024	-96.7096	65.39965	No
2024-08-11	NA	NA	Amaruq KM (NA)	50-100	NA	NA	NA	NA	NA	2024	-96.6697	65.40253	No
2024-09-30	NA	NA	Amaruq KM (NA)	100-300	NA	NA	NA	Blast	NA	2024	-96.7379	65.4049	No
2024-10-05	NA	NA	AWAR KM 19	>1000	Tanker	NA	NA	NA	NA	2024	-96.0845	64.46588	No
2024-10-15	NA	NA	AWAR KM 33	300-1000	NA	NA	NA	Tanker	NA	2024	-96.2345	64.56732	Yes
2024-10-17	NA	NA	AWAR KM 76	300-1000	NA	NA	NA	NA	Convoy	2024	-96.0701	65.02185	Yes
2024-10-20	NA	NA	AWAR KM 59	100-300	NA	NA	Aircraft	NA	Aircraft	2024	-96.3709	64.74805	Yes
2024-10-22	NA	NA	AWAR KM 59	0-50	NA	NA	NA	NA	NA	2024	-96.3652	64.75421	Yes
2024-10-27	NA	NA	AWAR KM 14	>1000	NA	NA	NA	NA	NA	2024	-96.0476	64.43622	No
2024-10-27	NA	NA	AWAR KM 13	>1000	NA	NA	NA	NA	NA	2024	-96.0399	64.42786	No
2024-10-28	NA	NA	AWAR KM 80	300-1000	NA	NA	NA	NA	NA	2024	-96.2916	64.93353	Yes

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
2024-10-31	NA	NA	AWAR KM 33	300-1000	Thomas Dahm	NA	45	East	No	13	-6	40	NW	0
2024-11-01	NA	NA	AWAR KM 9	>1000	Thomas Dahm	NA	65	East	No	7	-6	40	NW	0
2024-11-01	NA	NA	AWAR KM 13	300-1000	Thomas Dahm	NA	75	East	No	2	-6	40	NW	0
2024-11-04	NA	NA	AWAR KM 32	300-1000	FQS	NA	0	Both	Yes	NA	-6	30	NW	0
2024-11-05	NA	NA	AWAR KM 80	>1000	Thomas Dahm	NA	345	East	No	1	-8	40	NW	0
2024-11-08	NA	NA	AWAR KM 32	300-1000	CO FQS	NA	0	East	NA	14	-14	30	S	0
2024-11-22	NA	NA	AWAR KM 58	300-1000	Eric Leonard	NA	350	East	No	79	-15	30	N	98
2024-11-24	NA	NA	AWAR KM 61	300-1000	Thomas Dahm	NA	110	East	No	1	-18	40	NW	0
2024-11-27	NA	NA	AWAR KM 49	>1000	Thomas Dahm, Cedric Ookowt	NA	120	East	No	47	-18	49	NW	0
2024-11-28	NA	NA	Haul Road KM 173	50-100	FQS	NA	0	East	No	14	-22	30	NW	0
2024-11-28	NA	NA	Haul Road KM 168	100-300	FQS	NA	0	East	No	16	-22	30	NW	0
2024-11-28	NA	NA	Haul Road KM 133	>1000	Cedric Ookowt, Thomas Dahm	NA	40	East	No	148	-24	20	NW	0
2024-11-29	NA	NA	AWAR KM 79	300-1000	Cedric Ookowt, Thomas Dahm	NA	85	East	No	54	-26	20	N	0
2024-10-26	NA	NA	AWAR KM 6	>1000	Eric L.	NA	155	East	No	55	-8	30	N	89
2024-12-11	NA	NA	AWAR KM 80	>1000	Renee Pudnak	NA	5	East	No	32	-27	50	NW	0
2024-12-14	NA	NA	AWAR KM 89	300-1000	RP	NA	5	East	No	20	-23	20	NW	0
2024-12-17	NA	NA	AWAR KM 68	>1000	Eric Leonard	NA	90	East	No	27	-24	40	NW	100
2024-12-23	NA	NA	AWAR KM 23	100-300	Cedric Ookowt	NA	180	West	No	1	-24	20	SE	0
3/3/2025	13:49	15:15		100-300 m	RP FQS	NA	W	East	No	2	-20	NW	25	0
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km	Nicholas A., Renee P.	NA	N	West	No	64	-15	NW	40	0
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km	RP NA	NA	N,E	West	No	6	-15	NW	40	0
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km	Robert Chamberland	NA	NA	West	No	142	-18	SE	40	0
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m	Robert Chamberland, Cedric Ookowt	NA	S	West	No	8	-8	SE	15	0
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km	RC	NA	N	West	No	43	-6	SE	15	0
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km	RC, EL	NA	NA	West	No	33	-10	SE	30	0
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km	RC	NA	NA	West	No	210	-10	SE	30	0
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km	Thomas Dahm, Robert Chamberland, Jasmine Iqqaat	NA	NA	West	No	28	-7	N	20	0
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km	Eric Leonard	NA	NA	West	No	61	-11	SE	10	10
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km	Eric Leonard	NA	W	West	Yes	15	-18	N	20	68
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km	Thomas Dahm	NA	S	West	No	2	-18	NW	20	0
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km	Eric Leonard	NA	N	West	No	29	-16	NW	20	70
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km	Cedric Ookowt	NA	N	West	No	64	-5	SE	30	10
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km	Laurence Archambault, Sarah S.	NA	N	West	No	8	-8	SE	40	80
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km	Thomas Dahm	NA	NA	West	No	105	-16	SW	50	0
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km	NA SS	NA	N	West	No	24	-5	SE	18	80
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km	SS	NA	NA	West	No	271	-11	NW	18	85
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m	SS	NA	E	Both	Yes	145	-11	NW	18	60
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km	RC	NA	E	Both	Yes	879	-18	W	20	0
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m	RC	NA	NA	West		1	-13	NW	20	0
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km	John Noble	NA	NA	West	No	101-200	-11	N	50	80
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km	John Noble	NA	S	West		201-500	-13	N	50	80

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
2024-10-31	NA	NA	AWAR KM 33	300-1000	0	Precipitation: 0; windy	1000	1500	0
2024-11-01	NA	NA	AWAR KM 9	>1000	0	Precipitation: 0; overcast, windy	0	1500	0
2024-11-01	NA	NA	AWAR KM 13	300-1000	0	Precipitation: 0; overcast, windy	0	1500	0
2024-11-04	NA	NA	AWAR KM 32	300-1000	0	Precipitation: 0; snow, overcast	100	800	No
2024-11-05	NA	NA	AWAR KM 80	>1000	0	Precipitation: 0; windy	0	1500	0
2024-11-08	NA	NA	AWAR KM 32	300-1000	0	Precipitation: 0; light snow	0	900	0
2024-11-22	NA	NA	AWAR KM 58	300-1000	0	Precipitation: 0; sunny, cloudy	-100	1500	None
2024-11-24	NA	NA	AWAR KM 61	300-1000	0	Precipitation: 0; overcast	0	1000	0
2024-11-27	NA	NA	AWAR KM 49	>1000	0	Precipitation: 0; windy	1500	1000	0
2024-11-28	NA	NA	Haul Road KM 173	50-100	1	Precipitation: 0; overcast, windy	0	900	None
2024-11-28	NA	NA	Haul Road KM 168	100-300	1	Precipitation: 0; overcast	300	1100	None
2024-11-28	NA	NA	Haul Road KM 133	>1000	0	Precipitation: 0; sunny	-500	1500	0
2024-11-29	NA	NA	AWAR KM 79	300-1000	0	Precipitation: 0; sunny	0	1500	0
2024-10-26	NA	NA	AWAR KM 6	>1000	0	Precipitation: 0; overcast	0	1500	None
2024-12-11	NA	NA	AWAR KM 80	>1000	1	Precipitation: 0; cold	100	200	0
2024-12-14	NA	NA	AWAR KM 89	300-1000	1	Precipitation: 0; cold	100	200	0
2024-12-17	NA	NA	AWAR KM 68	>1000	0	Precipitation: 0; light wind, overcast	100	1500	None
2024-12-23	NA	NA	AWAR KM 23	100-300	1	Precipitation: 0; blowing snow	-50000	1000	None
3/3/2025	13:49	15:15		100-300 m	3	Precipitation: 0; cloudy	0	10	None
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km	1	Precipitation: 0; calm	2	15	None
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km	1	Precipitation: 0; calm	5	8	0
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km	0	Precipitation: 0; strong winds lifting up snow; visibility is 500 m	2	8	0
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m	0	Precipitation: Snow; 5-10 cm	0	10	0
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km	0	Precipitation: 0	2	10	0
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km	0	Precipitation: 0	0	10	0
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km	0	Precipitation: 0	1	10	0
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km	0	Precipitation: 0; overcast	5	10	0
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km	0	Precipitation: 0; overcast	3	15	None
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km	0	Precipitation: 0; overcast	1	15	None
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km	0	Precipitation: 0; cloudy	0	10	0
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km	0	Precipitation: 0; clear	0	10	0
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km	2	Precipitation: Snowing	1	15	0
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km	0	Precipitation: None	1	25	0
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km	0	Precipitation: 0; overcast, snowy, windy	-20	10	0
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km	1	Precipitation: 0; sunny	1	10	None
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km	0	Precipitation: 0	1	10	None
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m	7	Precipitation: 0	1	10	None
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km	5	Precipitation: 0; sunny	0	10	0
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m	2	Precipitation: 0; sunny	0	10	0
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km	0	Precipitation: 0; blowing snow	2	15	0
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km	0	Precipitation: 0; blowing snow	2	10	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
2024-10-31	NA	NA	AWAR KM 33	300-1000	8	7	0	0	0	0	9	0	1	3	0	0
2024-11-01	NA	NA	AWAR KM 9	>1000	0	0	0	7	0	0	0	0	0	7	0	0
2024-11-01	NA	NA	AWAR KM 13	300-1000	0	0	0	2	0	0	0	0	0	2	0	0
2024-11-04	NA	NA	AWAR KM 32	300-1000	180	0	0	20	0	0	175	0	0	25	0	0
2024-11-05	NA	NA	AWAR KM 80	>1000	0	0	0	1	0	0	0	0	0	1	0	0
2024-11-08	NA	NA	AWAR KM 32	300-1000	0	0	0	14	0	0	0	0	0	14	0	0
2024-11-22	NA	NA	AWAR KM 58	300-1000	78	0	0	1	0	0	79	0	0	0	0	0
2024-11-24	NA	NA	AWAR KM 61	300-1000	0	0	0	1	0	0	0	0	0	1	0	0
2024-11-27	NA	NA	AWAR KM 49	>1000	0	0	0	47	0	0	0	0	0	47	0	0
2024-11-28	NA	NA	Haul Road KM 173	50-100	14	0	0	0	0	0	0	0	0	0	14	0
2024-11-28	NA	NA	Haul Road KM 168	100-300	0	0	0	16	0	0	0	0	0	16	0	0
2024-11-28	NA	NA	Haul Road KM 133	>1000	14	11	0	0	0	0	11	8	6	0	0	0
2024-11-29	NA	NA	AWAR KM 79	300-1000	54	0	0	0	0	0	NA	NA	NA	NA	NA	NA
2024-10-26	NA	NA	AWAR KM 6	>1000	10	0	5	40	0	0	4	0	8	28	0	0
2024-12-11	NA	NA	AWAR KM 80	>1000	32	0	0	0	0	0	NA	NA	NA	NA	NA	NA
2024-12-14	NA	NA	AWAR KM 89	300-1000	20	0	0	0	0	0	6	14	0	0	0	0
2024-12-17	NA	NA	AWAR KM 68	>1000	0	0	0	27	0	0	0	0	0	27	0	0
2024-12-23	NA	NA	AWAR KM 23	100-300	0	1	0	0	0	0	0	1	0	0	0	0
3/3/2025	13:49	15:15		100-300 m	2	0	2	0	0	0	1	0	1	1	0	0
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km	62	0	0	2	0	0	50	0	0	14	0	0
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km	0	0	0	1	0	0	0	0	0	6	0	0
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km	34	0	3	2	6	0	43	0	2	0	0	0
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m	0	0	0	8	0	0	0	0	0	1	0	0
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km	22	0	0	15	6	0	27	0	0	15	1	0
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km	3	30	0	0	0	0	0	33	0	0	0	0
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km	53	157	0	0	0	0	54	154	0	0	2	0
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km	28	0	0	0	0	0	23	5	0	0	0	0
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km	0	15	19	0	0	0	0	16	17	0	0	0
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km	0	0	0	9	0	0	8	0	0	0	0	1
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km	0	0	0	2	0	0	0	0	0	2	0	0
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km	29	0	0	0	0	0	28	0	1	0	0	0
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km	0	0	64	64	0	0	0	0	64	64	0	0
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km	0	0	0	8	0	0	0	0	0	8	0	0
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km	75	0	0	0	0	0	60	0	0	15	0	0
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km	0	0	0	24	0	0	0	0	0	0	0	24
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km	78	193	0	0	0	0	78	193	0	0	0	0
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m	124	0	0	21	0	0	124	0	0	21	0	0
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km	1	35	1	166	0	0	3	9	13	159	0	0
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m	0	0	1	0	0	0						
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km	0	164	3	0	0	0	0	167	0	0	0	0
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km	97	0	10	17	0	0	18	2	0	59	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
2024-10-31	NA	NA	AWAR KM 33	300-1000	5	2	0	6	0	0	5	5	0	3	0	0
2024-11-01	NA	NA	AWAR KM 9	>1000	7	0	0	0	0	0	7	0	0	0	0	0
2024-11-01	NA	NA	AWAR KM 13	300-1000	0	0	0	2	0	0	2	0	0	0	0	0
2024-11-04	NA	NA	AWAR KM 32	300-1000	0	0	0	200	0	0	0	0	0	150	0	50
2024-11-05	NA	NA	AWAR KM 80	>1000	0	0	0	1	0	0	0	0	0	1	0	0
2024-11-08	NA	NA	AWAR KM 32	300-1000	0	0	0	14	0	0	0	0	0	0	0	0
2024-11-22	NA	NA	AWAR KM 58	300-1000	77	0	0	2	0	0	76	3	0	0	0	0
2024-11-24	NA	NA	AWAR KM 61	300-1000	0	0	0	1	0	0	0	0	0	1	0	0
2024-11-27	NA	NA	AWAR KM 49	>1000	0	0	0	47	0	0	0	0	0	47	0	0
2024-11-28	NA	NA	Haul Road KM 173	50-100	0	0	0	14	0	0	14	0	0	0	0	0
2024-11-28	NA	NA	Haul Road KM 168	100-300	0	0	0	16	0	0	0	0	0	16	0	0
2024-11-28	NA	NA	Haul Road KM 133	>1000	11	14	0	0	0	0	14	11	0	0	0	0
2024-11-29	NA	NA	AWAR KM 79	300-1000	49	2	0	3	0	0	40	3	0	11	0	0
2024-10-26	NA	NA	AWAR KM 6	>1000	5	0	1	12	0	0	1	11	3	0	0	0
2024-12-11	NA	NA	AWAR KM 80	>1000	0	0	0	32	0	0	0	0	0	32	0	0
2024-12-14	NA	NA	AWAR KM 89	300-1000	2	18	0	0	0	0	1	19	0	0	0	0
2024-12-17	NA	NA	AWAR KM 68	>1000	0	0	0	48	0	0	0	0	0	65	0	0
2024-12-23	NA	NA	AWAR KM 23	100-300	0	1	0	0	0	0	0	1	0	0	0	0
3/3/2025	13:49	15:15		100-300 m	2	0	0	0	0	0	2	0	0	0	0	0
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km	50	0	0	14	0	0	45	0	0	19	0	0
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km	0	0	0	5	0	0	0	0	0	5	0	0
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km	41	0	1	3	0	0	33	0	1	2	0	0
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m	0	0	0	0	0	0	5	0	0	0	0	0
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km	30	0	0	10	3	0	11	0	0	31	1	0
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km	0	32	1	0	0	0	0	0	0	0	33	0
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km	49	161	0	0	0	0	47	163	0	0	0	0
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km	23	5	0	0	0	0	24	4	0	0	0	0
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km	0	15	24	0	0	0	20	14	6	0	0	0
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km	0	0	0	5	0	0	0	0	0	0	0	0
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km	0	0	0	2	0	0	0	0	0	2	0	0
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km	28	0	0	1	0	0	28	0	1	0	0	0
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km	0	0	64	0	0	0	0	0	64	64	0	0
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km												
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km	65	0	0	10	0	0	65	0	0	10	0	0
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km	0	0	0	10	0	0	10	0	0	0	0	0
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km	78	193	0	0	0	0	81	190	0	0	0	0
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m	119	0	0	26	0	0	118	0	0	27	0	0
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km	11	16	8	182	0	0	3	23	7	198	0	0
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m												
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km	0	167	0	0	0	0	0	166	1	0	0	0
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km	3	0	8	0	0	0						

