



## Herd Update: March 2010

photo by Kieran O'Donovan, YTG

### March 2010 Porcupine Caribou Fieldwork

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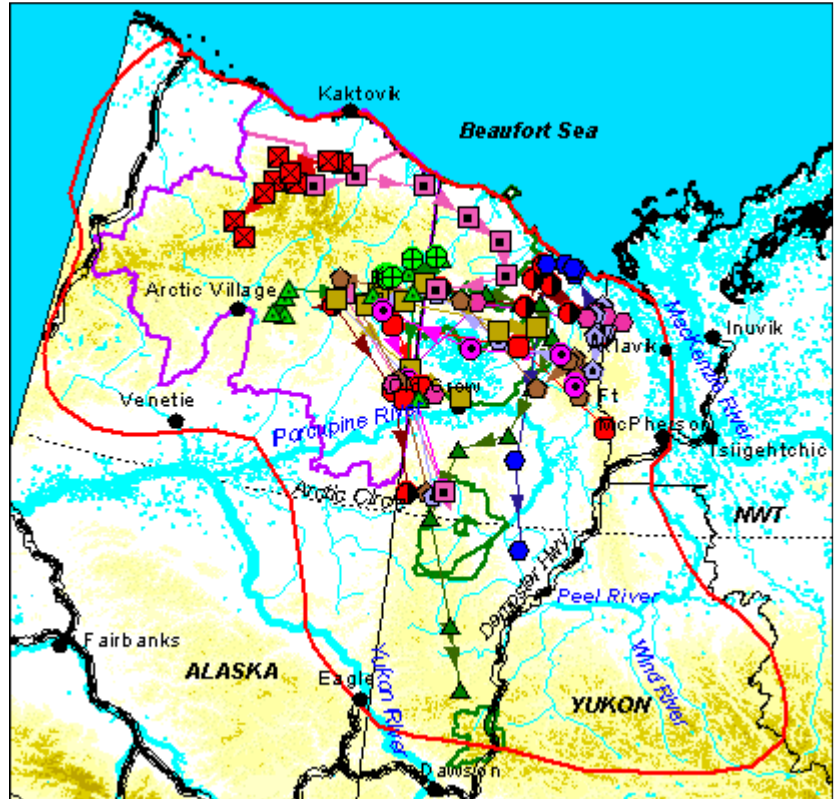
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## Fall Movements

In mid September of 2009, it appeared that for the third consecutive year the majority of the Porcupine Caribou Herd would winter in Alaska as most of the satellite collared caribou were headed that way. Between the 23rd and 30th of September, however, many caribou seemed to reverse their migration and move back into the Yukon. Some caribou headed back towards Old Crow - something that they have rarely done once they move towards winter range. Other caribou spread out through Fishing Branch and along the Miner and Whitestone Rivers all the way south to the Blackstone uplands.

