

An aerial photograph of a riverbank. The river is dark and occupies the upper left portion of the frame. The bank is composed of grey gravel and sand. A group of approximately 12 harvested caribou with large antlers is lined up on the bank. To the right, there is a dense forest of evergreen trees. The lighting suggests a bright day, casting shadows on the ground.

Gwich'in Harvest Survey

Summary of Porcupine Caribou harvest
from June 2023 to May 2024.

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Harvester Participation

Survey participation rates have varied by each community in the last two surveys. The participation rates are dependent on the changes in the number of the total harvesters and the number of survey responses. Generally, a community with a smaller number of harvesters tends to see more drastic changes in the participation rates compared to a community with more harvesters. Due to capacity issues, Inuvik had no participation in the last five surveys.

		Aklavik	Fort McPherson	Inuvik	Tsiigehtchic	Total
June - Oct 2023	Total Harvesters	47	108	Unknown	40	195
	Survey Responses	30	86	0	23	139
	Participation Rate	64%	80%	0%	58%	71%
Nov 2023 - May 2024	Total Harvesters	47	101	Unknown	43	191
	Survey Responses	24	80	0	2	106
	Participation Rate	51%	79%	0%	5%	55%

Harvester Observations

Below are the selections of representational observations on landscape, weather, wildlife & plants, and people. Duplicate and similar responses were reduced for conciseness. The summaries list the observations in the order of the most observed to the least observed.

Legend

A	Aklavik
M	Fort McPherson
I	Inuvik
T	Tsiigehtchic

June to October 2023 Observation Summary

The most observations reported on the lands and waters included: low water levels; fires; more sandbars; and landslides.

The most reported weather patterns included: warmer summer; more unpredictable weather; drier summer; and low precipitation.

Observations of more wolves and foxes were reported throughout the GSA, especially from survey participants in Fort McPherson. Although there was an overall increase in the number of fish and moose reported, an evident decrease in the number of caribou were observed throughout the GSA.

Landscape

A	More overflow
A	Took longer to freeze up

A	Dirty waters
A	Low water and smoky from fires
A	Erosion on inland and more mud bars
A	Mudslides
A	Caving in banks (erosion)
A	Lots of water
A	Eroding banks and more swampy
A	Dirty water in the river, less bugs, and more swampy
M	More fires that block sun light
M	Lots of fires
M	Low water level
M	More fires
M	Low water
M	Lots of water
M	Low water, dry creeks
M	Low water, more sandbars, cut banks, and land slides
M	More water
M	Drier
M	Less water
M	Different ice conditions, and late freeze up
M	More sand bars, shallower and faster water
M	More damp
T	Low water
T	Low water and more sandbars
T	Clear low water
T	Low water, less creek runoffs, dry grounds, and more fires
T	Dry
T	Landslides, high water, dried out lakes, and creeks
T	Lots of slumping and grounds dropping

Weather

A	Warmer, drier summer and wetter, longer fall
A	Extreme weather
A	Warmer weather
A	Warmer weather, the fall arrived earlier and lasts longer
M	No rain during summer, warmer fall with more rain, and less snow
M	Warmer
M	Global warming
M	Warmer spring, summer, and fall
M	Warmer summer and less rain
M	Very warm summer
M	Very dry summer, no rain, and very warm fall
M	Dry summer and less rain

M	Warmer summer and less rain
M	Very dry summer, no rain, and very warm fall
M	Warmer and less snow
M	Warmer summer
M	Too warm and dry
M	Climate change
M	Warmer and less rain (climate change)
M	Warmer, more east wind (climate change)
M	Warmer and more snow
M	More wind, humidity, and damp snow
M	Colder
M	More snow
T	Less rain and wind
T	Longer warmer and drier weather
T	Warmer and drier weather, and less rain
T	Not much snow
T	Late fall
T	Warmer and more snow
T	Lots of snow making it hard to get to hunting grounds

Wildlife & Plants

A	Can't see or hear songbirds
A	Fish are slow on some days
M	Less caribou, more wolves and foxes
M	Many wolves and less fish
M	More otters
M	More foxes, ptarmigan, and wolves
M	More coney, loche, muskrats, and rabbits
M	More wolves, moose, and less fish
M	Less birds and more fish
M	More sheep and fish
M	More rabbits and ptarmigans but less moose
M	Less caribou and less moose
M	More movement of wildlife because of fire
M	Less animals
M	More Grizzly bears
M	Fish drowning faster
M	More wolves, foxes and fish down faster
M	Less caribou, changing migration route
M	More wolves, foxes, and fish is soft
M	Less geese and ducks
M	Lots of ptarmigans and rabbits
M	Different migration pattern for caribou