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
2024-10-31	NA	NA	AWAR KM 33	300-1000	8	5	0	0	0	0	8	5	0	0	0
2024-11-01	NA	NA	AWAR KM 9	>1000	7	0	0	0	0	0	7	0	0	0	0
2024-11-01	NA	NA	AWAR KM 13	300-1000	2	0	0	0	0	0	2	0	0	0	0
2024-11-04	NA	NA	AWAR KM 32	300-1000	0	0	0	150	0	0	0	0	0	150	0
2024-11-05	NA	NA	AWAR KM 80	>1000	0	0	0	1	0	0	0	0	0	0	0
2024-11-08	NA	NA	AWAR KM 32	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-22	NA	NA	AWAR KM 58	300-1000	79	0	0	0	0	0	79	0	0	0	0
2024-11-24	NA	NA	AWAR KM 61	300-1000	0	0	0	1	0	0	0	0	0	1	0
2024-11-27	NA	NA	AWAR KM 49	>1000	0	0	0	47	0	0	0	0	0	47	0
2024-11-28	NA	NA	Haul Road KM 173	50-100	0	0	0	14	0	0	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 168	100-300	0	0	0	16	0	0	0	0	0	0	0
2024-11-28	NA	NA	Haul Road KM 133	>1000	14	11	0	0	0	0	14	11	0	0	0
2024-11-29	NA	NA	AWAR KM 79	300-1000	32	4	0	18	0	0	27	3	0	24	0
2024-10-26	NA	NA	AWAR KM 6	>1000	2	14	0	0	0	0	2	14	0	0	0
2024-12-11	NA	NA	AWAR KM 80	>1000	0	0	0	32	0	0	0	0	0	0	0
2024-12-14	NA	NA	AWAR KM 89	300-1000	2	18	0	0	0	0	3	17	0	0	0
2024-12-17	NA	NA	AWAR KM 68	>1000	0	0	0	18	0	0	0	0	0	0	0
2024-12-23	NA	NA	AWAR KM 23	100-300	0	1	0	0	0	0	0	1	0	0	0
3/3/2025	13:49	15:15		100-300 m	2	0	0	0	0	0	2	0	0	0	2
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km	49	0	0	15	0	0	53	0	0	11	0
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km	0	0	5	1	0	0	0	0	5	1	0
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km	28	1	1	0	0	0	29	0	0	0	0
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m	5	0	0	0	0	0	6	0	0	0	0
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km	14	0	0	7	0	0	16	0	0	17	0
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km	0	0	0	33	0	0	0	0	0	33	0
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km	39	170	0	1	0	0	38	171	0	1	0
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km	25	3	0	0	0	0	25	3	0	0	0
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km	25	14	0	0	0	0	27	17	0	0	0
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km	0	0	0	0	0	0	0	0	0	0	0
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km	2	0	0	0	0	0	2	0	0	0	0
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km	29	0	0	0	0	0	29	0	0	0	0
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km	0	0	64	64	0	0	0	0	64	64	0
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km											
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km	71	0	0	4	0	0	63	0	0	12	0
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km	0	0	0	0	0	0					
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km	81	190	0	0	0	0	81	190	0	0	0
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m	119	0	0	29	0	0	120	0	0	45	0
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km	4	23	9	150	0	0	6	23	7	104	0
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m											
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km	0	167	0	0	0	0	0	191	5	0	0
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km											

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
2024-10-31	NA	NA	AWAR KM 33	300-1000	0	6	7	0	0	0	0	5	8	0	0
2024-11-01	NA	NA	AWAR KM 9	>1000	0	7	0	0	0	0	0	7	0	0	0
2024-11-01	NA	NA	AWAR KM 13	300-1000	0	2	0	0	0	0	0	2	0	0	0
2024-11-04	NA	NA	AWAR KM 32	300-1000	0	25	0	0	125	0	0	25	0	0	125
2024-11-05	NA	NA	AWAR KM 80	>1000	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-08	NA	NA	AWAR KM 32	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-22	NA	NA	AWAR KM 58	300-1000	0	79	0	0	0	0	0	0	0	0	0
2024-11-24	NA	NA	AWAR KM 61	300-1000	0	0	0	0	1	0	0	0	0	0	1
2024-11-27	NA	NA	AWAR KM 49	>1000	0	0	0	0	47	0	0	0	0	0	47
2024-11-28	NA	NA	Haul Road KM 173	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 168	100-300	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 133	>1000	0	14	11	0	0	0	0	14	11	0	0
2024-11-29	NA	NA	AWAR KM 79	300-1000	0	23	4	0	27	0	0	20	4	0	30
2024-10-26	NA	NA	AWAR KM 6	>1000	0	0	11	0	5	0	0	3	13	0	0
2024-12-11	NA	NA	AWAR KM 80	>1000	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-12-14	NA	NA	AWAR KM 89	300-1000	0	3	17	0	0	0	0	3	17	0	0
2024-12-17	NA	NA	AWAR KM 68	>1000	0	0	0	0	6	0	0	0	0	0	1
2024-12-23	NA	NA	AWAR KM 23	100-300	0	0	1	0	0	0	0	0	1	0	0
3/3/2025	13:49	15:15		100-300 m	0	1	0	0	1	0	0	2	0	0	0
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km	0	56	0	0	8	0	0	53	0	0	11
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km	0	0	0	0	6	0	0	0	0	0	0
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km	0	29	0	0	9	0	0	27	0	0	2
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m	0	2	0	0	0	0	0	2	0	0	0
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km	0	10	0	0	18	0	0	15	0	0	35
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km	0	0	0	0	33	0	0	0	0	0	33
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km	0	36	143	0	31	0	0	43	166	0	1
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km	0	24	3	0	1	0	0	24	4	0	0
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km	0	23	18	2	0	0	0	27	2	0	0
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km	0	0	0	0	0	0	0	0	0	0	0
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km	0	2	0	0	0	0	0	2	0	0	0
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km	0	29	0	0	0	0	0	29	0	0	0
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km	0	0	0	64	64	0	0	0	0	64	64
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km											
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km	0	61	0	0	14	0	0	50	0	0	25
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km											
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km	0	81	190	0	0	0	0	73	198	0	0
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m	0	134	0	0	11	0	0				
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km	0	4	22	18	77	0	0	7	22	5	72
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m											
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km	0	0	196	0	0	0	0	0	196	0	0
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km											

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
2024-10-31	NA	NA	AWAR KM 33	300-1000	0	0	4	9	0	0	0	0	4	9	0
2024-11-01	NA	NA	AWAR KM 9	>1000	0	0	7	0	0	0	0	0	7	0	0
2024-11-01	NA	NA	AWAR KM 13	300-1000	0	0	2	0	0	0	0	0	2	0	0
2024-11-04	NA	NA	AWAR KM 32	300-1000	0	0	0	0	0	150	0	0	0	75	0
2024-11-05	NA	NA	AWAR KM 80	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-08	NA	NA	AWAR KM 32	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-22	NA	NA	AWAR KM 58	300-1000	0	79	0	0	0	0	0	79	0	0	0
2024-11-24	NA	NA	AWAR KM 61	300-1000	0	0	0	0	0	1	0	0	0	0	0
2024-11-27	NA	NA	AWAR KM 49	>1000	0	0	0	0	0	47	0	0	0	0	0
2024-11-28	NA	NA	Haul Road KM 173	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 168	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 133	>1000	0	0	13	11	0	1	0	0	13	11	1
2024-11-29	NA	NA	AWAR KM 79	300-1000	0	0	20	4	0	30	0	0	20	3	1
2024-10-26	NA	NA	AWAR KM 6	>1000	0	0	0	14	2	0	0	0	0	16	0
2024-12-11	NA	NA	AWAR KM 80	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-12-14	NA	NA	AWAR KM 89	300-1000	0	0	5	15	0	0	0	0	5	15	0
2024-12-17	NA	NA	AWAR KM 68	>1000	0	0	0	0	5	0	0	0	0	0	5
2024-12-23	NA	NA	AWAR KM 23	100-300	0	0	0	1	0	0	0	0	0	1	0
3/3/2025	13:49	15:15		100-300 m	0	0	0	0	2	0	0	0	0	0	0
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km	0	0	0	0	0	5	0	0	0	0	0
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km	0	0	0	0	0	6	0	0	0	0	2
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km	0	0	23	0	0	0	0	0	27	0	0
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m	0	0	2	0	0	0	1	0	4	0	0
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km	0	0	21	0	0	27	0	0	16	0	0
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km	0	0	0	0	0	33	0	0	0	33	0
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km	0	0	30	178	0	2	0	0	30	180	0
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km	0	0	24	4	0	0	0	0	23	5	0
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km	15	0	34	2	0	6	0	0	7	0	0
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km	0	0	0	0	0	0	0	0	0	0	0
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km	0	0	2	0	0	0	0	0	2	0	0
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km	0	0	14	15	0	0	0	0	9	20	0
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km	0	0	0	0	64	64	0	0	0	0	64
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km											
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km	0	0	63	0	0	12	0	0	0	0	0
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km											
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km	0	0	78	193	0	0	0	0	78	193	0
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m											
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km	0	0	6	19	17	68	0	0	4	7	5
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m											
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km	0	0	0	196	0	0	0	0	0	195	1
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km											

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
2024-10-31	NA	NA	AWAR KM 33	300-1000	0	0	0	4	9	0	0	0	0
2024-11-01	NA	NA	AWAR KM 9	>1000	0	0	0	7	0	0	0	0	0
2024-11-01	NA	NA	AWAR KM 13	300-1000	0	0	0	2	0	0	0	0	0
2024-11-04	NA	NA	AWAR KM 32	300-1000	74	0	0	0	75	0	75	0	0
2024-11-05	NA	NA	AWAR KM 80	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-08	NA	NA	AWAR KM 32	300-1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-22	NA	NA	AWAR KM 58	300-1000	0	0	78	0	0	0	0	0	77
2024-11-24	NA	NA	AWAR KM 61	300-1000	1	0	0	0	0	0	0	0	0
2024-11-27	NA	NA	AWAR KM 49	>1000	47	0	0	0	0	0	47	0	0
2024-11-28	NA	NA	Haul Road KM 173	50-100	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 168	100-300	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 133	>1000	0	0	0	11	11	3	0	0	0
2024-11-29	NA	NA	AWAR KM 79	300-1000	30	0	0	18	4	0	32	0	0
2024-10-26	NA	NA	AWAR KM 6	>1000	0	0	0	0	16	0	0	0	0
2024-12-11	NA	NA	AWAR KM 80	>1000	NA	NA	NA	NA	NA	NA	NA	NA	NA
2024-12-14	NA	NA	AWAR KM 89	300-1000	0	0	0	NA	NA	NA	NA	NA	NA
2024-12-17	NA	NA	AWAR KM 68	>1000	0	0	0	0	0	0	5	0	0
2024-12-23	NA	NA	AWAR KM 23	100-300	0	0	0	0	1	0	0	0	0
3/3/2025	13:49	15:15		100-300 m	2	0	0	0	0	2	0	0	0
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km	0	0	0	0	0	0	0	0	0
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km	0	0	0						
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km	2	0	0	27	0	0	0	4	0
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m	0	0	0	4	0	0	0	0	0
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km	13	0	0	15	0	0	12	0	0
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km	0	0	0	17	0	0	16	0	0
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km	0	0	0	26	184	0	0	0	0
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km	0	0	0	20	8	0	0	0	0
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km	15	0	16	2	0	0	9	0	0
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km	0	0	0	0	0	0	0	0	0
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km	0	0	0	2	0	0	0	0	0
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km	0	0	0	6	23	0	0	0	0
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km	64	0	0	0	0	15	49	0	0
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km									
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km	0	0	0	0	0	0	0	0	0
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km									
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km	0	0	0	78	193	0	0	0	0
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m									
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km	66	0	0	1	2	7	52	0	0
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m									
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km	0	0	0	0	196	0	0	0	0
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km									

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
2024-10-31	NA	NA	AWAR KM 33	300-1000	NA	NA	NA	NA	NA	NA
2024-11-01	NA	NA	AWAR KM 9	>1000	NA	NA	NA	NA	NA	NA
2024-11-01	NA	NA	AWAR KM 13	300-1000	NA	NA	NA	Aircraft	NA	NA
2024-11-04	NA	NA	AWAR KM 32	300-1000	NA	NA	NA	NA	NA	NA
2024-11-05	NA	NA	AWAR KM 80	>1000	NA	NA	NA	NA	NA	NA
2024-11-08	NA	NA	AWAR KM 32	300-1000	Aircraft	NA	Aircraft	NA	NA	NA
2024-11-22	NA	NA	AWAR KM 58	300-1000	NA	NA	NA	NA	NA	NA
2024-11-24	NA	NA	AWAR KM 61	300-1000	NA	NA	NA	NA	NA	NA
2024-11-27	NA	NA	AWAR KM 49	>1000	NA	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 173	50-100	NA	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 168	100-300	NA	NA	NA	NA	NA	NA
2024-11-28	NA	NA	Haul Road KM 133	>1000	NA	NA	NA	NA	NA	NA
2024-11-29	NA	NA	AWAR KM 79	300-1000	NA	NA	NA	Convoy	NA	NA
2024-10-26	NA	NA	AWAR KM 6	>1000	NA	NA	NA	NA	NA	NA
2024-12-11	NA	NA	AWAR KM 80	>1000	NA	NA	NA	NA	NA	NA
2024-12-14	NA	NA	AWAR KM 89	300-1000	NA	NA	NA	NA	NA	NA
2024-12-17	NA	NA	AWAR KM 68	>1000	NA	NA	NA	NA	NA	NA
2024-12-23	NA	NA	AWAR KM 23	100-300	NA	NA	NA	Tanker	NA	Tanker
3/3/2025	13:49	15:15		100-300 m						
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km				2	1	
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km						
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km	1					
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m				1		
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km						
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km						
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km						
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km	3					
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km						
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km						
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km						
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km						
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km	3					
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km						
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km						
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km		1		1	1	
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km						
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m						
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km						
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m						
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km						
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km						

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
2024-10-31	NA	NA	AWAR KM 33	300-1000	NA	NA	NA	NA	NA	2024	-96.2229	64.56897	No
2024-11-01	NA	NA	AWAR KM 9	>1000	NA	NA	NA	NA	NA	2024	-96.0168	64.38617	No
2024-11-01	NA	NA	AWAR KM 13	300-1000	NA	NA	NA	NA	NA	2024	-96.0287	64.41241	No
2024-11-04	NA	NA	AWAR KM 32	300-1000	NA	NA	NA	NA	NA	2024	-96.2032	64.55884	Yes
2024-11-05	NA	NA	AWAR KM 80	>1000	NA	NA	NA	NA	NA	2024	-96.307	64.92871	No
2024-11-08	NA	NA	AWAR KM 32	300-1000	NA	NA	NA	NA	NA	2024	-96.2026	64.56879	Yes
2024-11-22	NA	NA	AWAR KM 58	300-1000	NA	Aircraft	NA	Aircraft	Aircraft	2024	-96.3424	64.72321	No
2024-11-24	NA	NA	AWAR KM 61	300-1000	NA	NA	NA	NA	NA	2024	-96.3495	64.76733	No
2024-11-27	NA	NA	AWAR KM 49	>1000	NA	NA	NA	NA	NA	2024	-96.3732	64.67963	No
2024-11-28	NA	NA	Haul Road KM 173	50-100	NA	NA	NA	NA	NA	2024	-96.6017	65.37274	Yes
2024-11-28	NA	NA	Haul Road KM 168	100-300	NA	NA	NA	NA	NA	2024	-96.5493	65.3465	Yes
2024-11-28	NA	NA	Haul Road KM 133	>1000	NA	NA	NA	NA	NA	2024	-96.184	65.20209	No
2024-11-29	NA	NA	AWAR KM 79	300-1000	NA	NA	NA	NA	NA	2024	-96.3137	64.91034	No
2024-10-26	NA	NA	AWAR KM 6	>1000	NA	NA	NA	NA	NA	2024	-96.0702	65.02179	Yes
2024-12-11	NA	NA	AWAR KM 80	>1000	NA	NA	NA	NA	NA	2024	-96.3012	64.92323	Yes
2024-12-14	NA	NA	AWAR KM 89	300-1000	NA	NA	NA	NA	NA	2024	-96.2181	64.96454	Yes
2024-12-17	NA	NA	AWAR KM 68	>1000	NA	NA	NA	NA	NA	2024	-96.3161	64.82635	No
2024-12-23	NA	NA	AWAR KM 23	100-300	NA	NA	NA	NA	NA	2024	-96.1218	64.49725	No
3/3/2025	13:49	15:15		100-300 m						2025	-96.0821	65.0200	No
4/5/2025	8:17	9:08	Haul Road KM 160	1-1.5 km						2025	-96.4358	65.3181	Yes
4/5/2025	9:55	10:23	Haul Road KM 134	300 m-1 km						2025	-96.1801	65.1994	Yes
4/8/2025	9:01	9:31	AWAR KM 94	300 m-1 km				2	2	2025	-96.2073	65.0087	Yes
4/10/2025	13:02	13:32	AWAR KM 98	100-300 m						2025	-96.1584	65.0320	No
4/10/2025	13:40	14:13	AWAR KM 101	300 m-1 km						2025	-96.1442	65.0552	No
4/9/2025	16:36	17:11	AWAR KM 94	300 m-1 km						2025	-96.2027	65.0092	No
4/9/2025	15:47	16:23	AWAR KM 94	1-1.5 km						2025	-96.0701	65.0219	No
4/11/2025	13:26	14:00	AWAR KM 57	>1.5 km						2025	-96.3559	64.7372	Yes
4/12/2025	9:21	9:58	Haul Road KM 135	300 m-1 km	4					2025	-96.2180	65.2101	No
4/14/2025	10:00	11:30	Haul Road KM 111	300 m-1 km				5		2025	-96.0316	65.0458	No
4/14/2025	11:07	11:30	AWAR KM 65	>1.5 km						2025	-96.3406	64.7959	No
4/15/2025	13:47	14:19	AWAR KM 88	1-1.5 km						2025	-96.2189	64.9599	No
4/22/2025	14:03	14:42	AWAR KM 77	300 m-1 km						2025	-96.3380	64.8956	Yes
4/22/2025	11:47	12:00	Haul Road KM 160	300 m-1 km						2025	-96.4120	65.3014	No
4/22/2025	0:45	13:15	AWAR KM 95	1-1.5 km						2025	-96.0700	65.0218	Yes
4/23/2025	16:08	16:28	Haul Road KM 169	300 m-1 km						2025	-96.6671	65.4015	No
4/27/2025	8:17	8:53	Haul Road KM 176	1-1.5 km						2025	-96.6125	65.3963	Yes
4/28/2025	16:12	16:31	Haul Road KM 162	100-300 m						2025	-96.4209	65.3151	No
4/29/2025	8:55	9:30	AWAR KM 89	300 m-1 km						2025	-96.2212	64.9709	No
5/2/2025	8:50	8:50	AWAR KM 93	100-300 m						2025	-96.2238	64.9901	No
5/6/2025	11:44	12:28	Haul Road KM 112	300 m-1 km						2025	-96.0104	65.0503	Yes
5/6/2025	10:35	10:35	Haul Road KM 116	300 m-1 km						2025	-96.0305	65.0829	No

