

2018-19 ABEKS Update

For: PCMB Annual Harvest Meeting

Inuvik NWT

February 12th, 2019

Photo Credit: Jessie Pascal 2018

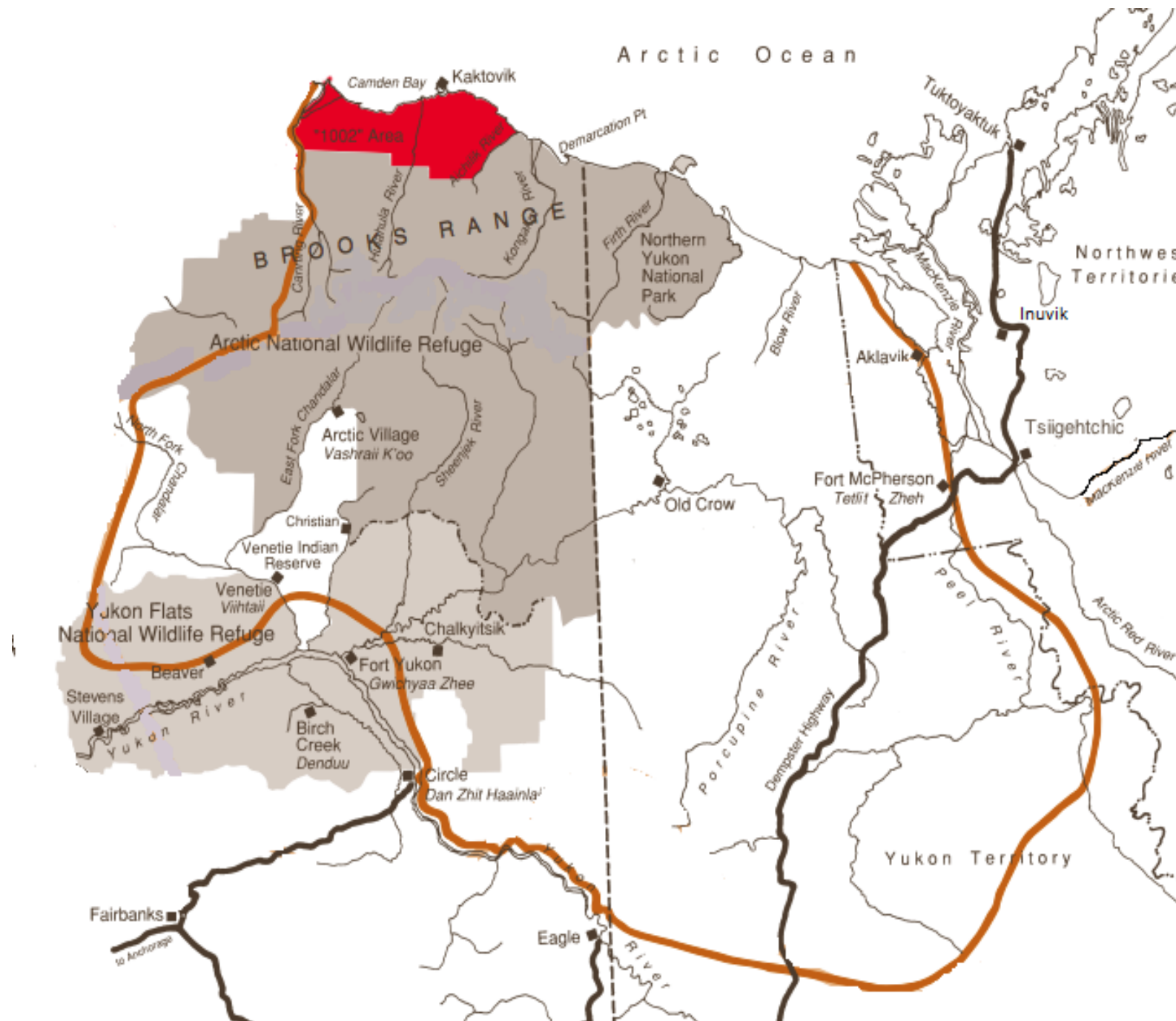
ABEKS 2018

129 interviews with local experts

Old Crow, Tsiigehtchic, Fort
McPherson, Inuvik, Aklavik

Tuktoyaktuk is also an ABEKS
community but is not included in
this presentation.