- M More wolves and foxes in town
- M More moose and more foxes in town
- M Fish are softer and eggs came earlier
- M More wolves and less moose
- M Lots of foxes, more martins and rabbits
- M Less geese, ducks, and fish
- T Different birds
- T More wolves and bigger fish
- T Caribou came early then left quickly. Main herd stayed around Aklavik

People

- M Saw 4 wheelers chasing caribou off the road

November 2023 to May 2024 Observation Summary

The most observations reported on the lands and waters included: low water; erosion; and flooding.

The most observed weather patterns included: more snow; and colder winter.

No significant trend was found in observations of wildlife and plants.

Landscape

A	Erosion and low water
A	Lots of overflow and erosion
A	Lots of erosion over the years, and lots of creeks are plugged up making it hard to get around in the springtime
A	Banks are falling-in by lots of erosion
A	Lots of overflow from melting snow
M	Low water this spring
M	Too low water
M	Permafrost thawing and erosion
M	Low water and banks are changing
M	Strange break up
M	Low water, ice melting faster, and slower water
M	Less water this spring
M	More water
M	Lots of water and flooding
M	low water this spring
M	Overflow on the lakes, unable to get wood in my area in the bush
M	Lots of water
M	Forest fires

Weather

A	Warmer winter and colder spring
A	Lots of snow and slush in May
A	Really windy
A	Warmer, unusual weather, and colder spring
A	Lots of snow and colder weather
A	More snow and colder spring
A	Low water
A	Cold winter with lots of snow, warm spring
A	Cold spring with lots of snow and cooler June
A	Lots of snow and cold weather
A	Colder
A	Cold winter and spring
M	Cold, lots of snow

M	Lots of snow, good for the summer, lakes, and animals
M	More snow and warmer in the winter
M	More snow and warmer
M	Lots of snow in the winter
M	Warmer weather, colder winter with more snow
M	More snow and cold spring
M	Cooler this spring and unexpected snow fall
M	Colder winter months
M	Deep snow
M	Cold winters with lots of snow
M	Lots of snow and wind
M	Too warm, lots of snow

Wildlife & Plants

A	Lot of animal activity
A	Plants are not as green as this time last year
A	Fish came sooner and in bigger number than usual
M	Hardly any wildlife
M	Less animals, less birds
M	Not a lot of caribou on the mountains and less moose on the Peel River
M	Less animals on the mountains
M	Concerned about global warming, got to adapt and look for different opportunities and resources
M	Don't like to see caribou carcasses at the garbage dump. A couple of rare birds seen due to global warming. Way more snow geese.
M	No berries due to fires and hotter weather
M	Less caribou, more willows, lots of ptarmigan

Reported Harvest

June to October 2023

		Aklavik	Fort McPherson	Inuvik	Tsiigehtchic	Total
Caribou - Porcupine	Male	30	9	Unknown	2	41
	Female	0	3		0	3
	M/F Ratio	-	3.00		-	13.67
Caribou - Woodland	Male	0	12	Unknown	0	12
	Female	0	0		0	0
	M/F Ratio	-	-		-	-
Caribou - Other	Male	0	0	Unknown	0	0
	Female	0	0		0	0
	M/F Ratio	-	-		-	-
Caribou - Unknown	Male	0	0	Unknown	0	0
	Female	0	0		0	0
	M/F Ratio	-	-		-	-

Assumptions

- Any caribou of unknown sex were put in the female category.

Notes

- Aklavik
 - Harvest data from six surveys that reported harvests from outside of the survey window were excluded.
 - 12 survey participants out of 25 Aklavik surveys reported their caribou needs were not met (7 unable to hunt and 5 too far away).
- Fort McPherson
 - One empty survey with only a name was excluded. Sometimes forms get prefilled with names and not omitted after the survey.
 - 54 survey participants out of 68 Fort McPherson surveys reported their caribou needs were not met (51 few caribou, 11 unable to hunt, and 6 far away). Some harvesters received caribou meat from family or friends, but their needs were still not met.
- Tsiigehtchic
 - One empty survey with only a name was excluded. Sometimes forms get prefilled with names and not omitted after the survey.
 - 5 survey participants out of 11 Tsiigehtchic surveys reported their caribou needs were not met (3 far away, 1 unable to hunt, and 1 few caribou).
- Inuvik
 - The survey was missed.