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Observers	Waypoint	Bearing to Caribou Group	Is Group East or West of Survey?	Did the Group Cross the Road during the Survey?	Caribou Group Size	Temperature	Wind Speed (km/h)	Wind Direction	Humidity
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km	Thomas Dahm, Jonathan Bath	NA	S	East	No	3	-6	N	15	0
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km	Thomas Dahm	NA	E	East	No	2	-6	NW	15	0
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km	Thomas Dahm	NA	S	West	No	1	1	NW	20	0
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km	Thomas Dahm, Jonathan Bath	NA	S	West	No	2	4	NE	20	0
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km	Thomas Dahm, Jonathan Bath	NA	S	West	No	32	4	NW	20	0
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km	Renee Pudnak	NA	E	West	No	14	-12	NW	20	0
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m	RP	NA	W	West	No	12	-12	NW	20	0
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km	Renee P., Nicholas A.	NA	W	West	No	200	-15	NW	40	0
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km	Renee Pudnak	NA	N	East	No	1	-2	W	15	0
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km	Thomas Dahm	NA	NA	East	No	62	-6	NW	30	0
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km	Laurence Archambault	NA	E,W	West	No	201-500	-4	N	7	92
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m	CO JG	NA	NA	East	No	24	-3	S	15	70
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km	Laurence Archambault, Tanisha Noah	NA	NA	East	No	8	-1	SE	27	94
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km	JG	NA	NA	East	No	356	-13	N	39	80
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m	TL	NA	W	West	No	16	-15	N	40	0
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km	TL	NA	S	East	No	23	-15	N	40	0
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m	TL RB	NA	E	East	No	9	-15	N	40	0
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m	Thomas Dahm, Brett Nigel, Dan Coulton	NA	NA	East	No	3	-8	NW	30	0
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km	Nicholas Andreotte, Julien Girard	NA	NA	East	No	43	-7	N	30	90
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m	RC BN	NA	S	West	Yes	1	-7	N	40	0
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km	TL	NA	W	East	No	167	-11	NW	30	0
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km	Thomas Dahm	NA	W	East	Yes	881	-12	NW	40	0
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km	JG RW RP	NA	NA	East	No	47	-3	SE	35	85
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km	Brett Niego	NA	W	West	No	7	-3	SE	50	0
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km	Thomas Dahm, Brett Niego	NA	N	East	Yes	2	-1	NW	50	0
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km	Nicholas Andreotte	NA	S	East		1	0	SE	30	94
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km	RC, BN	NA	W	West	No	101-200	-3	SE	40	0
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	Nicholas Andreotte, Renee Pudnak	NA	E	East	No	1	-9	SE	30	82
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m	TL BN	NA	E	East	No	2	-15	SE	30	0
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km	RL, FQS	NA	W	East	No	201-500	-20	N	20	0
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km	Laurence Archambault, Courtney Cielen	NA	W	East		62	-14	N	20	80
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m	JG RP	NA	NA	East	No	2	-25	NW	40	65
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km	Renee Pudnak	NA	W	East	No	305	-31	W	20	67
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km	Nicholas Andreotte	NA	NA	West	No	36	-35	W	30	65
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m	Thomas Dahl, Cedric Ookowt	NA	NA	East	No	48	-19	SW	20	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Days Since Last Snow or Wind Event	Weather Observations	Road Height (cm)	Road Side Width (cm)	Structures Present
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km	0	Precipitation: 0; cloudy	0	10	0
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km	0	Precipitation: 0; cloudy	10	10	0
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km	0	Precipitation: 0; sunny	10	10	0
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km	0	Precipitation: 0; overcast	-10	10	0
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km	0	Precipitation: 0; cloudy	10	10	0
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km	2	Precipitation: 0; windy	20	2	0
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m	2	Precipitation: 0; windy	1	2	0
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km	1	Precipitation: Calm	1	8	0
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km	1	Precipitation: 0	2	15	1
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km	0	Precipitation: 0; overcast	10	15	0
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km	0	Precipitation: 0	2	15	0
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m	0	Precipitation: 0; cloudy	2	15	Bridge 200 m SW of the group
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km	0	Precipitation: Blowing snow	1	15	None
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km	0	Precipitation: 0; sunny with clouds, sunset	2	15	1 bridge and 1 sea can to store environment spill response materials
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m	0	Precipitation: 0; clear sky	2	15	Old road
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km	0	Precipitation: 0	2	10	0
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m	0	Precipitation: 0; clear sky	2	15	0
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m	0	Precipitation: 0; windy	0	10	0
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km	1	Precipitation: 0; cloudy, windy	1	15	None
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m	0	Precipitation: 0; low visibility due to blowing snow	1	10	None
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km	0	Precipitation: 0; clear sky	3	15	0
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km	0	Precipitation: 0; overcast	1	10	0
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km	0	Precipitation: 2; blowing snow	2	15	Bridges at 160
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km	0	Precipitation: 0; poor visibility	2	10	0
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km	0	Precipitation: 0; cloudy	2	10	0
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km	0	Precipitation: Yes; snow and wind	1	15	Bridge
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km	0	Precipitation: Light snow, overcast, windy, and very light snow	0	10	None
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	0	Precipitation: Yes; light snow	2	15	Bridge
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m	1	Precipitation: 0	2	10	0
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km	3	Precipitation: 0; sunny	2	10	0
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km	0	Precipitation: 0; clear, no precipitation	1	10	0
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m	0	Precipitation: 0; cloudy, blowing snow	2	10	None
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km	7	Precipitation: 0	2	10	0
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km	7	Precipitation: 0; cloudy, windy	3	15	None
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m	5	Precipitation: 0; cloudy, windy	5	15	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (0 Minutes)	Laying (0 Minutes)	Standing (0 Minutes)	Walking (0 Minutes)	Alert (0 Minutes)	Trotting (0 Minutes)	Feeding (3 Minutes)	Laying (3 Minutes)	Standing (3 Minutes)	Walking (3 Minutes)	Alert (3 Minutes)	Trotting (3 Minutes)
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km	0	0	0	3	0	0	0	0	0	3	0	0
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km	0	0	0	2	0	0	0	0	0	2	0	0
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km	0	0	0	1	0	0	0	0	0	1	0	0
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km	0	0	2	0	0	0	0	0	1	1	0	0
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km	0	0	0	32	0	0	0	0	0	32	0	0
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km	14	0	0	0	0	0	12	3	0	0	0	0
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m	12	0	0	0	0	0	12	0	0	0	0	0
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km	0	30	70	100	0	0	0	30	70	100	0	0
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km	1	0	0	0	0	0	0	0	0	1	0	0
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km	50	0	0	12	0	0	60	0	0	2	0	0
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km	14	6	0	0	0	0	20	0	0	0	0	0
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m	15	9	0	0	0	0	17	7	0	0	0	0
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km	8	0	0	0	0	0	8	0	0	0	0	0
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km	67	15	0	18	0	0	82	5	0	13	0	0
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m	10	0	3	0	3	0	5	0	7	4	0	0
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km	6	0	0	1	0	0	5	0	1	0	0	1
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m	0	0	0	0	0	9	9	0	0	0	0	0
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m	2	1	0	0	0	0	2	1	0	0	0	0
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km	43	0	0	0	0	0	43	0	0	0	0	0
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m	0	0	1	0	0	0	0	0	1	0	0	0
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km	6	0	0	0	0	0	6	0	0	0	0	0
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km	0	0	0	20	0	0	0	0	0	20	0	0
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km	33	0	0	0	0	0	32	0	0	1	0	0
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km	6	0	1	0	0	0	4	2	1	0	0	0
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km	0	0	0	2	0	0	0	0	0	2	0	0
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km	0	0	0	1	0	0	0	0	0	0	1	0
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km	23	0	0	50	0	0	39	1	0	33	0	0
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	1	0	0	0	0	0	0	0	0	0	1	0
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m	2	0	0	0	0	0	2	0	0	0	0	0
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km	0	0	0	19	0	1	0	0	0	20	0	0
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km	0	0	0	10	0	0						
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m	2	0	0	0	0	0	2	0	0	0	0	0
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km	305	0	0	0	0	0	233	72	0	0	0	0
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km	0	0	0	0	0	36	35	0	0	0	0	60
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m	48	0	0	0	0	0	48	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (6 Minutes)	Laying (6 Minutes)	Standing (6 Minutes)	Walking (6 Minutes)	Alert (6 Minutes)	Trotting (6 Minutes)	Feeding (9 Minutes)	Laying (9 Minutes)	Standing (9 Minutes)	Walking (9 Minutes)	Alert (9 Minutes)	Trotting (9 Minutes)
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km	0	0	0	3	0	0	0	0	0	1	0	0
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km	0	0	0	2	0	0	0	0	0	2	0	0
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km	0	0	0	0	0	0	0	0	0	0	0	0
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km	0	0	0	2	0	0	0	0	0	2	0	0
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km	0	0	0	32	0	0	0	0	0	32	0	0
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km	8	6	0	0	0	0	10	4	0	0	0	0
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m	12	0	0	0	0	0	12	0	0	0	0	0
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km	0	30	100	70	0	0	0	30	155	15	0	0
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km	0	0	0	1	0	0	1	0	0	0	0	0
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km	55	0	0	7	0	0	60	0	0	1	1	0
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km	20	0	0	0	0	0	20	0	0	0	0	0
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m	24	0	0	0	0	0	4	0	0	20	0	0
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km	8	0	0	0	0	0	3	2	0	0	0	0
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km	79	6	15	0	0	0	86	4	0	10	0	0
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m	1	4	8	2	1	0	4	8	0	4	0	0
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km	3	2	0	2	0	0	4	1	0	2	0	0
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m	9	0	0	0	0	0	9	0	0	0	0	0
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m	0	3	0	0	0	0	0	3	0	0	0	0
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km	43	0	0	0	0	0	43	0	0	0	0	0
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m	0	0	1	0	0	0	1	0	0	0	0	0
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km	4	0	0	2	0	0	3	0	3	0	0	0
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km	0	0	0	20	0	0	0	0	0	20	0	0
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km	31	0	0	2	0	0	29	0	0	3	1	0
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km	3	3	1	0	0	0	2	5	0	0	0	0
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km	0	0	0	2	0	0	0	0	0	2	0	0
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km	0	0	0	0	1	0	0	0	0	0	0	0
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km	149	1	0	7	0	0	139	0	0	18	0	0
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	0	0	0	0	1	0	1	0	0	0	0	0
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m	1	0	1	0	0	0	2	0	0	0	0	0
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km	0	8	0	12	0	0	0	11	9	0	0	0
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km												
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m	2	0	0	0	0	0	2	0	0	0	0	0
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km	305	0	0	0	0	0	230	0	75	0	0	0
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km	50	0	0	74	0	0	100	0	0	24	0	0
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m	48	0	0	0	0	0	48	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Feeding (12 Minutes)	Laying (12 Minutes)	Standing (12 Minutes)	Walking (12 Minutes)	Alert (12 Minutes)	Trotting (12 Minutes)	Feeding (15 Minutes)	Laying (15 Minutes)	Standing (15 Minutes)	Walking (15 Minutes)	Alert (15 Minutes)
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km	0	0	0	1	0	0					
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km	0	0	0	2	0	0	0	0	0	2	0
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km	0	0	0	1	0	0	0	0	0	1	0
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km	0	0	0	2	0	0	0	0	0	2	0
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km	0	0	0	32	0	0	0	0	0	32	0
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km	0	0	0	0	0	0	9	5	0	0	0
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m	12	0	0	0	0	0					
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km	0	30	155	15	0	0	0	30	155	15	0
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km	1	0	0	0	0	0	1	0	0	0	0
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km	50	2	0	10	0	0	62	0	0	0	0
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km	20	0	0	0	0	0	20	0	0	0	0
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m	24	0	0	0	0	0	4	0	0	20	0
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km	1	0	0	1	0	0	1	0	0	0	0
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km	89	7	0	4	0	0	83	4	4	9	0
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m	3	13	0	0	0	0	1	15	0	0	0
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km	6	1	0	0	0	0	1	0	0	6	0
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m	9	0	0	0	0	0	9	0	0	0	0
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m	0	3	0	0	0	0	0	3	0	0	0
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km	43	0	0	0	0	0	43	0	0	0	0
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m	1	0	0	0	0	0	0	0	0	1	0
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km	6	0	0	0	0	0	6	0	0	0	0
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km	0	0	0	20	0	0	0	0	0	20	0
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km	39	1	0	2	0	0	39	3	0	0	0
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km	1	6	0	0	0	0	0	6	0	0	1
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km	0	0	0	2	0	0	0	0	0	2	0
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km	0	0	0	0	0	0	0	0	0	0	0
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km	148	174	0	9	0	0	165	1	0	15	0
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	1	0	0	0	0	0	1	0	0	0	0
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m	1	0	1	0	0	0	0	0	0	2	0
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km	0	20	0	0	0	0	0	5	0	15	0
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km											
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m	2	0	0	0	0	0	2	0	0	0	0
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km	305	0	0	0	0	0	240	65	0	0	0
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km	106	0	0	18	0	0	116	0	0	8	0
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m	48	0	0	0	0	0	48	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Trotting (15 Minutes)	Feeding (18 Minutes)	Laying (18 Minutes)	Standing (18 Minutes)	Walking (18 Minutes)	Alert (18 Minutes)	Trotting (18 Minutes)	Feeding (21 Minutes)	Laying (21 Minutes)	Standing (21 Minutes)	Walking (21 Minutes)
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km											
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km	0	0	0	0	2	0	0	0	0	0	2
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km	0	0	0	0	1	0	0	2	0	0	0
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km	0	0	0	0	2	0	0	0	0	0	2
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km	0	0	0	0	32	0	0	0	0	0	32
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km	0	10	4	0	0	0	0	8	6	0	0
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m											
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km	0	0	30	155	15	0	0	70	100	0	30
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km	0	1	0	0	0	0	0	1	0	0	0
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km	0	47	0	0	15	0	0	55	0	0	7
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km	0	20	0	0	0	0	0	20	0	0	0
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m	0	4	0	0	20	0	0	8	0	0	16
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km	0	1	0	0	0	0	0	0	1	0	0
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km	0	81	8	4	6	0	1	83	4	3	10
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m	0	0	16	0	0	0	0	1	15	0	0
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km	0	0	0	0	0	0	7	0	0	2	0
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m	0	9	0	0	0	0	0	9	0	0	0
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m	0	0	3	0	0	0	0	0	3	0	0
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km	0	43	0	0	0	0	0	43	0	0	0
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m	0	0	0	0	0	0	1	1	0	0	0
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km	0	3	1	0	2	0	0	2	2	2	0
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km	0	0	0	0	20	0	0	0	0	0	20
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km	0	39	2	1	0	0	0	44	3	0	0
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km	0	6	0	0	0	1	0	1	4	1	0
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km	0	0	0	0	2	0	0	0	0	0	2
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km	0										
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km	2	169	0	5	9	0	0	148	0	0	35
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	0	1	0	0	0	0	0	1	0	0	0
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m	0	2	0	0	0	0	0	2	0	0	0
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km	0	0	2	0	18	0	0	0	0	0	20
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km											
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m	0	2	0	0	0	0	0	2	0	0	0
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km	0	238	67	0	0	0	0	239	60	0	0
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km	0	80	4	0	0	0	40	79	0	0	5
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m	0	48	0	0	0	0	0	40	0	0	8