Period covered = November
2017-October 2018



Number of interviews per year by community, 2011-2018
n=1004

	2011 (n=124)	2012 (n=155)	2013 (n=159)	2014 (n=141)	2015 (n=119)	2016 (n=27)	2017 (n=150)	2018 (n=129)
Aklavik (Gwich'in)	6	20	20	20	20	0	20	20
Aklavik (Inuvialuit)	21	20	20	20	20	0	19	20
Arctic Village (Gwich'in)	4	19	20	20	0	8	10	0
Fort McPherson (Gwich'in)	20	20	20	20	19	0	20	20
Inuvik (Gwich'in)	14	20	20	10	20	0	20	20
Inuvik (Inuvialuit)	19	19	20	11	20	0	20	10
Old Crow (Gwich'in)	20	17	19	20	20	19	21	20
Tsiigehtchic (Gwich'in)	20	20	20	20	0	0	20	19

Key findings

- Interviewees reported their ability to meet caribou needs was low this year due to availability (location) not abundance (how many in the herd)
- If people answer that that didn't hunt because caribou were too far it may be because of time of year that caribou came through. Migration time and routes are changing every year.
- Most people who didn't hunt say they didn't have time.

Indicators

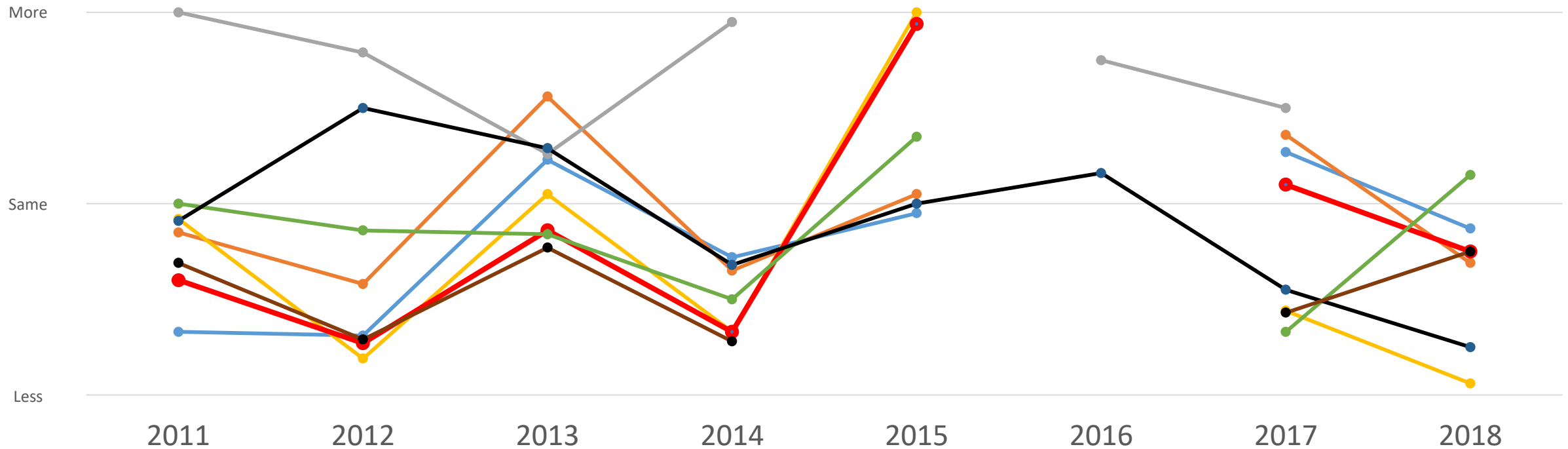
- **Adult female and calf abundance**
- **Overall caribou abundance**
- **Meeting caribou needs**
- **Reasons for not meeting needs**
- **Caribou body condition**
- **Abnormalities reported**



Example abundance index calculation

Calf abundance Winter 2018	All communities n=66	Aklavik (Gwich'n) NWT n=15	Aklavik (Inuvialuit) NWT n=14	Fort McPherson (Gwich'in) NWT n=12	Inuvik (Gwich'in) NWT n=1	Inuvik (Inuvialuit) NWT n=3	Old Crow (Gwich'in) Yukon n=19	Tsiigehtchic (Gwich'in) NWT n=2
more	9%	7%	36%	0	0	0	0	0
same	33%	60%	57%	17%	0	33%	11%	0
less	58%	33%	7%	83%	100%	67%	89%	100%
Index = 3(more) +2(same) +less	1.51	1.74	2.29	1.17	1	1.33	1.11	1