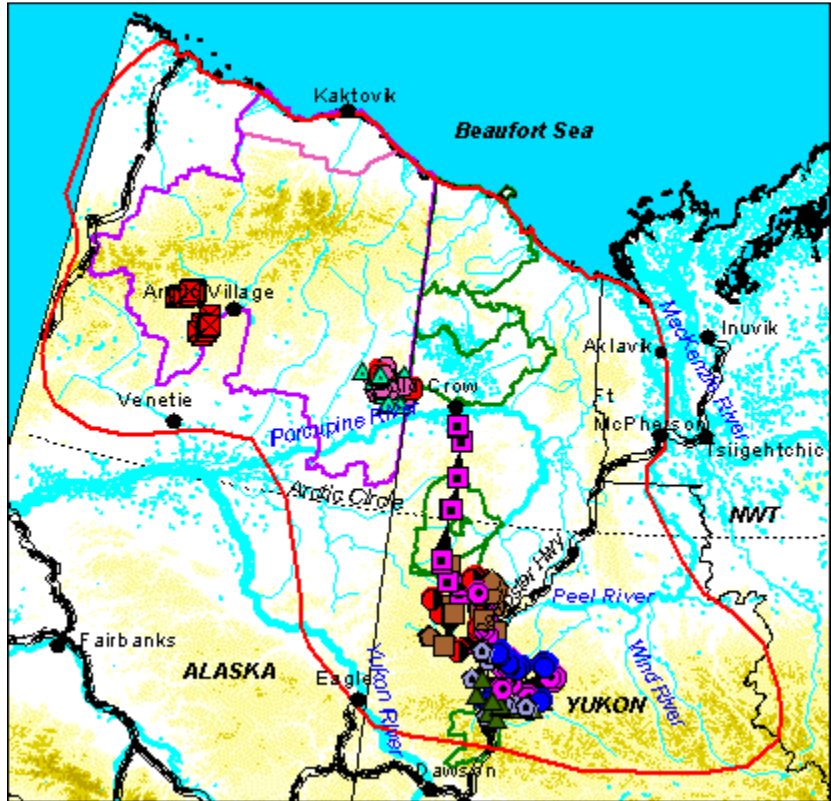


**Movements of Satellite collared cow caribou during late summer and fall, 2009.**

In the middle October, the Alaska Dept. of Fish and Game (ADFG), the Department of Environment, Government of Yukon (YDOE), and the U.S. Fish and Wildlife Service- Arctic National Wildlife Refuge (USFWS) conducted a composition survey of the Porcupine Caribou Herd (PCH) during the rut (14-16 October, 2009).

## Winter satellite collar locations

Throughout the late fall and early winter, Porcupine Caribou in the Yukon moved around a fair bit, more than they often do. In late January "Arnaq" moved about 175 kilometers north from the upper Whitestone River to south of Old Crow. Caribou were available to hunters along the Dempster Highway throughout the winter months, mostly along the Blackstone River and Engineer Creek / Ogilvie River. Quite a number of caribou wintered in the Old Crow Flats, something they haven't done in many years.



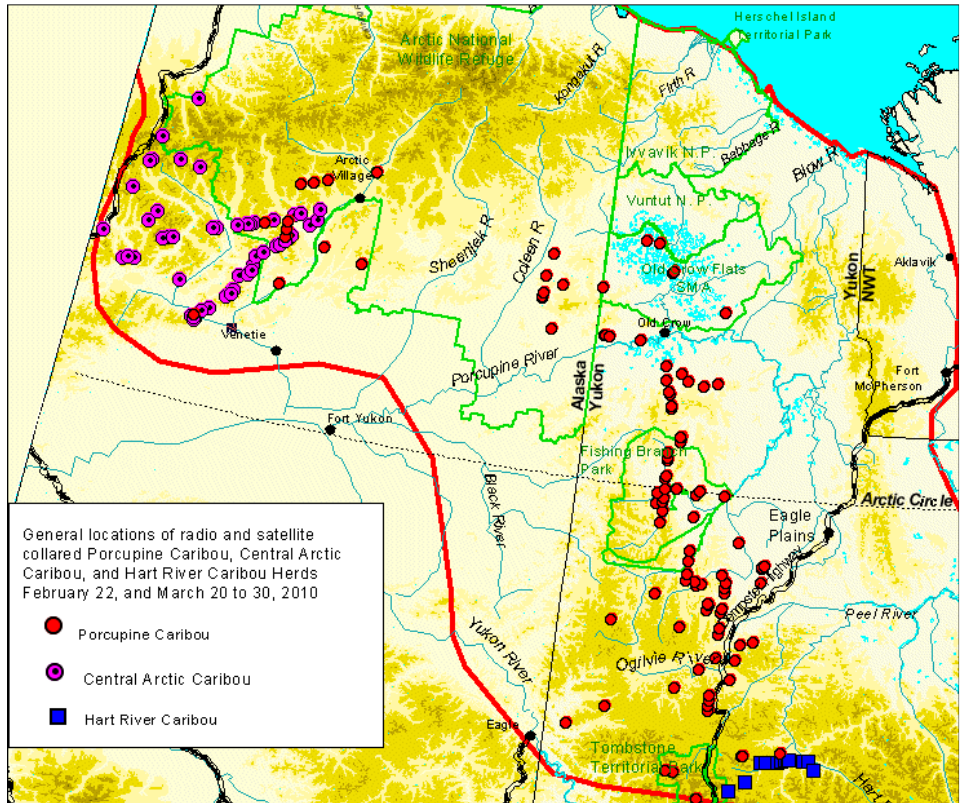
Movements of Satellite collared cow caribou during winter months, December 1, 2009 to March 31, 2010

## Late Winter Telemetry relocations

Telemetry flights to located radio collared Porcupine Caribou were conducted on February 22, March 2, 13 and 20 to 30 by Yukon and Alaskan biologists.