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Alert (21 Minutes)	Trotting (21 Minutes)	Feeding (24 Minutes)	Laying (24 Minutes)	Standing (24 Minutes)	Walking (24 Minutes)	Alert (24 Minutes)	Trotting (24 Minutes)	Feeding (27 Minutes)	Laying (27 Minutes)	Standing (27 Minutes)
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km											
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km	0	0	0	0	0	2	0	0	0	0	0
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km	0	0	2	0	0	0	0	0	2	0	0
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km	0	0	0	0	0	2	0	0	0	0	0
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km	0	0	0	0	0	32	0	0	0	0	0
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km	0	0	9	4	0	0	0	0	6	8	0
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m											
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km	0	0	0	70	100	30	0	0	0	0	150
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km	0	0	0	0	0	1	0	0			
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km	0	0	32	0	0	30	0	0	42	0	0
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km	0	0	20	0	0	0	0	0	20	0	0
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m	0	0	0	0	0	24	0	0	4	0	0
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km	0	0	0	1	0	0	0	0	0	1	0
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km	0	0	89	2	5	4	0	0	94	0	6
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m	0	0	1	15	0	0	0	0	1	15	0
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km	5	0	5	0	1	1	0	0	7	0	0
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m	0	0	9	0	0	0	0	0	3	0	0
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m	0	0	0	3	0	0	0	0	0	3	0
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km	0	0	43	0	0	0	0	0	43	0	0
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m	0	0	0	0	0	1	0	0	0	0	0
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km	0	0	4	2	0	0	0	0	4	2	0
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km	0	0	0	0	0	20	0	0	0	0	0
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km	0	0	43	4	0	0	0	0	40	4	0
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km	1	0	1	5	0	0	1	0	0	2	4
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km	0	0	0	0	0	2	0	0	0	0	0
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km											
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km	0	0	152	0	7	24	0	0	133	0	25
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	0	0	1	0	0	0	0	0	0	0	0
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m	0	0	2	0	0	0	0	0	0	0	0
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km	0	0	17	0	0	3	0	0	20	0	0
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km											
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m	0	0	2	0	0	0	0	0	2	0	0
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km	6	0	235	31	0	0	39	0	245	0	5
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km	0	0	54	0	0	30	0	0	50	0	0
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m	0	0	48	0	0	0	0	0	48	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Walking (27 Minutes)	Alert (27 Minutes)	Trotting (27 Minutes)	Feeding (30 Minutes)	Laying (30 Minutes)	Standing (30 Minutes)	Walking (30 Minutes)	Alert (30 Minutes)	Trotting (30 Minutes)
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km									
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km	2	0	0	0	0	0	2	0	0
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km	0	0	0	2	0	0	0	0	0
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km	2	0	0	0	0	0	2	0	0
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km	32	0	0	0	0	0	32	0	0
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km	0	0	0	6	8	0	0	0	0
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m									
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km	50	150	0	0	0	0	200	0	200
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km									
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km	20	0	0	84	10	0	30	0	0
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km	0	0	0	20	0	0	0	0	0
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m	20	0	0	16	0	0	0	0	0
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km	0	0	0	0	1	0	0	0	0
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km	0	0	0	94	0	2	3	0	1
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m	0	0	0	0	16	0	0	0	0
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km	0	0	0	6	0	0	1	0	0
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m	5	0	1	7	0	2	0	0	0
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m	0	0	0	0	3	0	0	0	0
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km	0	0	0	43	0	0	0	0	0
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m	1	0	0	0	0	0	1	0	0
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km	0	0	0	4	2	0	0	0	0
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km	20	0	0	0	0	0	20	0	0
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km	3	0	0	35	5	0	6	1	0
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km	0	1	0	3	2	0	0	2	0
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km	2	0	0	0	0	0	2	0	0
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km									
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km	20	0	5	160	4	1	17	0	1
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	0	1	0	1	0	0	0	0	0
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m	0	2	0	0	0	0	0	2	0
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km	0	0	0	20	0	0	0	0	0
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km									
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m	0	0	0	2	0	0	0	0	0
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km	55	0	0	80	0	135	90	0	0
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km	4	0	0	54	0	0	0	0	0
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m	0	0	0	48	0	0	0	0	0

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (0 Minutes)	Disturbance (3 Minutes)	Disturbance (6 Minutes)	Disturbance (9 Minutes)	Disturbance (12 Minutes)	Disturbance (15 Minutes)
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km						
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km			1	2		
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km						
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km						
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km			2			
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km						
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m						
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km	1					
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km						
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km						
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km						
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m						
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km						
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km						
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m	1					
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km						
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m						
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m						
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km		2	1		1	
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m						
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km						
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km						
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km				1	1	1
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km						
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km						
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km	1					
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km						
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	1		3			
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m		`				
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km					2	
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km						
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m			1			1
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km						
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km				1		1
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m						1

APPENDIX D: DATA FROM CARIBOU BEHAVIOUR SURVEYS, 2020 TO 2025

Date	Start Time	End Time	Road Name and Distance Marker	Distance from Caribou to Observer Location Binned	Disturbance (18 Minutes)	Disturbance (21 Minutes)	Disturbance (24 Minutes)	Disturbance (27 Minutes)	Disturbance (30 Minutes)	Year	Longitude	Latitude	Reconnaissance Survey
5/16/2025	7:40	7:56	AWAR KM 92	300 m-1 km						2025	-96.2242	64.9892	No
5/17/2025	9:59	10:30	AWAR KM 22	1-1.5 km						2025	-96.1067	64.4886	No
5/19/2025	15:31	16:00	AWAR KM 73	300 m-1 km						2025	-96.3247	64.8594	No
5/20/2025	9:55	10:15	AWAR KM 43	1-1.5 km						2025	-96.3053	64.6424	No
5/20/2025	10:15	10:45	AWAR KM 42	1-1.5 km						2025	-96.2937	64.6267	No
4/26/2025	11:45	12:21	Haul Road KM 149	300 m-1 km						2025	-96.4458	65.2242	Yes
4/26/2025	13:04	13:19	Haul Road KM 135	100-300 m						2025	-96.2149	65.2097	Yes
4/5/2025	11:02	11:37	Haul Road KM 121	1-1.5 km				3	3	2025	-96.1025	65.1187	Yes
10/22/2025	11:13	11:40	Haul Road KM 130	300 m-1 km						2025	-96.1589	65.1822	Yes
10/31/2025	13:48	14:20	Haul Road KM 147	>1.5 km						2025	-96.0700	65.0218	Yes
10/31/2025	14:20	14:50	Haul Road KM 147	300 m-1 km						2025	-96.4482	65.2267	No
11/1/2025	13:36	14:06	Haul Road KM 129	100-300 m						2025	-96.2847	65.2265	No
11/2/2025	9:10	9:46	Haul Road KM 146	300 m-1 km						2025	-96.4226	65.2270	No
11/4/2025	15:33	16:12	Haul Road KM 159	300 m-1 km						2025	-96.4138	65.2932	No
11/5/2025	13:55	14:26	AWAR KM 73	100-300 m						2025	-96.3244	64.8696	No
11/5/2025	14:36	15:06	AWAR KM 74	300 m-1 km						2025	-96.3368	64.8802	No
11/5/2025	8:53	9:23	Haul Road KM 128	100-300 m						2025	-96.1508	65.1764	No
11/6/2025	9:27	9:57	AWAR KM 87	100-300 m						2025	-96.2486	64.9516	No
11/7/2025	10:10	10:43	Haul Road KM 160	300 m-1 km	1		1			2025	-96.4123	65.3015	No
11/7/2025	10:06	10:36	AWAR KM 75	100-300 m	1					2025	-96.3417	64.8842	No
11/8/2025	9:35	10:05	AWAR KM 77	300 m-1 km						2025	-96.3405	64.8836	No
11/9/2025	12:15	12:45	AWAR KM 82	300 m-1 km						2025	-96.3031	64.9350	No
11/10/2025	13:43	14:15	Haul Road KM 161	300 m-1 km	1	2	1			2025	-96.4124	65.3064	Yes
11/10/2025	9:51	10:24	AWAR KM 68	300 m-1 km						2025	-96.3301	64.8090	No
11/11/2025	11:48	12:15	AWAR KM 45	1-1.5 km						2025	-96.2970	64.6376	No
11/11/2025	12:29	12:45	Haul Road KM 161	300 m-1 km						2025	-96.4133	65.3073	No
11/12/2025	8:37	9:11	AWAR KM 82	300 m-1 km						2025	-96.3037	64.9351	No
11/13/2025	10:51	11:26	Haul Road KM 139	300 m-1 km	1				1	2025	-96.2743	65.2267	No
11/13/2025	13:35	14:09	AWAR KM 28	100-300 m				2		2025	-96.1680	64.5399	No
11/25/2025	11:39	12:22	AWAR KM 59	300 m-1 km	2	2		1	1	2025	-96.3700	64.7500	Yes
11/27/2025	9:58	9:58	AWAR KM 70	300 m-1 km						2025	-96.3166	64.8367	No
12/5/2025	14:28	14:58	Haul Road KM 120	100-300 m						2025	-96.0668	65.0968	No
12/15/2025	14:14	14:49	Haul Road KM 171	300 m-1 km						2025	-96.5923	65.3559	Yes
12/16/2025	14:20	15:04	Haul Road KM 171	300 m-1 km						2025	-96.6014	65.3681	Yes
12/25/2025	10:40	11:10	Haul Road KM 148	100-300 m		1				2025	-96.6665	65.4016	No