Did you see more, less or about the same amount of caribou as usual? 2011-2018



—●— Aklavik (Gwich'in)

—●— Arctic Village (Alaska) Gwich'in

—●— Inuvik (Gwich'in)

—●— Old Crow (Gwich'in)

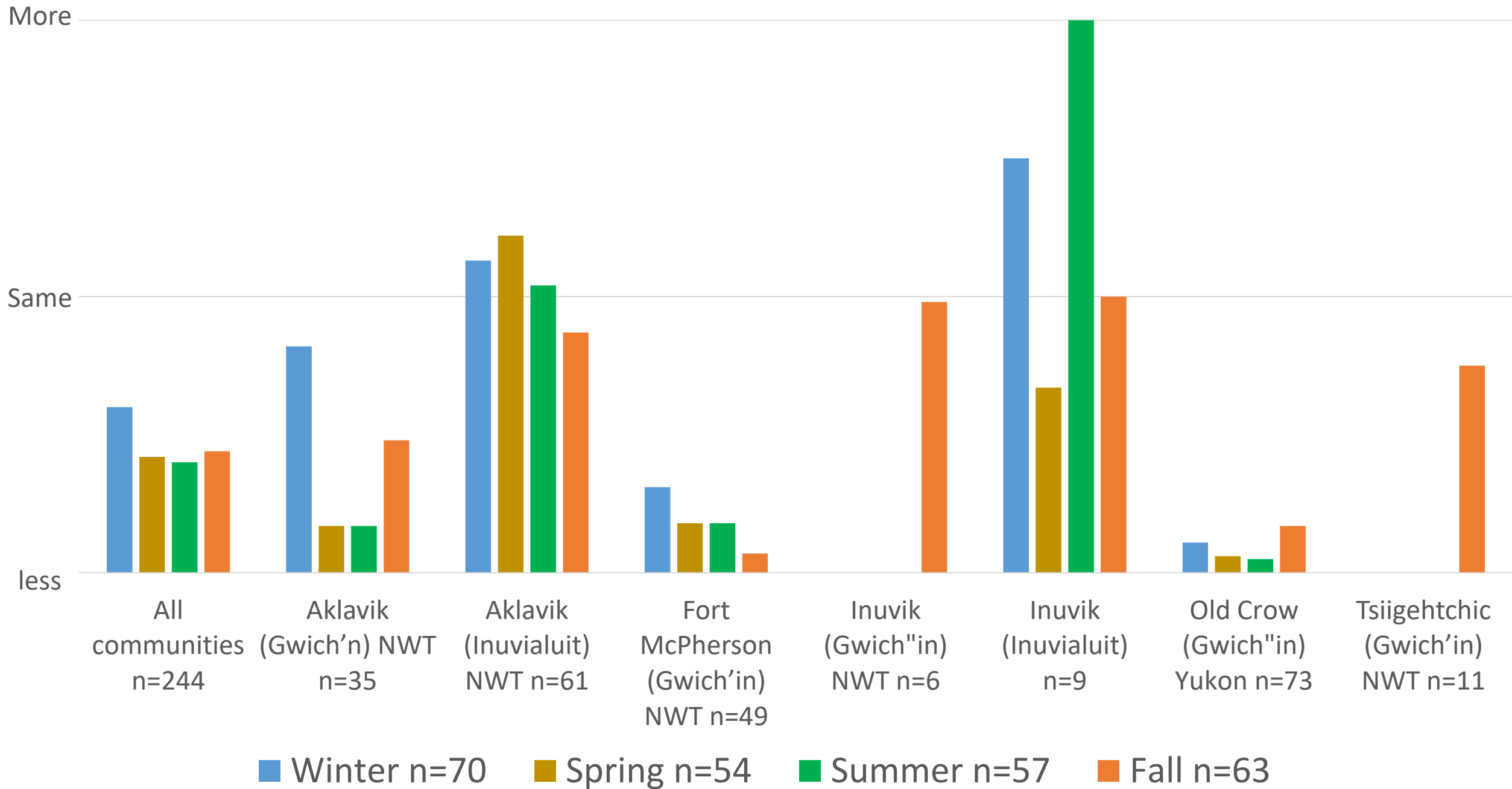
—●— Aklavik (Inuvialuit)