November 2023 to May 2024

		Aklavik	Fort McPherson	Inuvik	Tsiigehtchic	Total
Caribou - Porcupine	Male	0	23	Unknown	0	23
	Female	0	30		0	30
	M/F Ratio	-	0.77		-	0.77
Caribou - Woodland	Male	0	0	Unknown	0	0
	Female	0	0		0	0
	M/F Ratio	-	-		-	-
Caribou - Other	Male	0	0	Unknown	0	0
	Female	0	0		0	0
	M/F Ratio	-	-		-	-
Caribou - Unknown	Male	0	0	Unknown	0	0
	Female	0	0		0	0
	M/F Ratio	-	-		-	-

Assumptions

- Any caribous of unknown sex were put in the female category.

Notes

- Aklavik
 - One survey from outside of the surveyed harvest period was excluded.
 - 9 survey participants out of 24 Aklavik surveys, reported their caribou needs were not met (3 unable to hunt, 6 few caribou).
- Fort McPherson
 - 10 empty surveys with only names were excluded.
 - 62 survey participants out of 80 Fort McPherson surveys reported their caribou needs were not met (12 unable to hunt, 14 far away, 36 few caribou).
- Tsiigehtchic
 - One Porcupine Caribou harvest from outside of the survey window was excluded.
 - 1 survey participant out of 2 Tsiigehtchic surveys reported their caribou needs were not met (1 few caribou).
- Inuvik
 - The survey was missed.

Estimated Total Harvest

The estimated total harvest of Porcupine Caribou was 108 (\pm unknown) caribou from June 2022 to October 2022, and 95 (\pm unknown) caribou from November 2023 to May 2024. Due to staffing capacity at the Nihtat Renewable Resources Council, Inuvik was unable to conduct the harvest survey. Consequently, Inuvik's estimated total harvest was extrapolated by multiplying the average harvest per hunter within the GSA (total reported harvest numbers divided by the total surveyed hunters from the other three communities) by the number of harvesters from Inuvik. The margin of error and other statistical values were not calculated for Inuvik and All Communities due to the lack of data.

Notes

- Any animals of unknown sex were put in the female category.
- In the tables' column headings, M = male, F = female/unknown.
- Margin of Error = 1.645 x Std Dev

June to October 2023

Estimated Harvest: Porcupine Caribou

	Aklavik		Fort McPherson		Inuvik		Tsiigehtchic		All Communities		
	M	F	M	F	M	F	M	F	M	F	Total
Total Reported Harvest	30	0	9	3	Unknown	Unknown	2	0	41	3	44
Variance of Rep Harvest	8.8	0.0	0.5	0.1	-	-	0.4	0.0	-	-	-
Estimated Total Harvest	56	0	15	5	22	2	8	0	102	7	108
Variance of Est Harvest	365	0	38	11	-	-	43	0	-	-	-
Std Dev of Est Harvest	19.1	0.0	6.1	3.2	-	-	6.6	0.0	-	-	-
Margin of Error	31.4	0.0	10.1	5.3	-	-	10.8	0.0	-	-	-
Lower CI (90% CL)	25.0	0.0	5.1	-0.3	-	-	-3.2	0.0	-	-	-
Upper CI (90% CL)	87.8	0.0	25.3	10.4	-	-	18.4	0.0	-	-	-
Margin of Error / Est Harv	56%	-	66%	105%	-	-	141%	-	-	-	-

November 2023 to May 2024

Estimated Harvest: Porcupine Caribou

	Aklavik		Fort McPherson		Inuvik		Tsiigehtchic		All Communities		
	M	F	M	F	M	F	M	F	M	F	Total
Total Reported Harvest	0	0	23	30	Unknown	Unknown	0	0	23	30	53
Variance of Rep Harvest	0.0	0.0	1.8	1.9	-	-	0.0	0.0	-	-	-
Estimated Total Harvest	0	0	29	38	12	16	0	0	41	54	95
Variance of Est Harvest	0	0	47	52	-	-	0	0	-	-	-
Std Dev of Est Harvest	0.0	0.0	6.8	7.2	-	-	0.0	0.0	-	-	-
Margin of Error	0.0	0.0	11.2	11.8	-	-	0.0	0.0	-	-	-
Lower CI (90% CL)	0.0	0.0	17.8	26.1	-	-	0.0	0.0	-	-	-
Upper CI (90% CL)	0.0	0.0	40.3	49.7	-	-	0.0	0.0	-	-	-
Margin of Error / Est Harv	-	-	39%	31%	-	-	-	-	-	-	-