APPENDIX E PROPORTION OF RESPONSE BEHAVIOUR DURING EACH SURVEY

FIGURE E-1 PROPORTION OF RESPONSE BEHAVIOUR DURING EACH SURVEY—2020

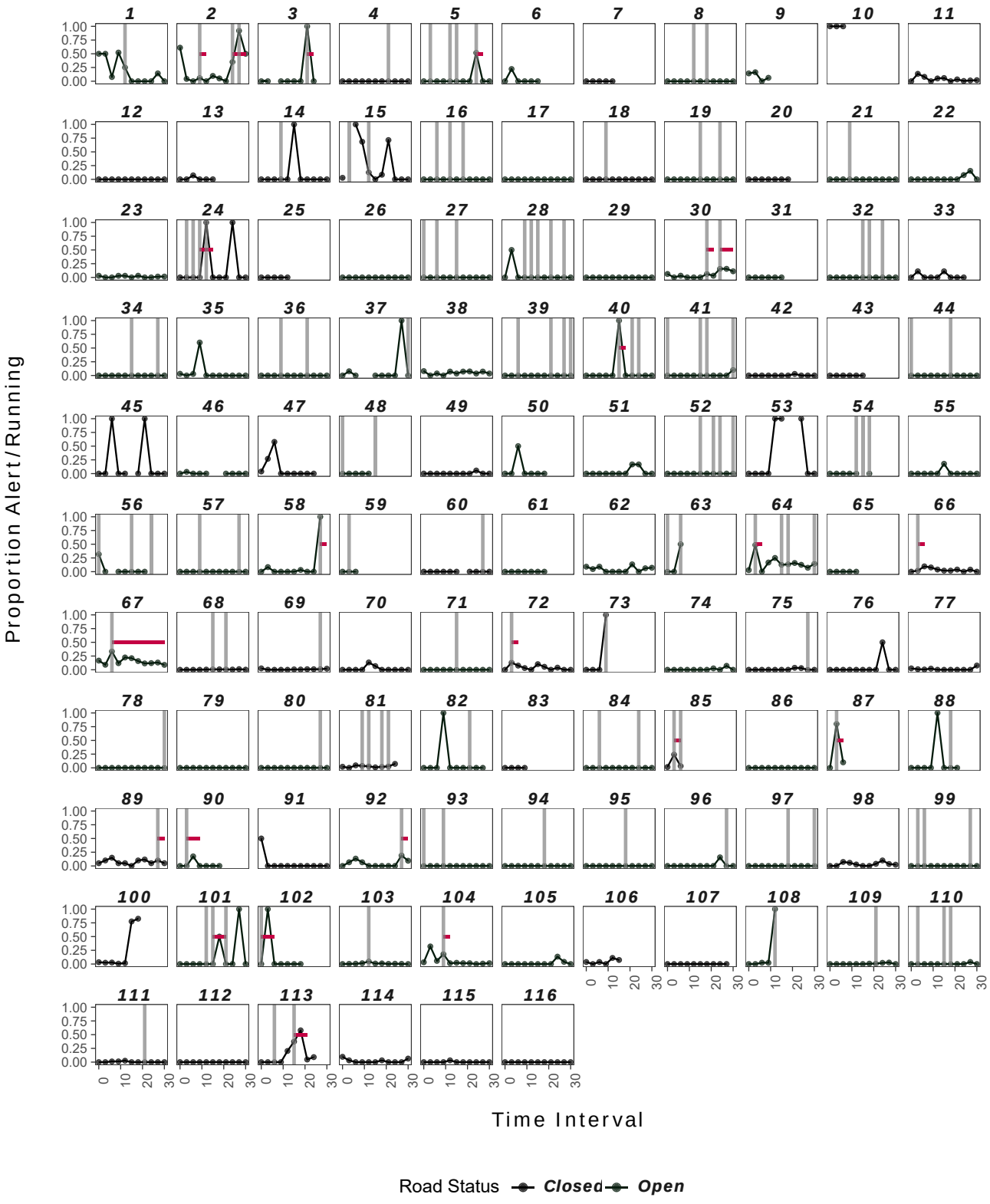


FIGURE E-2 PROPORTION OF RESPONSE BEHAVIOUR DURING EACH SURVEY—2021

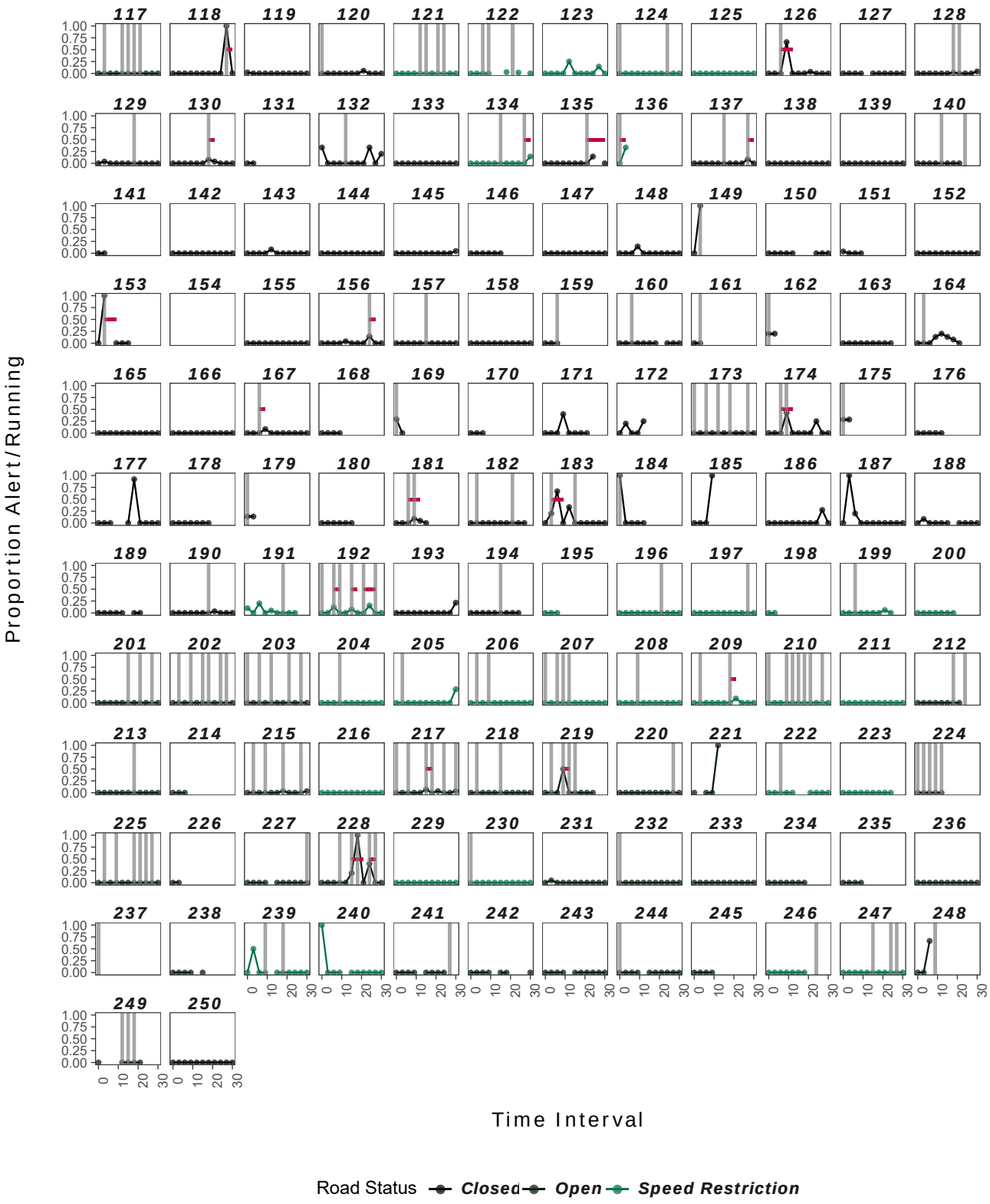
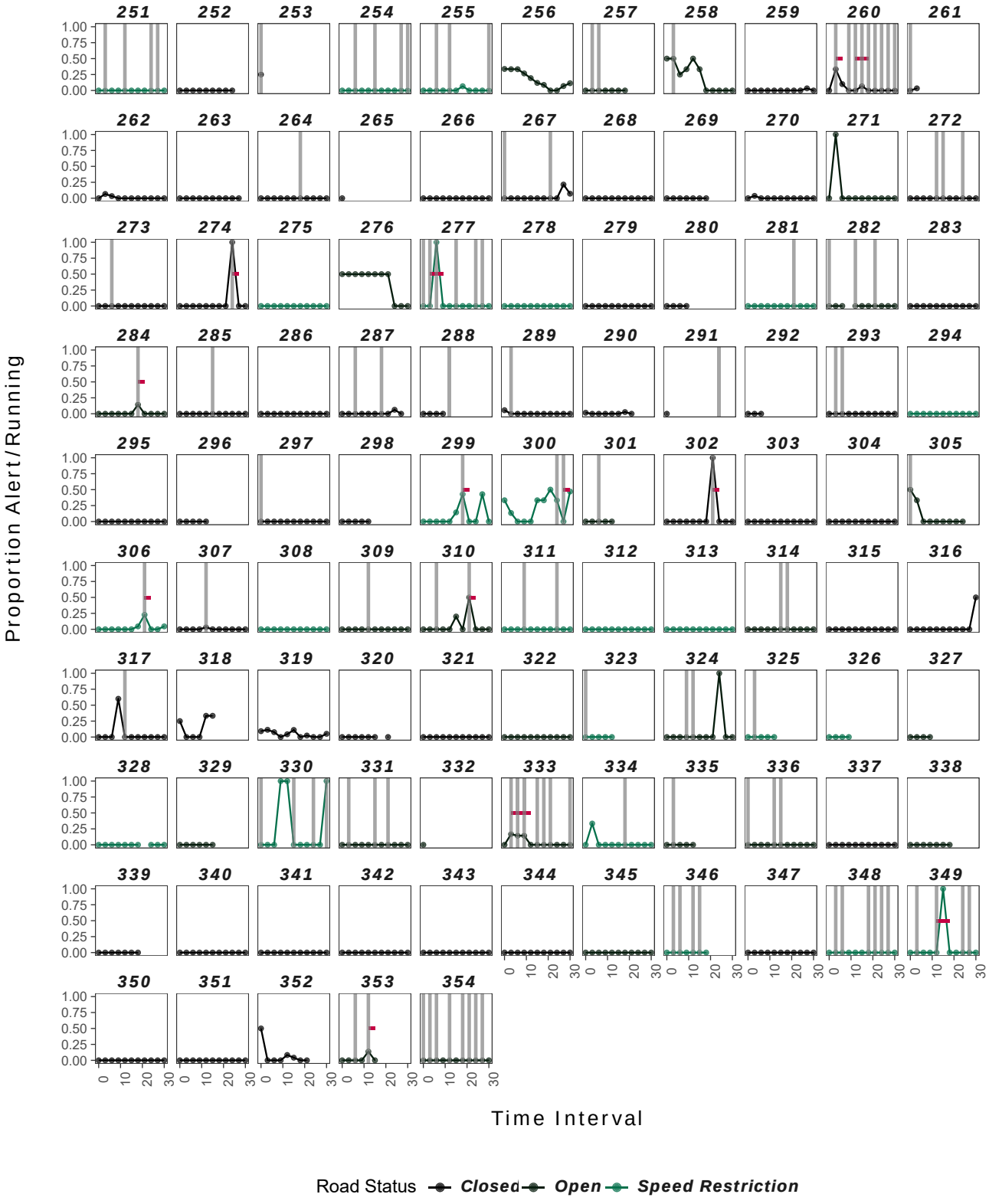


FIGURE E-3 PROPORTION OF RESPONSE BEHAVIOUR DURING EACH SURVEY—2022



CLIENT: Agnico Eagle Mines Limited
GRAPHICS NUMBER: AGN-26ERM-003:14

FIGURE E-4 PROPORTION OF RESPONSE BEHAVIOUR DURING EACH SURVEY—2023

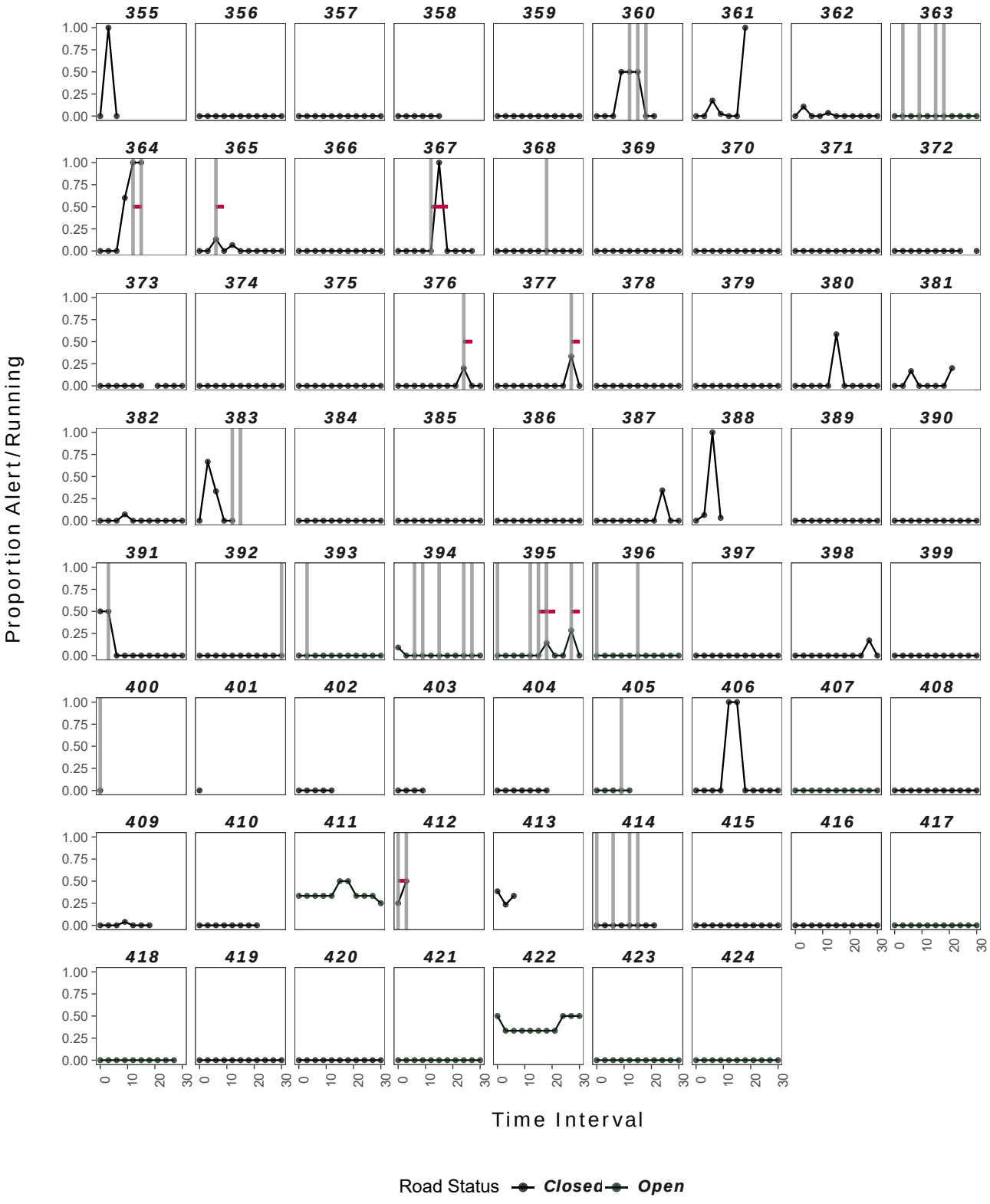


FIGURE E-5 PROPORTION OF RESPONSE BEHAVIOUR DURING EACH SURVEY—2024

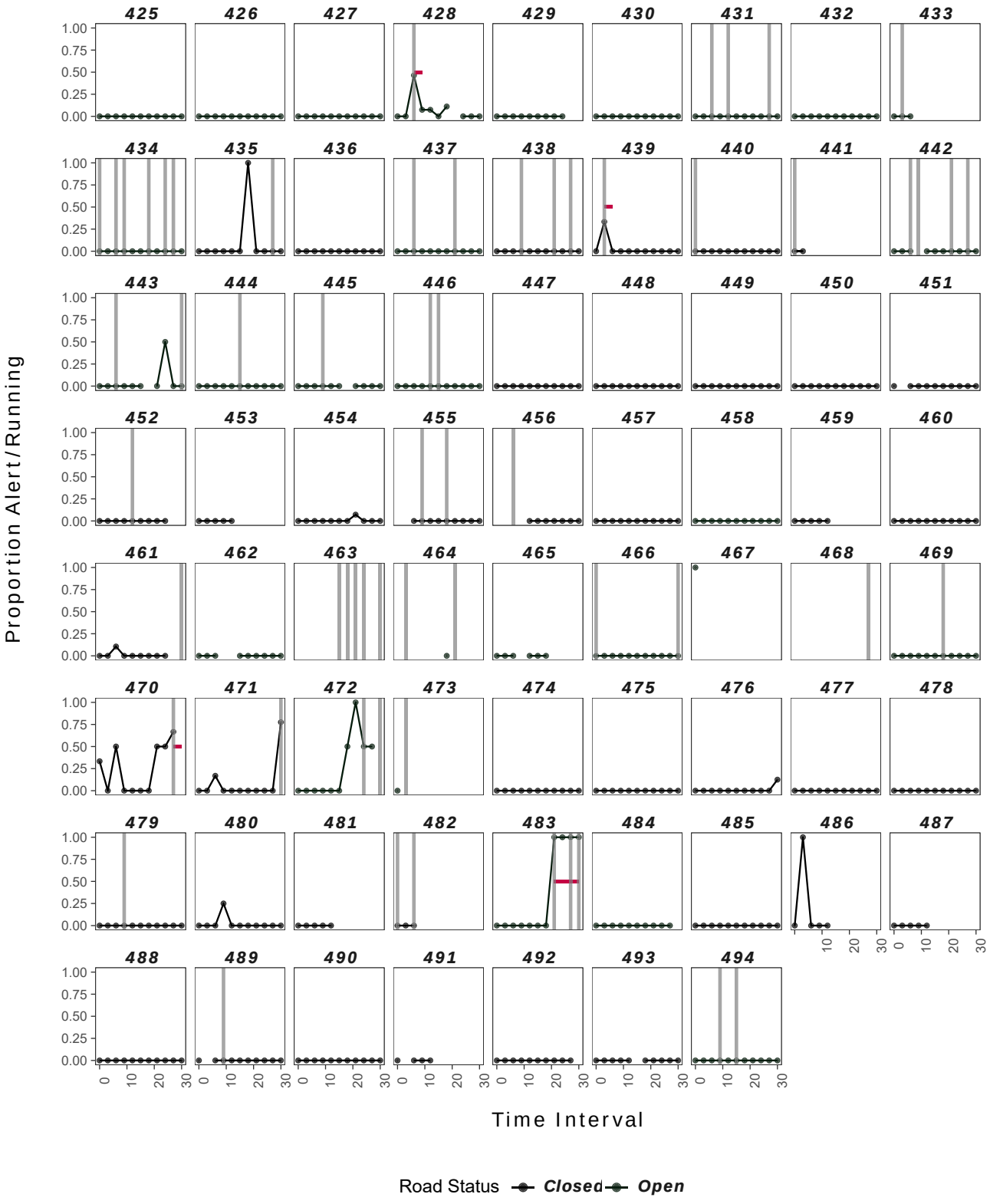
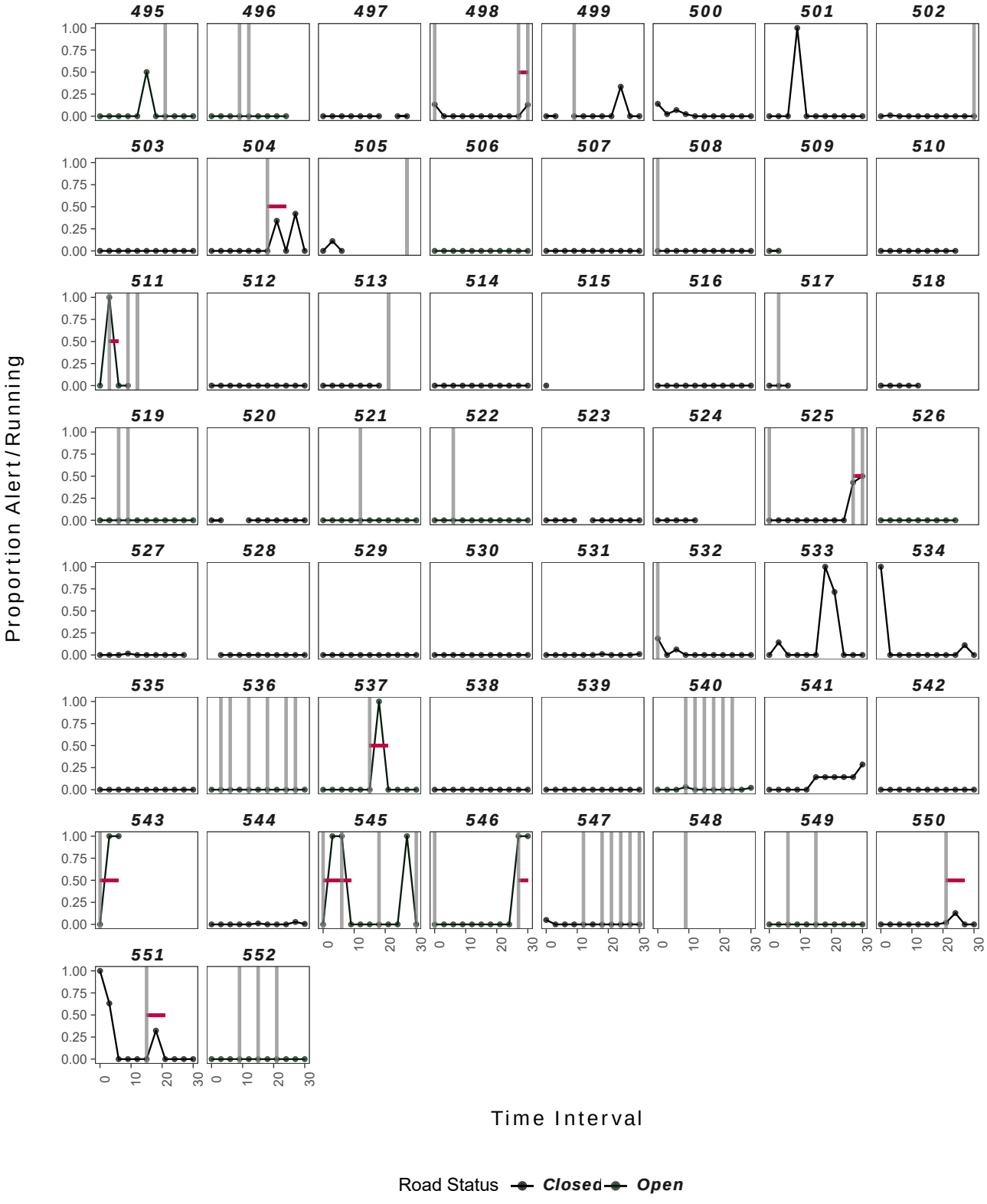


FIGURE E-6 PROPORTION OF RESPONSE BEHAVIOUR DURING EACH SURVEY—2025





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APPENDIX K

2025 Lead Caribou Assessment

TECHNICAL MEMORANDUM

DATE February 19, 2026 **Project No.** CA0055337.7557_4006_Rev1

TO Eric Haley
Agnico Eagle Mines Limited

CC Robin Allard

FROM Meghan Beale, Dan Coulton **EMAIL meghan.beale@wsp.com**

YEAR TWO OF THE LEAD CARIBOU PILOT PROGRAM: RESULTS FROM THE 2025 SPRING MIGRATION

1.0 INTRODUCTION

Over the past several years, Agnico Eagle Mines Limited (Agnico Eagle) and the Meadowbank Mine's (Mine) Terrestrial Advisory Group (TAG) have been evaluating alternate ways to successfully protect caribou from mine-related effects, including facilitating safe passage across the Whale Tail Haul Road (WTHR) and the All-weather Access Road (AWAR), particularly during spring and fall migration. Currently, road-related mitigation includes the partial and full closure of the WTHR and AWAR ('Mine roads') and the use of vehicle convoys during seasonal migration periods (Agnico Eagle 2019). Road closure mitigation is triggered by exceedance of a caribou group size threshold (GST), which requires frequent road surveys to monitor and record caribou group sizes and assess against the GST. The GST mitigation aims to protect at least 75% of caribou migrating through the Mine area by reducing road disturbances in response to large caribou groups.