—●— Fort McPherson (Gwich'in)

—●— Inuvik (Inuvialuit)

—●— Tsiigehtchic (Gwich'in)

Adult female abundance by community and season 2018

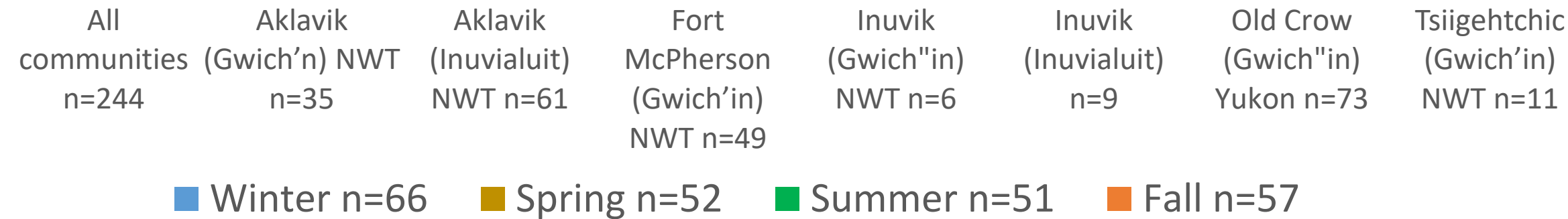


Adult calf abundance by community and season 2018

More

Same

less



<p>Aklavik (Gwich'in)</p>	<p>less caribou around our area</p> <p>gone back to alaska</p> <p>less and none around aklavik</p> <p>far back</p> <p>far back</p>
<p>Aklavik (Inuvialuit)</p>	<p>had to travel far to get</p> <p>mostly staying in Alaska.</p> <p>More</p> <p>never seen any</p> <p>they weren't in the area very much</p> <p>caribou only migrated through in late august</p> <p>more wild (scared of people)</p>
<p>Tsiigehtchic (Gwitch'n) NWT</p>	<p>They're changing route, seeing less now</p> <p>Only sightings in the fall</p> <p>No caribou</p> <p>Out of range and not a successful hunt</p> <p>There weren't around</p> <p>Herd came earlier in mid-July. hung around longer and comes back later.</p> <p>All bulls came first.</p> <p>Scared</p>

Fort McPherson (Gwich'in) NWT

less coming in herds.

less caribou

less caribou, small herd

less caribou migrating in our area.

less caribou coming this way.

Caribou were changing migrating routes.

Less caribou.

Only a few around, should remove collars on them, they have no hair underneath they're suffering them in the cold weathers.