Seventy-one Porcupine Caribou collars (75 %) were located in Yukon, while twenty-four (25 %) were located in Alaska. This included 6 new morts - collared caribou that had died this winter.

Porcupine Caribou were extremely spread out over their winter range this year. In Yukon there were concentrations of caribou from north of Old Crow in the flats through David Lord Creek, the Fishing Branch, Miner and Whitestone, Ogilvie and Tatonduk and Blackstone River drainages.



**Locations of radio and satellite collared Porcupine, Central Arctic and Hart River Caribou, February 22, and March 20 to 30, 2010**

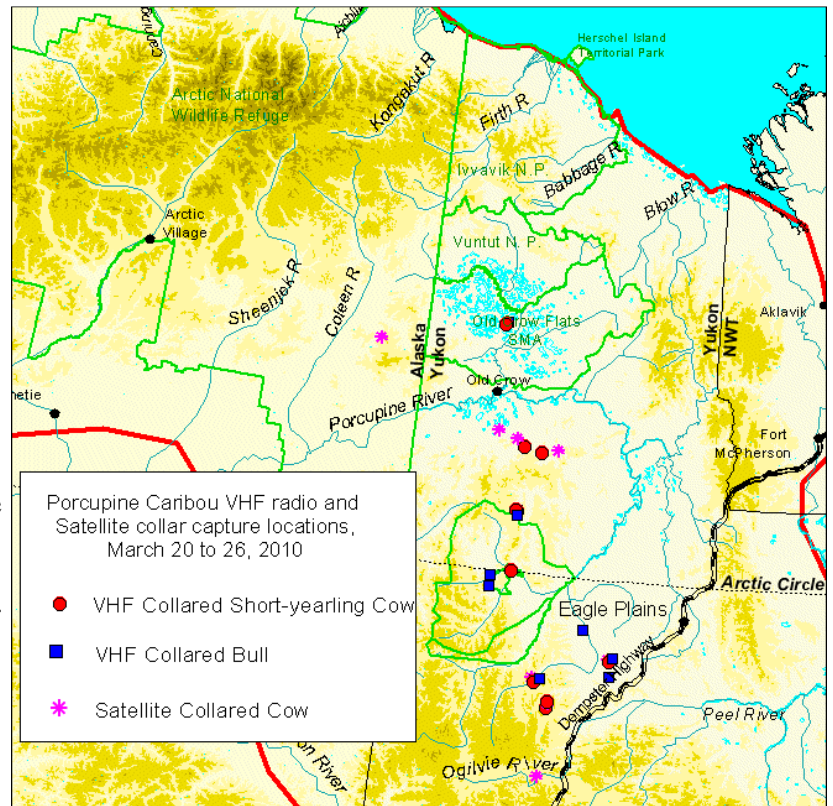
In Alaska, there was a large concentration of caribou in the mountains between the Coleen River and the Yukon / Alaska border. Porcupine caribou were also found west of Arctic Village.

In the southernmost extent of the winter range in the Yukon some Porcupine Caribou overlapped with animals from the Hart River Caribou Herd while in Alaska Porcupine Caribou that wintered west of Arctic Village were mixed with Central Arctic Caribou.

		Alaska		Yukon	
Collar Status	Herd	Central Arctic	Porcupine	Hart River	
Active		51	23	66	20
New Mort		4	1	5	2
Total		55	24	71	22
Total Porcupine Caribou Collars located March 2010 before captures			95		

## Capture locations

The goal this March was to recapture a number of cow caribou that had originally been collared with VHF transmitters as 9 month old calves - also called "Short-yearlings" as they are just short of being one year old. In addition, we wanted to capture 10 current short-yearling cows to increase our sample of known aged collared caribou. Typically when we capture mature caribou we estimate age based on teeth wear, but when we capture short-yearlings in March we can be quite sure of their age. We also needed to capture 10 mature bull caribou to increase our number of collared male animals for subsequent surveys.