Previous work established that groups of migrating caribou tend to be smaller during spring migration compared to fall migration and compared to aggregations during other times of the year (Cameron and Whitten 1979; WSP 2023a, b, c). Inuit Qaujimajatuqangit (IQ) indicates that the main caribou herd typically follows the lead female caribou ("Qiviqait" in Inuktituk [Agnico Eagle 2020]) during migration. Further, studies on caribou group composition indicate that pregnant females lead spring migration, followed by males and non-pregnant females (Cameron and Whitten 1979; Nicholson et al. 2016). Thus, lead caribou traveling through the Mine, in advance of the main migrating herd, may travel in small groups, may not meet the GST to trigger road closure mitigation, and may therefore not be afforded the same protections as larger groups of migrating caribou.

In advance of the 2024 spring migration, Agnico Eagle and the TAG initiated a pilot program to implement road closures in protection of lead caribou groups migrating through the Mine (Agnico Eagle 2023). The primary objective of the lead caribou pilot program was to protect lead caribou and allow the "Qiviqait" to pass through the Mine area with minimized disturbance, which could consequently facilitate the migration of trailing caribou (i.e., subsequent herds) through the Mine area. If road closure facilitates lead caribou migration through the Mine, trailing caribou groups may also migrate through the Mine area faster, which could help to alleviate concerns about the Mine causing migration delays. Additionally, if caribou can migrate through the Mine area faster, the overall impact of Mines disturbances on caribou should be lower. Although these outcomes were not guaranteed, they warranted further exploratory analyses to understand how the lead caribou pilot program could function as a mitigation strategy.

During the 2024 spring migration, lead caribou road closures were implemented for both the AWAR and WTHR. In the first year of the pilot program, the lead caribou road closure was initiated prior to the GST being exceeded for the AWAR and was initiated after the GST was exceeded for the WTHR (WSP 2025). Despite one lead caribou closure occurring prior to the GST being triggered, exploratory analyses for the 2024 spring migration could not confirm that the additional road closure resulted in increased migration speeds (WSP 2025).

This technical memorandum builds upon the exploratory analyses presented for the first year of the lead caribou pilot program (WSP 2025) and presents results from the second year of the pilot program, using an additional year of spring migration data (i.e., from 2025). Figures depicting age-sex composition of lead caribou groups were also included in this technical memorandum, in response to requests made by the TAG during the 18 and 19 September 2025 meeting.

2.0 METHODS

Caribou collar data collected between 2001 and 2025 were used in these analyses. Collar data from 2001 to 2024 had previously been compiled and cleaned in support of other deliverables (WSP 2023a, 2025), and collar data from the spring of 2025 (i.e., until 30 June 2025) were added to these data. Data contained fixes for female caribou from the Ahiak, Beverly, Lorillard, Qamanirjuaq, and Wager Bay herds, as well as collar data from animals not assigned to a herd (designated Northeast Mainland [NEM])(Table 1). The GN reclassified most caribou designated as NEM in 2023 to other herds in 2024 but did not apply this change to 2023 collar data. Collar data for 2023 were updated to reflect the new herd assignments. All data had previously been filtered to remove data with low position accuracy (position accuracy values of “0”, “1”, and “2”, where this information was available); location fixes within 14 days from the first fix (to reduce effects of capture and collaring; e.g., Dechen Quinn et al. 2012; Wilson et al. 2016); cases where two subsequent fixes were within one hour of each other (to reduce positioning uncertainty); and collars with stationary relocation time series (i.e., caribou mortality, collar fell off). Data were also constrained to the spring (i.e., 1 April – 25 May, inclusive) for each year. Data were compiled and analysed using *R* version 4.3.3 (R Core Team 2024). Data used in figures and analyses are summarized in Table 1.

To understand the effects of lead caribou road closures on caribou movement, analyses reported herein focused on collared individuals that came within 17 km west and 2.6 km east of the AWAR and WTHR roads (Boulanger et al. 2024), hereafter referred to as the study area. These distances west and east of the Mine roads were selected based on the potential spatial influence of Mine roads on caribou movement as suggested by Boulanger et al. (2024). The number of days between the arrival of the first collared caribou (i.e., day = 0) and the arrival of subsequent collared caribou in that year was calculated to examine interactions with closed roads across years. The number of individuals that were near a closed road at their closest GPS fix to the Mine roads was compared, with 2025 as the reference category.

The time it took collared caribou to traverse the 17 km west of the Mine roads and 2.6 km east of the Mine roads was analysed by calculating speed between subsequent collar fixes. Fix rates differed by year (mode fix rate = 120 hours from 2001 to 2004; 24 hours from 2005 to 2012; 6 hours from 2013 to 2015; 4 hours from 2016 to 2025). Despite these different fix rates, retain data were retained across years to facilitate inter-year comparisons. Using the *move2* package (Kranstauber et al. 2024) in *R* (R Core team 2024), existing trajectories were used to extrapolate collar fixes at 10-minute intervals, which created a standard set of data points for all caribou that interacted with Mine roads, regardless of fix rate. From these extrapolated time points, the fix closest

to 17 km west of the Mine roads, the fix closest to the Mine roads, and the fix closest to 2.6 km east of the Mine roads were identified and retained for further analyses. This method allowed all caribou to have three common fix locations irrespective of different collar fix rates.

Speed from 17 km west to 2.6 km east of Mine roads was then calculated using two of these fixes (i.e., the time it took each caribou to traverse 19.6 km), and all three fixes were used to calculate the speeds on the west and east sides of the Mine roads separately (from 17 km west to the Mine roads, and from the Mine roads to 2.6 km east). Speed through study area was calculated for all years where sufficient data were available and years were separated into four time frames: Baseline (before Mine roads were built; 2001–2006), Operation (when only AWAR was operating; 2009–2016), Operation (when both AWAR and WTHR were operating; 2018–2023), and lead caribou closure (during lead caribou pilot program in 2024 and 2025). A generalized linear model with a gamma distribution was used to assess speed differences across the three time periods. In all models, if there was more than one fix per caribou, a random intercept for caribou-year was included. Because gamma models require values greater than zero, a small increment (i.e., 0.001) was added to all zero speeds to facilitate model estimation.

Road survey counts of caribou were compiled for 2025, then combined with previously compiled road survey count data from 2018–2024 (WSP 2025). Combined data were used to calculate when migration through the study area occurred each year. The migration end point was defined as the number of days it took to observe 95% of caribou. To quantify uncertainty around the end of migration, bootstrapped confidence intervals were calculated for the number of days it took to observe 95% of caribou. When these confidence intervals do not overlap, it can be considered evidence that there is a difference between years (Efron 1979). The size of caribou counts across years were tested using a generalized linear model with a negative binomial distribution. Odds ratios (OR) were reported, where OR > 1 indicates that the outcome is more likely compared to a reference level (e.g., larger counts were more likely in 2023 compared to 2024) and an OR < 1 indicates that the outcome is less likely (e.g., larger counts were less likely in 2022 compared to 2024).

Lastly, figures were created to depict the 2025 lead caribou closure in relation to group sizes observed during road surveys, as well as the age-sex composition of groups that reached the AWAR and WTHR as part of the first 5% of caribou observed during 2025 road surveys.

3.0 RESULTS

3.1 Telemetry Dataset

Table 1 summarizes data used for each figure and the corresponding analysis. Shaded cells indicate that data was not used due to poor quality, low relevance, or because none existed for that year. One collar was removed from 2024 and 2025 for visualizing trajectories (Figure 1) due to fixes far east of the roads.

Table 1: Sample Sizes in Collars or Caribou Counts for Each Figure and Associated Analysis

Year	Total Collars in Dataset	Figure 1[(a)]	Figure 2[(a)]	Figure 3A	Figure 3B	Figures 4 & 5[(a)]
2001	24			1	1	
2002	22			0	0	
2003	30			0	0	
2004	36			0	0	
2005	22			3	4	
2006	30			0	0	
2007	19			0	0	
2008	21			0	0	
2009	31			1	1	
2010	28			2	3	
2011	56			1	4	
2012	29		5	4	4	
2013	54		2	1	1	
2014	35		1	1	1	
2015	55		1	1	1	
2016	74		6	5	5	
2017	96		0	0	0	
2018	94		17	9	10	6,460
2019	102	102	13	10	10	73,308
2020	72	72	3	1	1	15,955
2021	45	45	3	3	3	25,210
2022	26	26	0	0	0	5,324
2023	118	118	18	14	14	65,916
2024	116	115	4	2	2	23,438
2025	86	86	8	13	13	35,082

Note(s):
Shaded cells indicate that data were either removed due to low quality, low relevance, or because data did not exist for that year.

3.2 Spring Migration in 2025

During the 2025 spring migration, 13 collared caribou approached the Mine roads (shown in yellow with black outline; Figure 1), which is higher than in 2024 when only four collared caribou approached the Mine roads (WSP 2025). Of these 13 collared caribou, 8 collared caribou from Lorillard (*n* = 4) and Wager Bay (*n* = 4) herds directly crossed the Mine roads (*n* = 6 crossed AWAR; *n* = 2 crossed WTHR). The remaining 5 collared caribou traversed the study area to the north of the WTHR and did not cross the Mine roads; these 5 collared caribou were from the Ahiak (*n* = 1), Beverly (*n* = 1), Lorillard (*n* = 2), and Wager Bay (*n* = 1) herds.

The 2025 spring migration was similar to the 2019 spring migration when 7 collared caribou from the Lorillard (*n* = 3) and Wager Bay (*n* = 4) herds crossed Mine roads. In past years, collared Ahiak caribou have interacted with Mine roads (i.e., *n* = 2 caribou in 2023 and *n* = 1 caribou in 2024) but only one collared Ahiak caribou came into the study area in 2025 and moved north of the Mine roads (Figure 1). Fewer collared caribou interacted with

the Mine roads in 2025 compared to 2023, when 16 collared caribou from the Ahiak (n = 2), Lorillard (n = 4), Wager Bay (n = 8), Qamanirjuaq (n = 1), and NEM (n = 1) caribou interacted with Mine roads. In summary, spring migration patterns have differed over the last seven years in both the number and composition of collared caribou entering the study area and crossing Mine roads.

3.3 Collared Caribou Road Interactions

In recent years, the first collared caribou to approach Mine roads have encountered closed roads, as indicated by green dots along the x-axis of Figure 2 in all years except 2021. Caribou did not interact with Mine roads in 2017 or 2022. In 2025, collared caribou approached Mine roads within a 35-day period, with most (77%) of collared caribou approaching Mine roads within 12 days. There was no difference in the proportion of collared caribou that approached a closed road in 2020 ($\beta = -1.61$; $\chi^2 = 1.39$; $p = 0.24$), 2023 ($\beta = 1.49$; $\chi^2 = 0.93$; $p = 0.33$), or 2024 ($\beta = 0.08$; $\chi^2 = 0.002$; $p = 0.96$), when compared to 2025 with 67%, 100%, 100%, and 92% of collared caribou approaching closed roads in 2020, 2023, 2024, and 2025, respectively. Significantly fewer ($\beta = -4.07$; $\chi^2 = 8.72$; $p < 0.01$) collared caribou approached closed roads in 2021 than in 2025, with 0% of collared caribou approaching closed roads in 2021.

3.4 Collared Movement Speed

Figure 3 shows average speed of collared caribou through the study area (from 17 km west to 2.6 km east) for four time frames. Speeds were significantly faster for caribou during Operations, when both the AWAR and WTHR were operating (2018–2023), than during lead caribou closure (OR = 1.67; 95% CI = [1.00, 2.68]; $p = 0.04$). However, speeds did not significantly differ for caribou during Baseline (OR = 1.85; 95% CI = [0.85, 4.45]; $p = 0.15$) and during Operations when only the AWAR was operating (OR = 1.72; 95% CI = [0.96, 3.00]; $p = 0.06$) when compared to lead caribou closure.

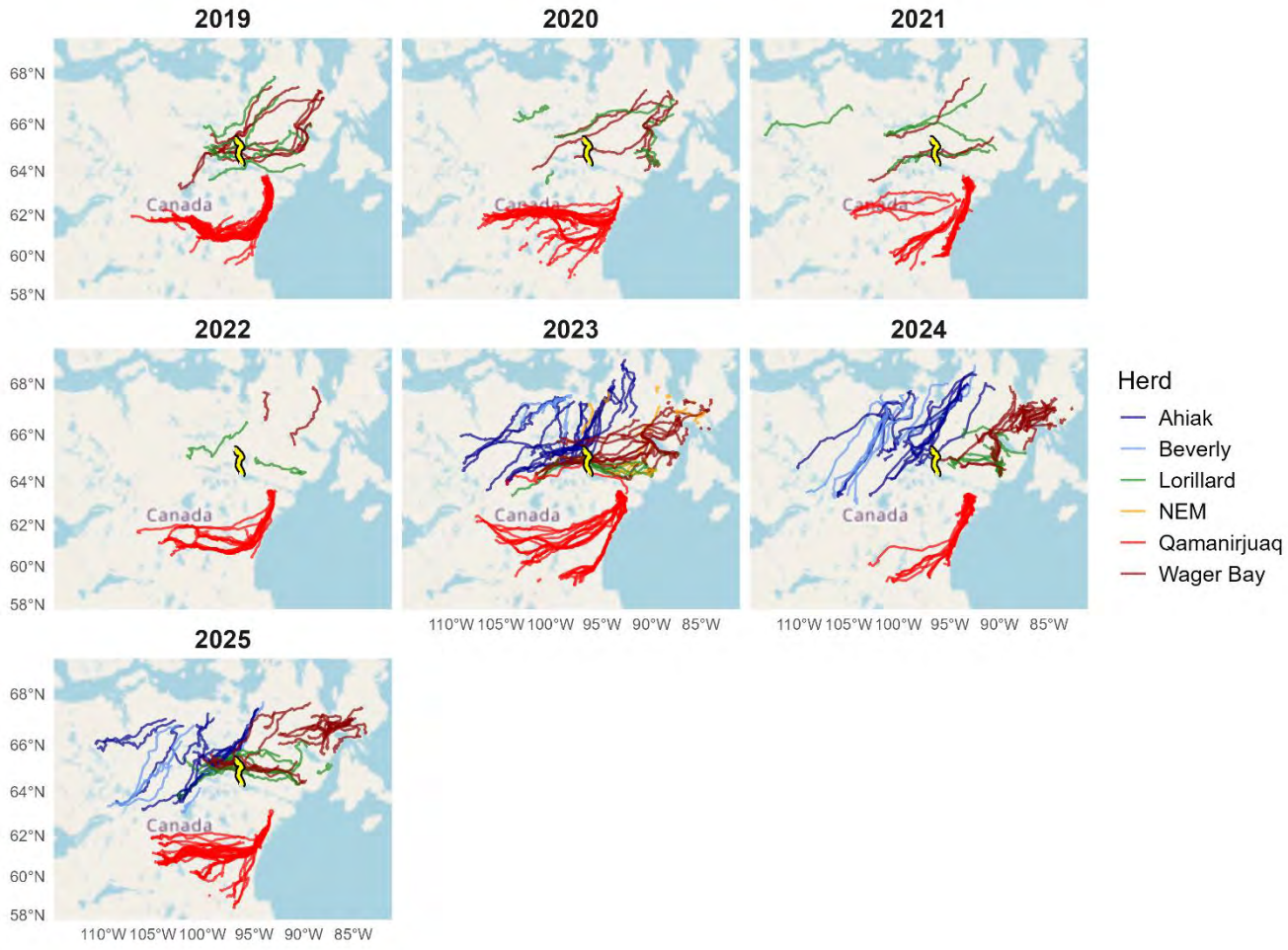


Figure 1: Spatial distribution of collar data 2019–2025 for Ahiak, Beverly, Lorillard, Qamanirjuaq, and Wager Bay herds, as well as collar data from animals not assigned to a herd (designated Northeast Mainland [NEM]). The Whale Tail Haul Road and All-weather Access Road are shown in yellow with a black outline.