Less caribou. taking different route

Hunters not allowing for leaders to pass. Caribou taking different route

NO caribou

Less

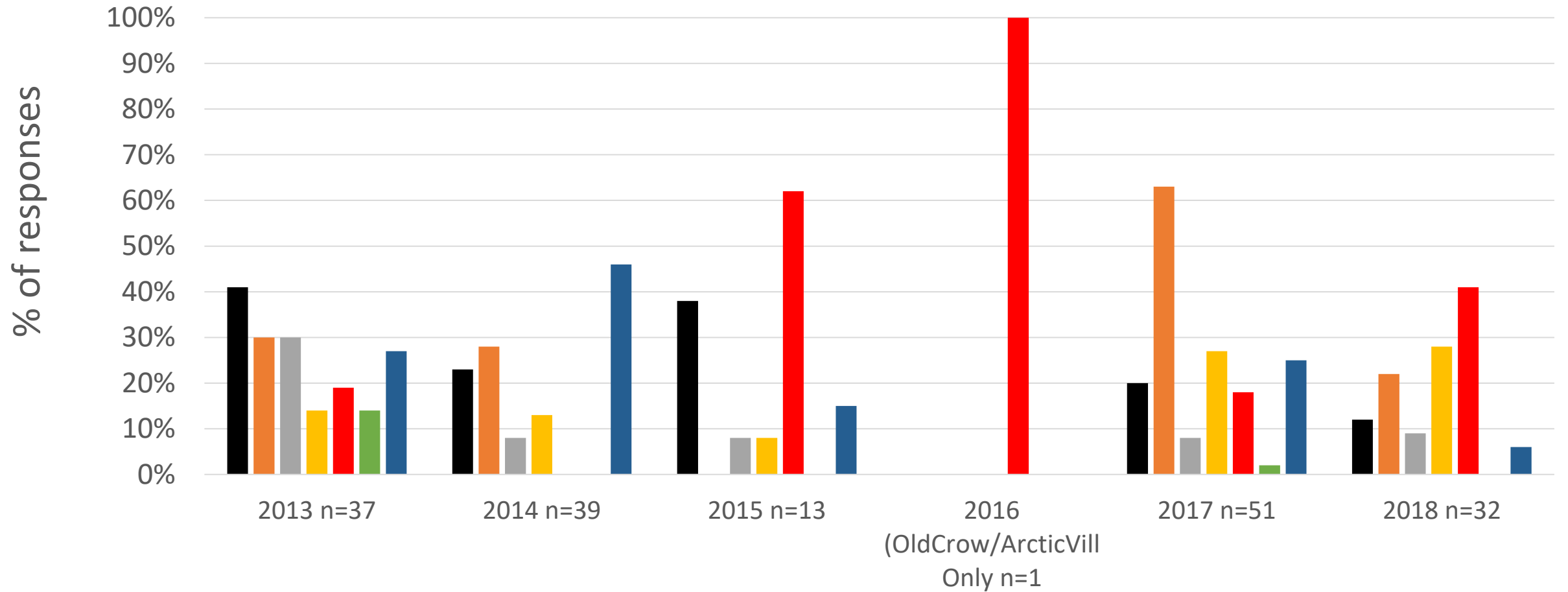
They're becoming more aware of people, less caribou came this year different migration & have less fat on them.

Starting to beware of people. Less fat on caribou

There were not many and they were chased away by four wheeler

<p>Inuvik (Gwich'in) NWT</p>	<p>Did not stay long, caribou heading back to Alaska early again.</p> <p>Hardly any caribou, LET THE LEADERS PASS.</p> <p>Nothing around. Went to check on Dempster Highway</p> <p>Caribou getting less and less</p> <p>Yes, Caribou finally back on the highway.</p>
<p>Inuvik (Inuvialuit) NWT</p>	<p>Very less</p>
<p>Old Crow (Gwtich'in) (Yukon)</p>	<p>Not very much caribou. Change of route.</p> <p>Less caribou in region due to change in their migration route</p> <p>Less caribou in region.</p> <p>Not in region.</p> <p>Not in region</p> <p>Change of route.</p> <p>Not in region, only a few come through.</p>