Survey Respondents

The Gwich'in Harvest Survey gathers harvest information from participants of the Gwich'in Comprehensive Land Claims Agreement (GCLCA) who live within the GSA. Sometimes, surveys from non-Gwich'in harvesters get submitted. Their observations and comments get included in our reports. However, their harvest data gets excluded from our calculations for harvester participation rate, total reported harvest, and estimated total harvest. The study population for the survey includes only Gwich'in participants. Therefore, including numerical data from non-Gwich'in harvesters could cause statistical errors and possible duplication with harvest studies conducted in other regions. Harvesters' personal information is confidential, and the GRRB archives this information and stores it safely and in accordance with GRRB policy alongside all other data for future use.

Acknowledgements

The GRRB would like to thank all harvesters who participated in the Gwich'in Harvest Survey. Mahsi cho for sharing your knowledge with us, without you this Harvest Study would not exist.

We thank the Renewable Resources Councils (RRC) in each community for their support and advice: the Ehdiiat RRC in Aklavik (ERRC), Tetlit RRC in Fort McPherson (TRRC), Nihtat RRC in Inuvik (NRRC), and Gwich'ya Gwich'in RRC (GGRRC) in Tsiigehtchic. The GRRB would also like to give special thanks to the RRC Coordinators and interviewers for all their hard work and dedication in ensuring the Harvest Survey's continued success. The RRC Coordinators and interviewers update their harvester lists, provide the program information to their communities, and collect valuable harvest information from local harvesters twice a year. Your efforts have not gone unnoticed: ERRC Coordinator Crystal Koe with Renita Ross and DeAndra Greenland; TRRC Coordinator Laura Nerysoo with Roland Koe, Danielle Peterson, Billy Wilson, Georgie Blake and Marion Koe; and GGRRC Coordinator Roxanne McLeod with Angel Koe and Jenn Andre.

Lastly, GRRB would like to thank the GNWT, Department of Environment and Climate Change for providing the funding to implement the Gwich'in Harvest Survey.

Cover photo of caribou at Rat River in 2007, taken by Nathan Millar.