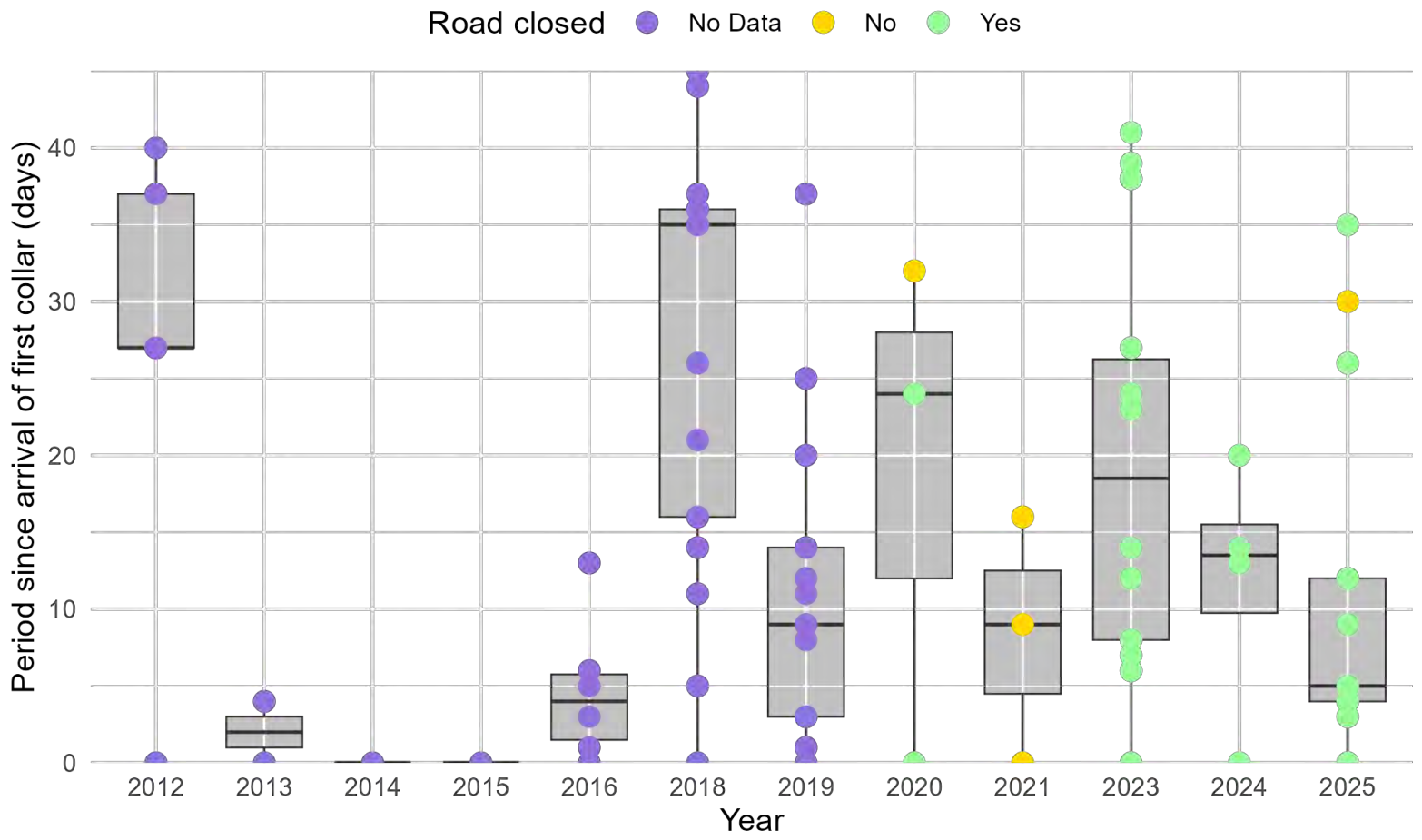


Figure 2: **Period of time between the arrival of each collared caribou within 17 km from the All-weather Access Road or Whale Tail Haul Road and the arrival of the first collared caribou in that year. The arrival of the first collared caribou intersects the x-axis. Dots are coloured based on whether the caribou approached a closed road or not. During 2017 and 2022, collared caribou did not interact with either road.**

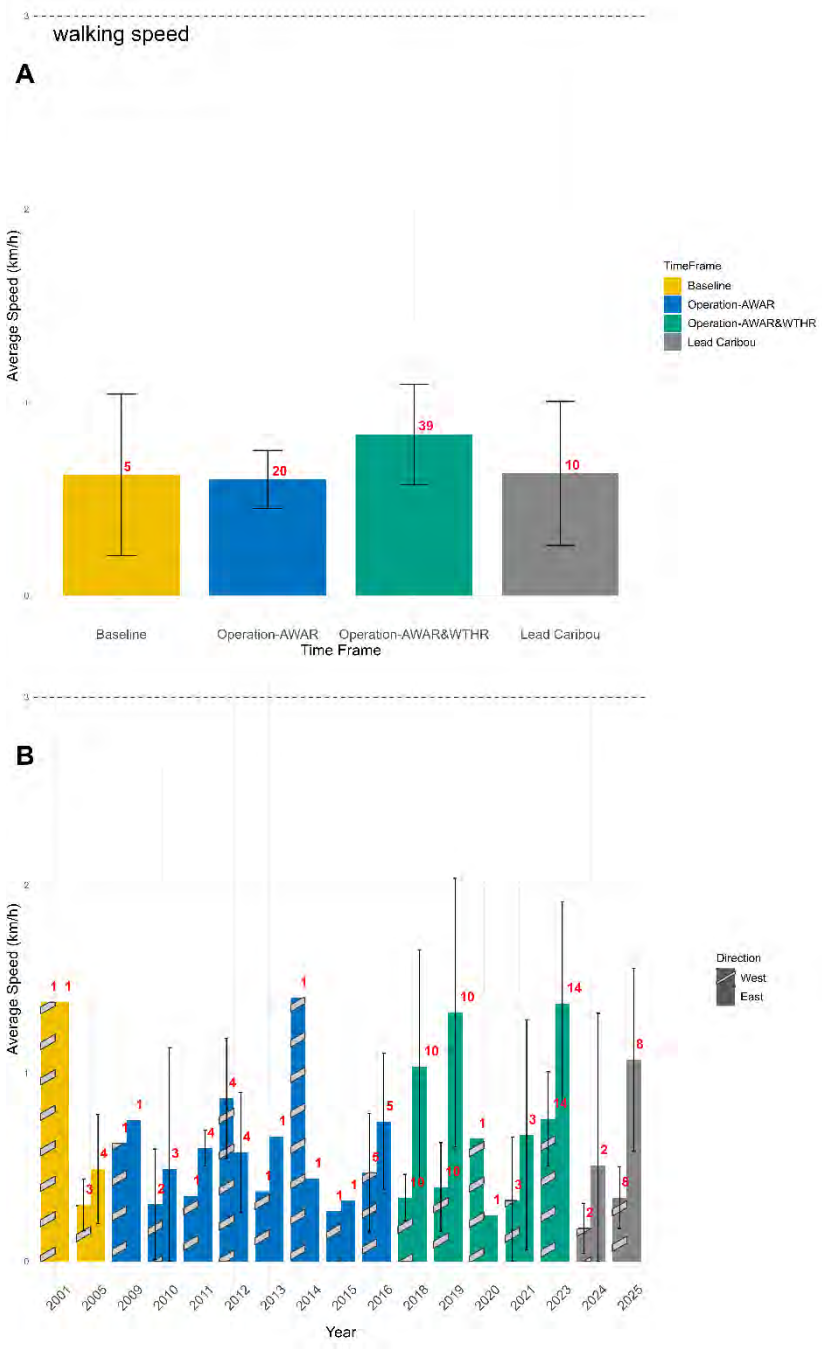


Figure 3: **Speed of collared caribou that crossed through the study area broken down by time period (A) and by side of the road and year (B). Error bars are confidence intervals. Red numbers show sample sizes. The dotted line at 3 km/h shows the maximum energy-efficient walking speed for caribou (Fancy and White 1987).**

3.5 Road Survey Migration Duration

Figure 4 shows the cumulative number of caribou observed during road surveys between 2018 and 2025. The curve (blue line) plateaus when the number of caribou observations decreases. The vertical dashed line shows the date at which 95% of caribou were observed each year. Across all years, 95% of caribou were observed before May 25, with 2018 being the year with the latest date at which 95% of caribou were observed (i.e., 25 May 2018) and 3 May 2019 being the year with the earliest date at which 95% of caribou were observed. In 2025, 95% of caribou were observed by 23 May 2025.

Because factors unrelated to migration could affect caribou counts (e.g., road survey effort), the peaks of the cumulative density curves in Figure 4 should be interpreted in tandem with estimates of uncertainty. Bootstrapped confidence intervals were used to estimate uncertainty (Figure 5). Confidence intervals for 2025 are narrower than in previous years, which indicates more certainty surrounding the date at which 95% of caribou were observed (i.e., 23 May 2025, or approximately 54 days after lead caribou entered the study area). Although confidence intervals are narrower for 2025 spring migration, the estimate itself is larger, which does not support that lead caribou closure facilitated in faster migration through the study area.

3.6 Timing of Lead Caribou Closure

During 2025 spring migration, a lead caribou closure was implemented on the WTHR from April 8–17 inclusive, which coincided with group sizes that exceeded the GST threshold (Figure 6). No lead caribou closure was implemented on the AWAR during 2025 spring migration. A Fisher's exact test was performed to examine if there was an association between lead caribou road closure and group sizes above the GST threshold in 2025. GST closures were more likely to occur during lead caribou closure than outside of those dates (OR = 13.9; 95% CI = [1.77, 1787.72]; p = 0.007), which suggests that either lead caribou groups tend to be large enough to trigger GST closures or that the lead caribou closure did not capture small groups of lead caribou. Alternatively, a decrease in monitoring during lead caribou closures could bias detections towards larger caribou groups. Given this possible bias, these results should be interpreted with caution.

3.7 Composition of Leading Caribou Groups

In 2025, the first caribou groups to approach the AWAR and WTHR arrived in early March (i.e., March 7 for the AWAR and March 8 for the WTHR), were small (i.e., herds of 2 and 14 caribou for the AWAR; a herd of 2 caribou for the WTHR), and were composed of both cows and bulls (Figure 7). In early April 2025, caribou approached the AWAR and WTHR in larger groups, with first GST exceedances occurring on 2 April and 4 April for the AWAR (62 adults and juveniles of mixed sex; green circle) and WTHR (44 bulls and cows; purple circle), respectively (Figure 7). Two lone bulls approached the WTHR separately on April 5 and 7 (blue circles), and a pair of cows approached the WTHR on April 8 (red circle; Figure 7). Additionally, two lone cows approached the AWAR separately on April 10 (red circle is two circles overlapping; Figure 7). The mean group size was 33 caribou for the AWAR and 31 caribou for the WTHR, across the first 5% of road surveyed caribou for each road.

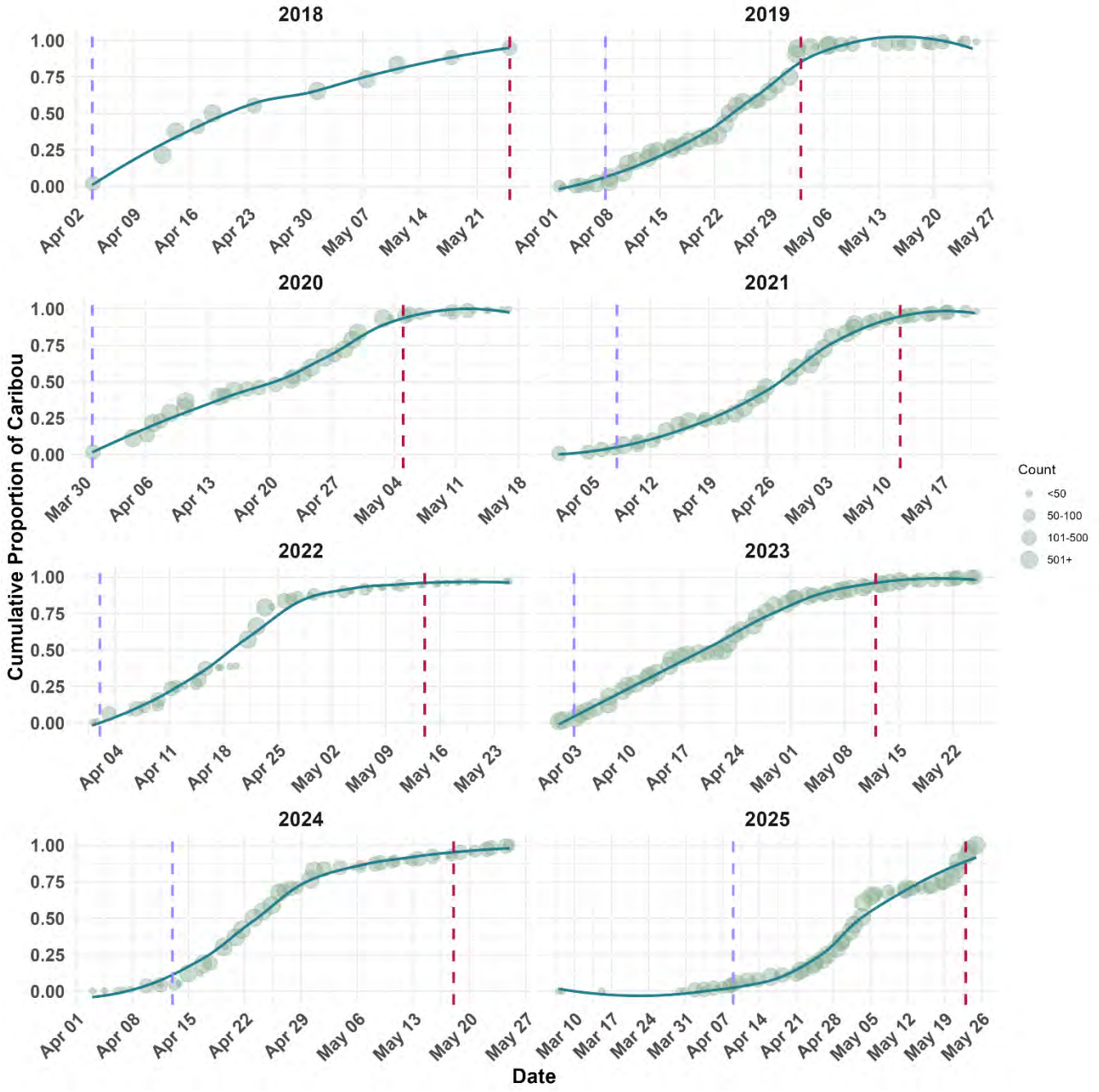


Figure 4: Cumulative proportion of caribou detected during road surveys between 2020 and 2025. Dot sizes are proportional to the total daily count of caribou observed. The vertical dashed lines indicate the date at which 5% (purple) and 95% (red) of road surveyed caribou were observed each year, respectively.

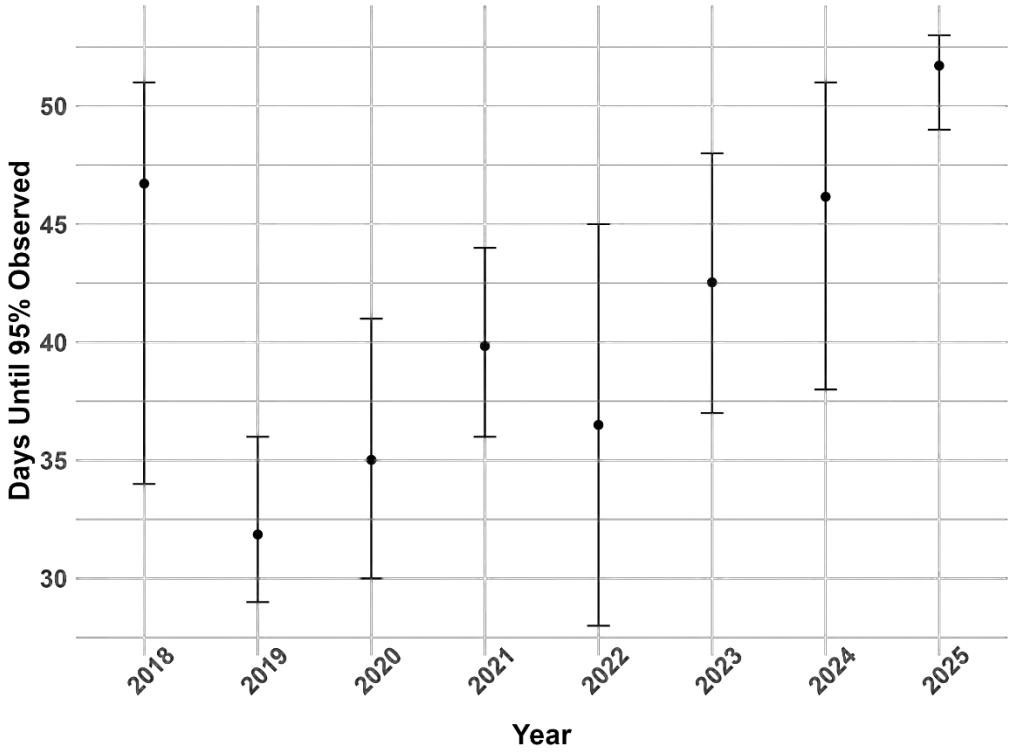


Figure 5: Comparison of spring migration end-dates across years. Black dots show the number of days between the first caribou group observation and the date at which 95% of road surveyed caribou were observed, per year. Error bars are the bootstrapped confidence intervals.