Main reasons caribou weren't hunted, 2013-2018



■ cost of gas/equipment

■ caribou too far/bad location

■ illness/health

■ not enough caribou

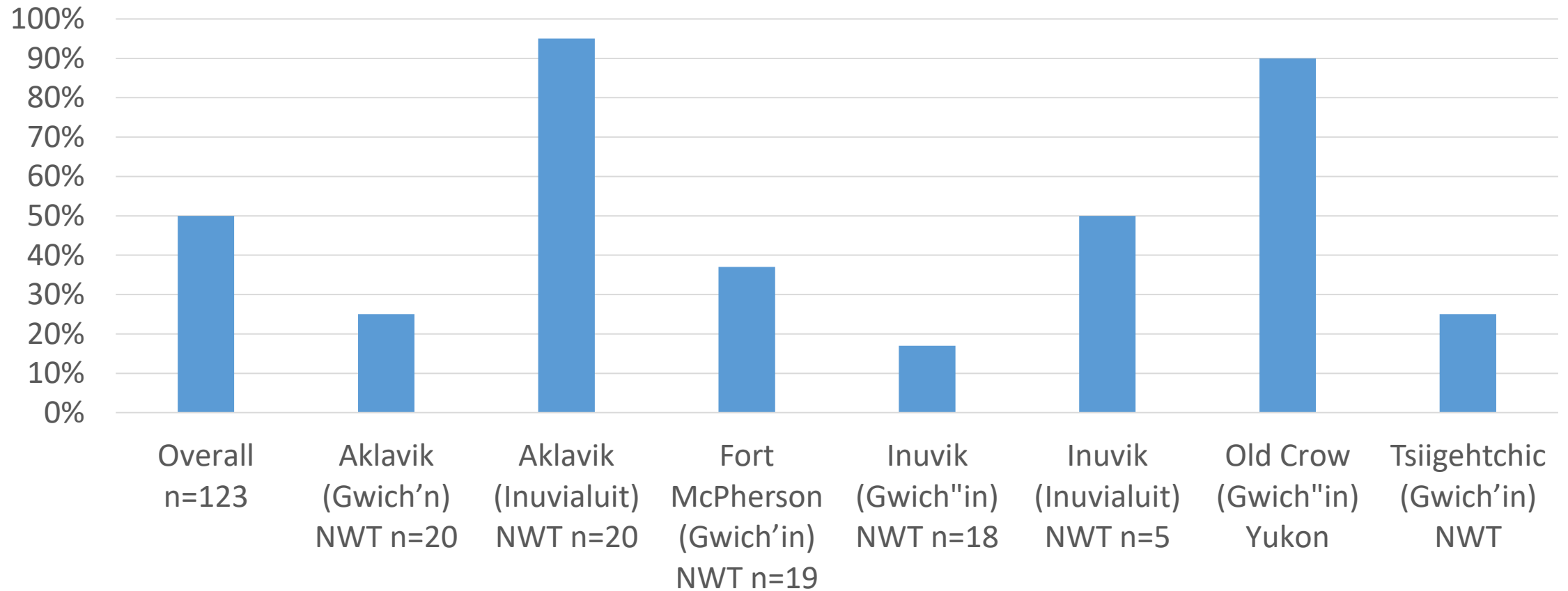
■ no time

■ had enough caribou