Appendix A – Harvest Survey Form

Harvest Data Collection Harvest Dates: **November 1, 2023 to May 31, 2024**



Instructions

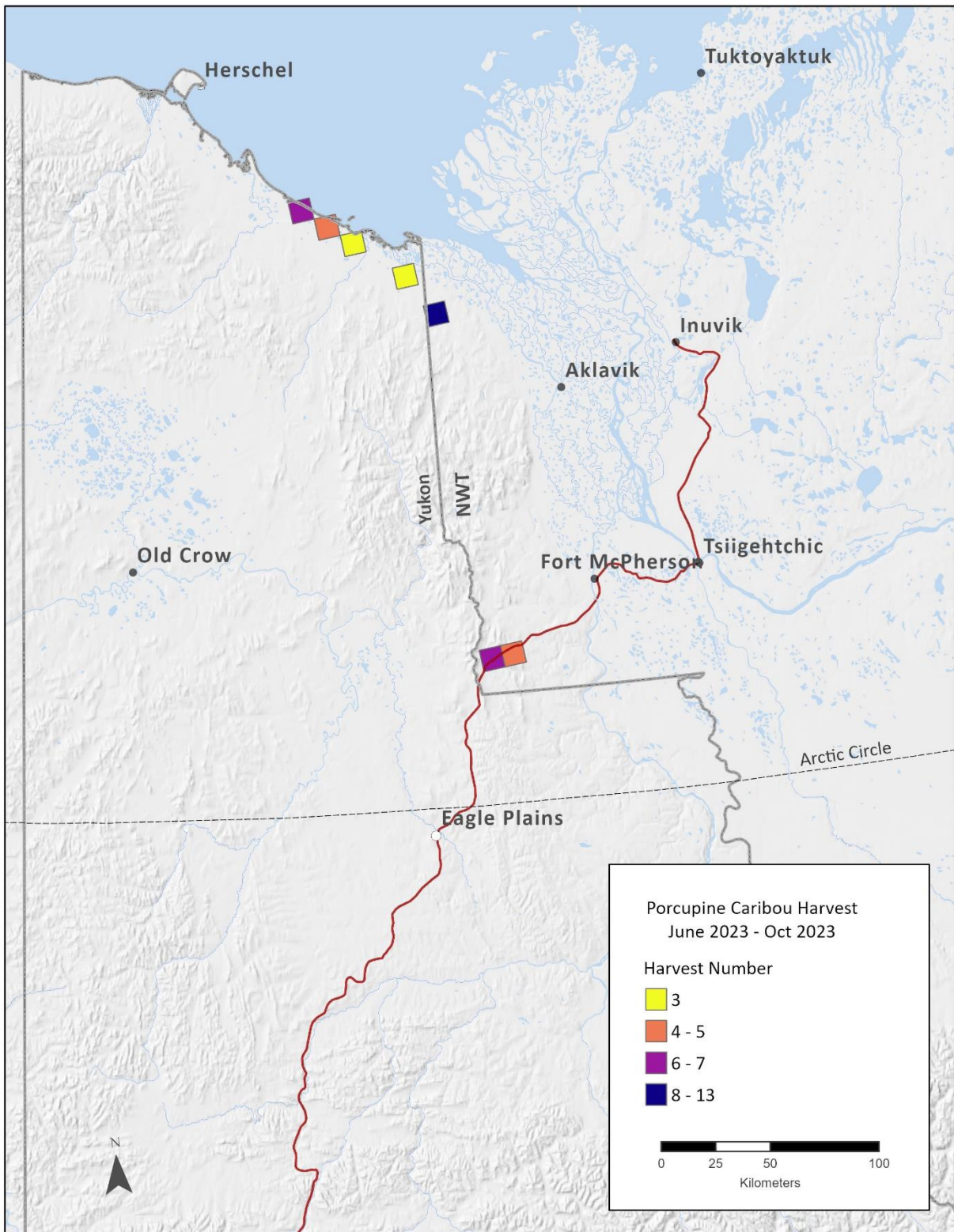
- If the harvester hunted with others, only report the numbers of animals he/she shot.
- A harvest must have a **Date** and a **Map Code**.
- Please use the **Age Codes** and **Sex Codes** provided below and follow the **Example** (remember to separate male and female numbers).
- Record harvest by different species on separate lines.

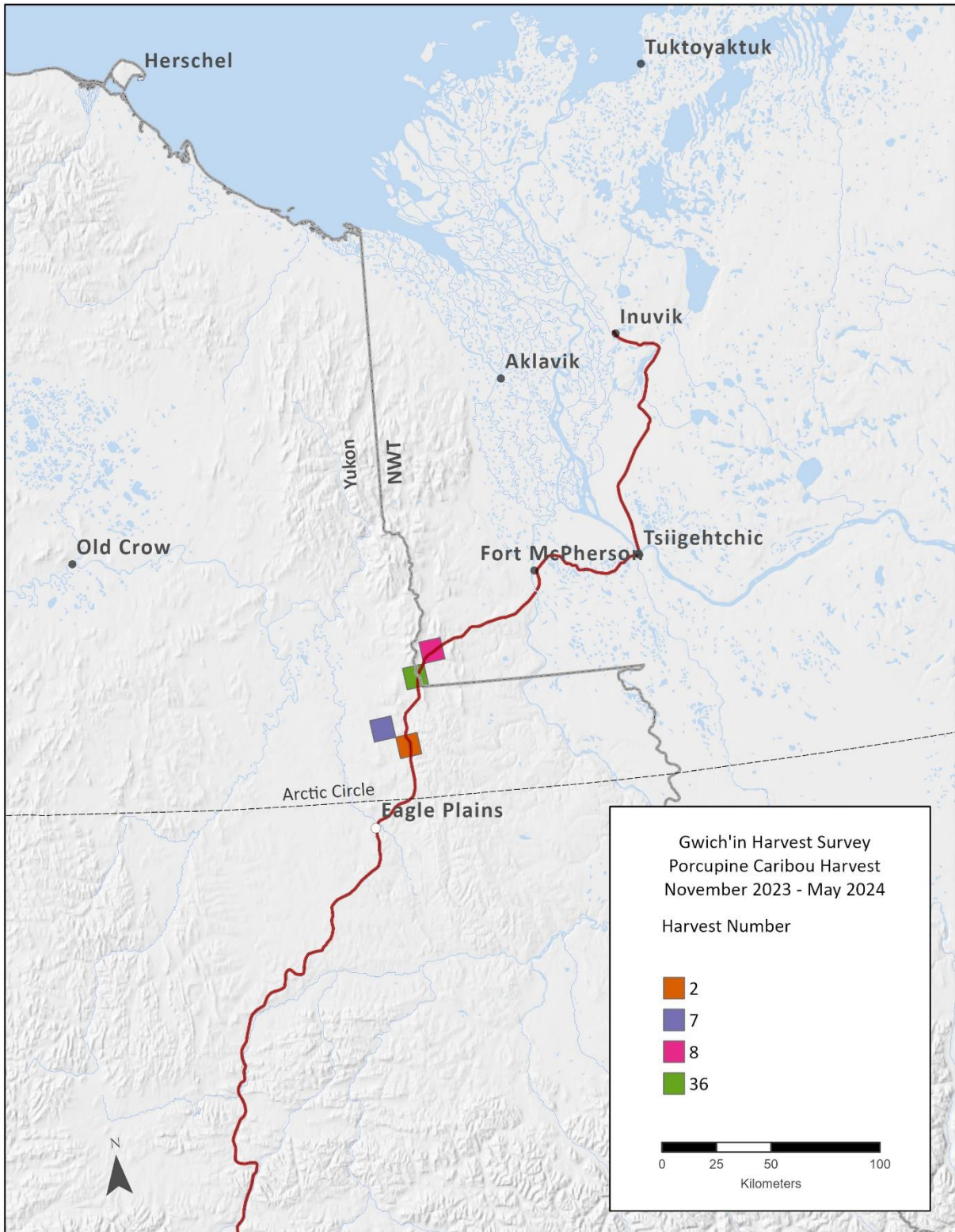
Age Codes		Sex Codes	
A - Adult	J - Juvenile	M - Male	F - Female
C - Calf/Lamb	U - Unknown	U - Unknown	