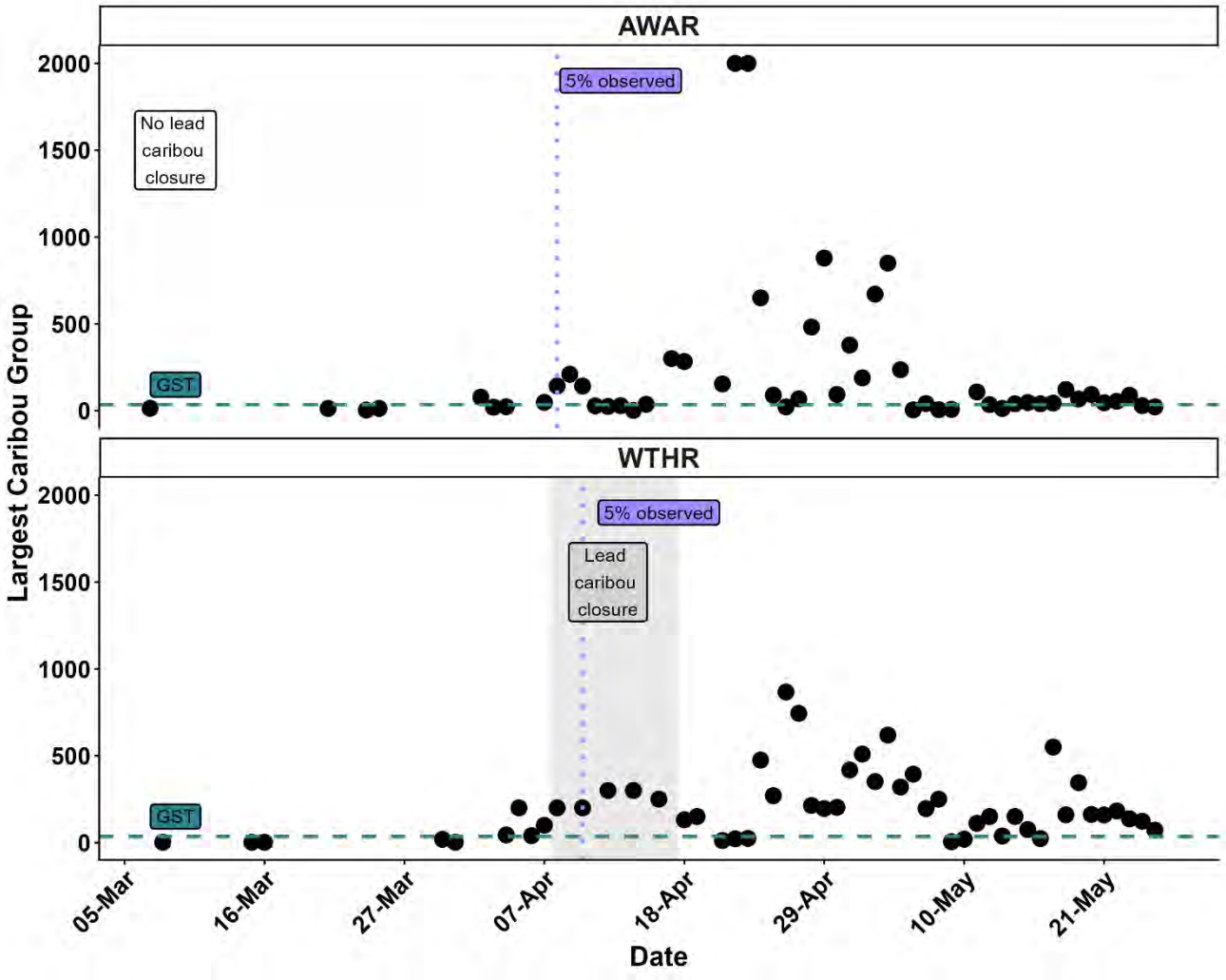


Figure 6: Largest caribou group detected with road surveys on the All-weather Access Road and Whale Tail Haul Road during spring migration in 2025. The spring 2025 GST value of 35 is shown with a teal dashed line. The date at which 5% of road surveyed caribou were observed is shown with a vertical purple dotted line. Lead caribou closures for spring 2025 migration are indicated with grey shading. No lead caribou closure occurred on the All-weather Access Road during spring migration in 2025.

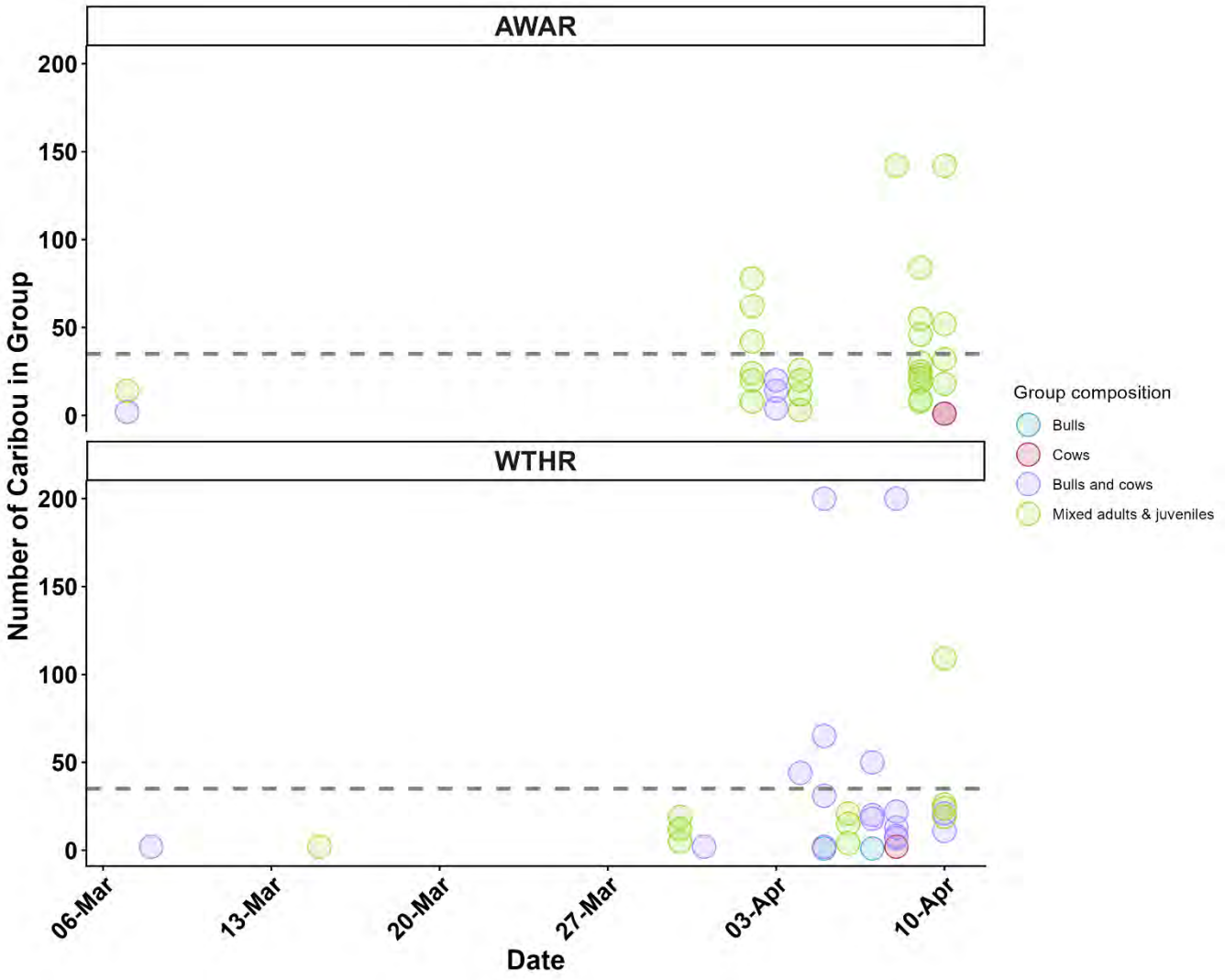


Figure 7: Age-sex composition of caribou groups observed during 2025 road surveys on the All-weather Access Road and Whale Tail Haul Road. The figure is truncated to show only caribou groups that were observed as part of the first 5% of caribou observed during 2025 spring migration. The spring 2025 GST value of 35 is shown with a grey dashed line.

4.0 DISCUSSION

The lead caribou pilot program was implemented for a second year during the 2025 spring migration. The primary objective of the pilot program was to protect lead caribou and allow the “Qiviqait” to pass through the Mine area with minimized disturbance, which could consequently facilitate the migration of trailing caribou through the Mine area. If road closure facilitates lead caribou migration through the Mine, trailing caribou groups may also migrate through the Mine area faster, which could help to alleviate concerns about the Mine causing migration delays. The analyses reported herein address this hypothesis by comparing caribou speed through the Mine area among years.

At this time, data from 2024 and 2025 monitoring do not support that the lead caribou pilot program resulted in increased migration speed or reduced migration duration through the Mine area (WSP 2025). The duration of 2024 spring migration was similar to prior years, and the duration of 2025 spring migration was longer than previous years. Spring migration in 2024 and 2025 may not have been faster than previous years if migration in previous years was also influenced by GST road closures. Because GST mitigation is designed to protect 75% of caribou encountering the Mine area, it is likely that most caribou encountering the AWAR and WHTR in 2024 and 2025 were already under the protection of the GST and the additional pilot program did not result in any discernable change in migration speed or duration. Further to this is that monitoring results indicate that percent of caribou encountering a closed road routinely exceeds 75%. For example, in 2024, the percent of caribou encountering a closed AWAR and WTHR was 80% and 95%, respectively, during spring migration. Irrespective of year, the first collared caribou interacting with Mine roads usually encountered closed roads. If this also occurred for lead caribou groups, then prior year road closures may have also facilitated road crossings. This possibility is emphasized by similar speeds through the study area during Mine operations and before the roads were built. Alternatively, lead caribou speeds and/or road closures may have little lasting influence on migration duration and speed because the speeds are similar to baseline. Instead, habitat features, physiological factors, immediate social cues, predator harassment, or climate factors may have stronger influences on movement patterns (Guttal and Couzin 2010; Alerstam and Bäckman 2018; Gurarie et al., 2019; Mallory et al, 2020).

Although lead caribou road closures did not appear to increase speed or reduce the duration of migration, the sample size of collared caribou interacting with Mine roads is relatively small, which restricts the precision of speed and duration estimates. However, small sample sizes also mean that only a fraction of caribou herds are exposed to or interacting with the Mine area each spring. It is also possible that the benefits of lead caribou closures are too subtle to be detected by collar data, especially if lead caribou are not collared. While there may be technical challenges to measuring the influence of lead caribou mitigation, Agnico Eagle acknowledges the importance of protecting lead caribou from shared IQ.

The caribou herds that migrate through the Mine area are of cultural significance and conservation concern to local Indigenous communities. In addition, a swift and unimpeded migration benefits Mine operations by minimizing periods of reduced mining activity. The lead caribou pilot program (Agnico Eagle 2024) is a successful example of collaboration between development operators, communities, and government. Community-integrated science should be a continuous process (Israel et al. 1998; Lambert et al. 2024) and programs such as the pilot program should be managed adaptively and flexibly from the outset. Although the first two years of the lead caribou pilot program have resulted in smaller than desirable sample sizes and, thus, some challenges in assessing the efficacy of the program for protecting lead caribou, ongoing collaboration among local Inuit community organizations, government, and Agnico Eagle should continue. Continued collaboration driving adaptive management will result in more successful conservation outcomes for barren-ground caribou in Nunavut.

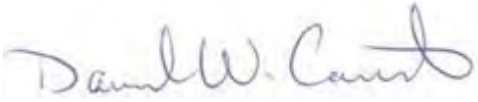
5.0 CLOSURE

We trust that this submission meets your current requirements. If you have any questions regarding the contents of this memorandum, please contact the undersigned.

WSP Canada Inc.



Meghan Beale, MSc, RPBio
Lead Wildlife Ecologist



Dan Coulton, PhD, RPBio
Senior Principal Wildlife Ecologist

MB/DC/cf

https://wsponlinecan.sharepoint.com/sites/ca-2024ca347557/shared documents/06. deliverables/2025 lead caribou assessment tm/04_final_rev1/aem_2025_lead_caribou_memo_20260219_rev1.docx

6.0 REFERENCES

Agnico Eagle (Agnico Eagle Mines Limited). 2019. Meadowbank Division - Terrestrial Ecosystem Management Plan, Version 7. June 2019.

Agnico Eagle. 2020. Terrestrial Advisory Group Meeting No. 5 Minutes. October 20, 2020.

Agnico Eagle. 2023. Meadowbank Terrestrial Advisory Group Official Meeting No. 15 (Minutes). 47 p.

Agnico Eagle. 2024. 2024 Spring Migration Caribou Protection Protocols. 2 p.

Alerstam T, Bäckman J. 2018. Ecology of animal migration. Current Biology 28(17): R968–R972. https://doi.org/10.1016/j.cub.2018.04.043

Boulanger J, Kite R, Campbell M, Shaw J, Lee D, Atkinson S. 2024. Estimating the effects of roads on migration: a barren-ground caribou case study. Canadian Journal of Zoology. 102(5): 476–493. https://doi.org/10.1139/cjz-2023-0121

Cameron RD, Whitten KR. 1979. Seasonal movements and sexual segregation of caribou determined by aerial survey. J Wildlife Manage. 1979; 43:626–33.

Dechen Quinn AC, Williams DM, Porter WF. 2012. Postcapture movement rates can inform data-censoring protocols for GPS-collared animals. Journal of Mammalogy 93:456-463.

Efron B. 1979. Bootstrap methods: Another look at the jackknife. The Annals of Statistics, 7(1): 1-26. https://doi.org/10.1214/aos/1176344552

Fancy SG, White RG. 1987. Energy expenditures for locomotion by barren-ground caribou. Canadian Journal of Zoology, 65(1), 122–128. https://doi.org/10.1139/z87-018

Gurarie E, Hebblewhite M, Joly K, Kelly AP, Adamczewski J, Davidson SC, Davison T, Gunn A, Suitor MJ, Fagan WF, Boelman N. 2019. Tactical departures and strategic arrivals: Divergent effects of climate and weather on caribou spring migrations. Ecosphere 10(12). https://doi.org/10.1002/ecs2.2971

Guttal V, Couzin ID. 2010. Social interactions, information use, and the evolution of collective migration. Proceedings of the National Academy of Sciences, 107(37): 16172–16177. https://doi.org/10.1073/pnas.1006874107

Israel BA, Schulz AJ, Parker EA, Becker AB. 1998. “Review of community-based research: Assessing partnership approaches to improve public Health”. Annual Review of Public Health 19: 173-202. https://doi.org/10.1146/annurev.publhealth.19.1.173

Kranstauber B, Safi K, Scharf AK. 2024. “move2: R package for processing movement data.” Methods in Ecology and Evolution. doi:10.1111/2041-210X.14383, https://doi.org/10.1111/2041-210X.14383.

Lambert WM, Camacho-Rivera M, Boutin-Foster C, Salifu M, Riley WJ. 2024. “Ending “domestic helicopter research.”” Cell 187: 1823-1827. https://doi.org/10.1016/j.cell.2024.02.027

Mallory CD, Williamson SN, Campbell MW, Boyce MS. 2020. Response of barren-ground caribou to advancing spring phenology. Oecologia 192:837–852.

Nicholson KL, Arthur SM, Horne JS, Garton EO, Del Vecchio PA. 2016. Modeling Caribou Movements: Seasonal Ranges and Migration Routes of the Central Arctic Herd. PLoS ONE 11(4): e0150333. https://doi.org/10.1371/journal.pone.0150333.

R Core Team. 2024. R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org/.

Wilson RR, Parrett LS, Joly K, Dau JR. 2016. Effects of roads on individual caribou movements during migration. Biological Conservation 195:2-8.

WSP (WSP Canada Inc.). 2023a. Updated Caribou Migration Timing with the Whale Tail Haul Road and All-weather Access Road. Prepared for Agnico Eagle Mines Limited by WSP. 22pp + 1 App.

WSP. 2023b. Lead Caribou Protection – Spring Migration. Prepared for Agnico Eagle Mines Limited by WSP. 15pp.

WSP. 2025. Assessment of spring lead caribou closure pilot program. Prepared for Agnico Eagles Mines Limited by WSP. 17 pp.

wsp.com