**Locations of caribou captured March 2010 for deployment of radio and satellite collars**

Radio collars were provided by the Vuntut National Park, Yukon Government and the Government of the Northwest Territories. Satellite collars were provided by the U.S. Fish and Wildlife Service.

Porcupine caribou captures and composition counts took place between March 20th and 26th. Since the caribou were so spread out the crew moved between Dawson, the Dempster Highway Ogilvie Maintenance camp, Eagle Plains Hotel and Old Crow. Captures were conducted using a Jet Ranger owned by Fireweed Helicopters. Karl Scholz was the pilot, and Kyle Russell, Kieran O'Donovan and Martin Kienzler of the Yukon Government made up the capture crew. Dave Sowards and Dorothy Cooley provided fixed-wing aerial tracking to find collared caribou and specifically those that we needed to recapture.

6 cow caribou that had originally been captured in either 2006 or 2007 as short yearlings were recaptured and fitted with Satellite transmitters. Several other caribou that we wanted to recollar were located but due to terrain (thick timber, bare steep ground) we were not able to attempt recaptures. 2 other satellite collars were deployed on random cow caribou. More information on these caribou will be provided in a subsequent update.



Kieran O'Donovan releasing a newly satellite collared cow caribou

10 short-yearling cows and 10 bulls were captured and fitted with radio transmitters.

During the handling, biologists took seven standard body measurements and recorded body condition. Blood and fecal samples were also taken for later testing.

In total, 20 radio and 8 satellite collar were deployed in March 2010 on Porcupine Caribou. This increases the number of active collars on Porcupine Caribou to 126, including 20 active satellite collars.

	Radio Collars		Satellite Collared Cows	Total
	Cow	Bull		
Old Collars (deployed pre-2010)	75	11	12	98
New Collars (deployed March-10)	10	10	8	28
<b>Total Active Radio &amp; Satellite Collars following March 2010 fieldwork</b>	<b>85</b>	<b>21</b>	<b>20</b>	<b>126</b>

## Composition count data

During composition counts, caribou are classified as Cows, 9 month old Calves, Mature bulls, and Immature bulls. Comp counts are used to estimate of over-winter survival of calves. To obtain an accurate representation of survival for a herd, it is necessary to classify caribou in as many wintering areas as possible as there can be differences between ranges.

Funding for the March 2010 composition count came from the Government of Yukon.

Data showed that there were some areas with higher calf numbers than others which is often the case. However, calf ratios this March were the lowest ever recorded, with 19.5 calves per 100 cows. This was not unexpected, as calf numbers in July 2009 were the lowest on record for this herd at 44 calves per 100 cows at one month past calving.

Porcupine Caribou March 2010 Composition Count									
Summary by location									
Location	Alaska - Coleen River	Old Crow Flats	David Lord Cr	Cody Cr	Fishing Branch	McParlon Cr	Whitestone / Miner	Ogilvie River	Total all Areas
Sum of Adult Cow	956	176	963	1113	511	671	209	19	4618
Sum of Calf	141	39	127	210	151	179	47	6	900
Sum of Immature Bull	88	53	150	287	104	283	73	18	1056
Sum of Mature Bull	28	39	31	81	22	116	23	3	343
<b>Total # Classified</b>	<b>1213</b>	<b>307</b>	<b>1271</b>	<b>1691</b>	<b>788</b>	<b>1249</b>	<b>352</b>	<b>46</b>	<b>6917</b>
<b>Calf:100 cows</b>	<b>14.7</b>	<b>22.2</b>	<b>13.2</b>	<b>18.9</b>	<b>29.5</b>	<b>26.7</b>	<b>22.5</b>	<b>31.6</b>	<b>19.5</b>
Ttl Bull:100 cows	12.1	52.3	18.8	33.1	24.7	59.5	45.9	110.5	30.3
Imm bull:100 cows	9.2	30.1	15.6	25.8	20.4	42.2	34.9	94.7	22.9
Mat bull:100 cows	2.9	22.2	3.2	7.3	4.3	17.3	11.0	15.8	7.4

## Dempster Snow Stations

Preliminary data from Energy Mines and Resources indicates that snow accumulation along the southern extent of the Dempster Highway is between 50 and 70 % of average, while mid to northern sections of the Dempster are between 70 and 90 % of average.

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### If you have any questions, please contact:

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