Harvester ID	Harvester Name	User Group	Community	Interviewer Name	Interview Date
		<input type="checkbox"/> Gwich'in <input type="checkbox"/> Inuvialuit <input type="checkbox"/> Other:			

Date	Place Name	Map Code	Species	How Many / Age / Sex	Have you reported this elsewhere?	Was this a community hunt?
Aug 31, 2022	James Creek	28108	<input checked="" type="checkbox"/> Porcupine Caribou <input type="checkbox"/> Moose <input type="checkbox"/> Woodland Caribou <input type="checkbox"/> Muskox <input type="checkbox"/> _____ <input type="checkbox"/> Dall's Sheep	2 / A / M 1 / C / F	<input checked="" type="checkbox"/> Check Station <input type="checkbox"/> Other: <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
			<input type="checkbox"/> Porcupine Caribou <input type="checkbox"/> Moose <input type="checkbox"/> Woodland Caribou <input type="checkbox"/> Muskox <input type="checkbox"/> _____ <input type="checkbox"/> Dall's Sheep		<input type="checkbox"/> Check Station <input type="checkbox"/> Other: <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Porcupine Caribou <input type="checkbox"/> Moose <input type="checkbox"/> Woodland Caribou <input type="checkbox"/> Muskox <input type="checkbox"/> _____ <input type="checkbox"/> Dall's Sheep		<input type="checkbox"/> Check Station <input type="checkbox"/> Other: <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Porcupine Caribou <input type="checkbox"/> Moose <input type="checkbox"/> Woodland Caribou <input type="checkbox"/> Muskox <input type="checkbox"/> _____ <input type="checkbox"/> Dall's Sheep		<input type="checkbox"/> Check Station <input type="checkbox"/> Other: <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Porcupine Caribou <input type="checkbox"/> Moose <input type="checkbox"/> Woodland Caribou <input type="checkbox"/> Muskox <input type="checkbox"/> _____ <input type="checkbox"/> Dall's Sheep		<input type="checkbox"/> Check Station <input type="checkbox"/> Other: <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

Appendix B – Map of Reported Harvest Locations





Notes

- The two maps show Porcupine Caribou harvest locations from the last two survey periods.
- Some harvesters did not provide map grid locations. When a common name of a place was provided (e.g. Shingle Point), they were used to determine the map codes. When the descriptions were too vague (e.g. Dempster Highway) or left blank, the harvests could not be mapped. All harvests from the last two survey periods were mapped.
- We thank Édouard Bélanger (Wildlife Harvest Specialist) from the Government of Yukon, Fish & Wildlife Branch for producing these maps.