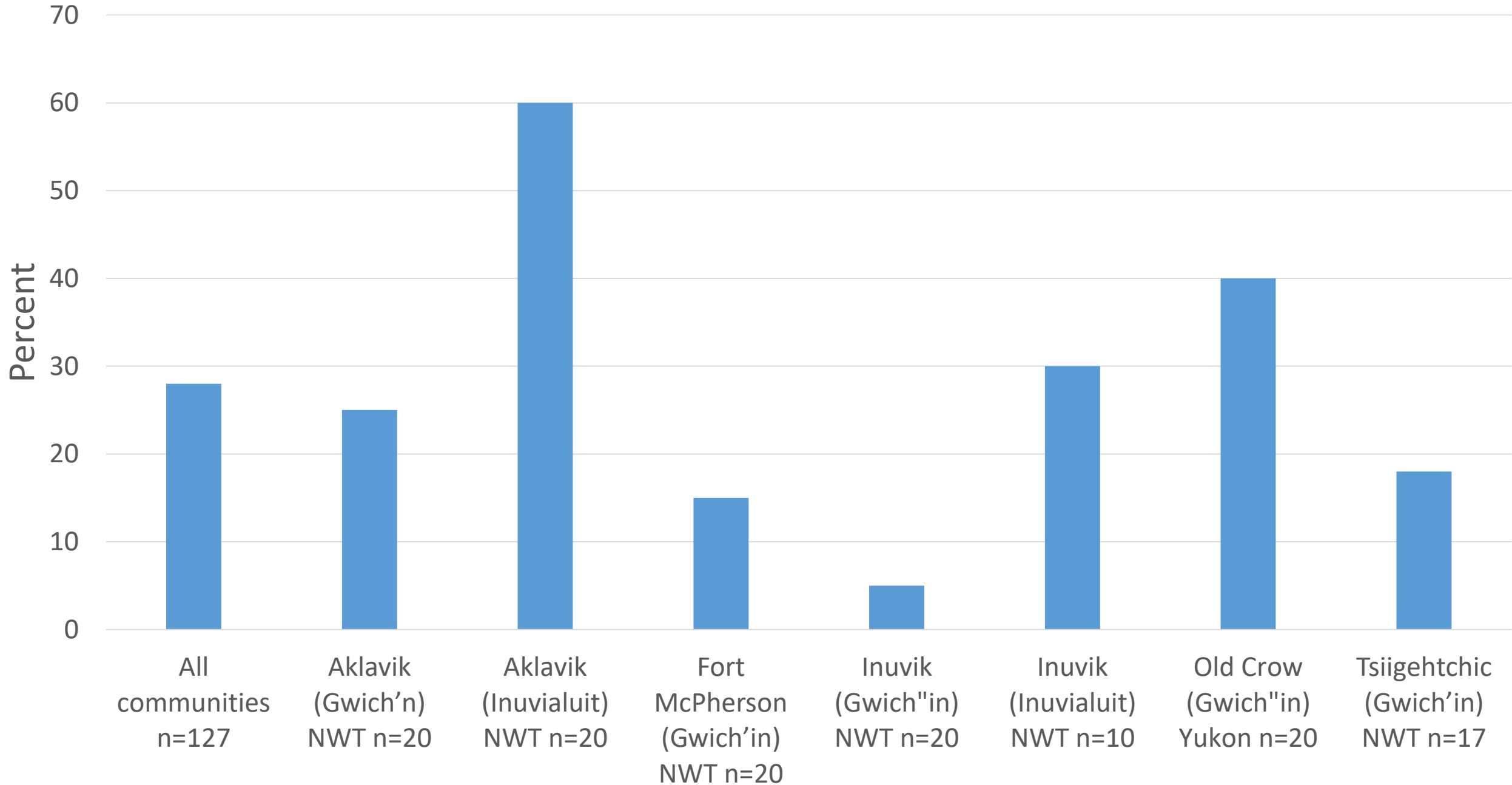
■ other

Percent of hunters who got caribou by community, 2018

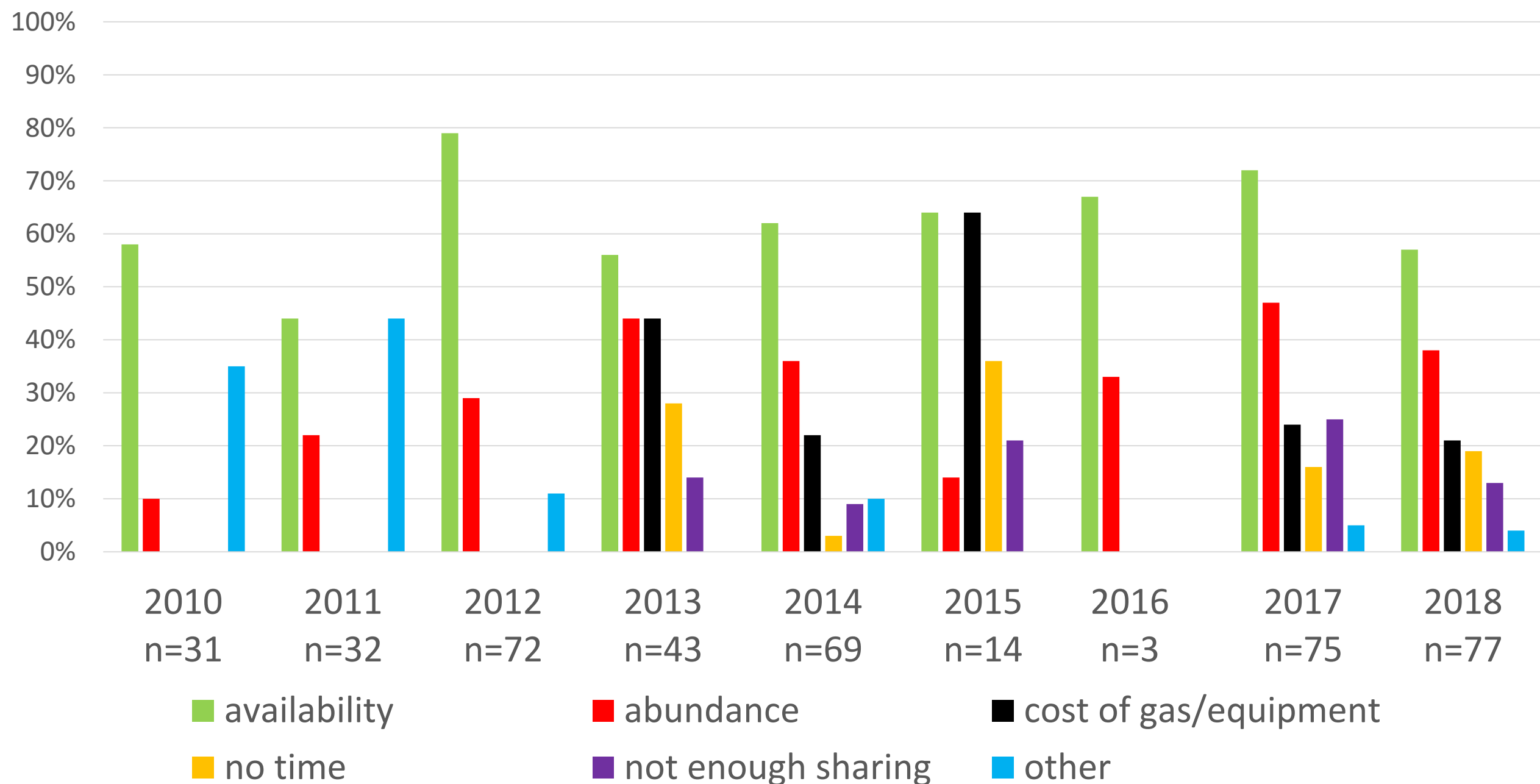
% of hunters who got caribou



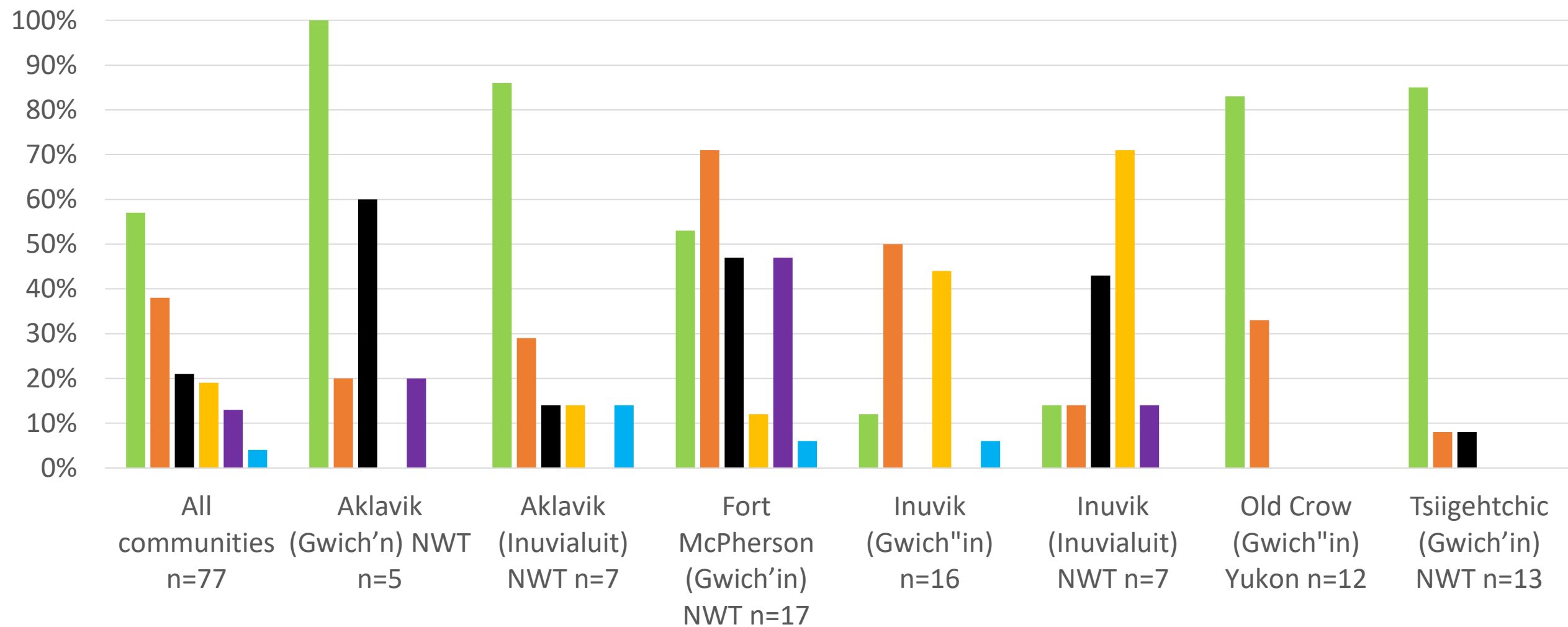
Percent of interviewees who reported meeting caribou needs in 2018



What prevented you from meeting your caribou needs 2010-2018



What prevented you from meeting your caribou needs in 2018?



■ availability, n=44

■ abundance, n=29

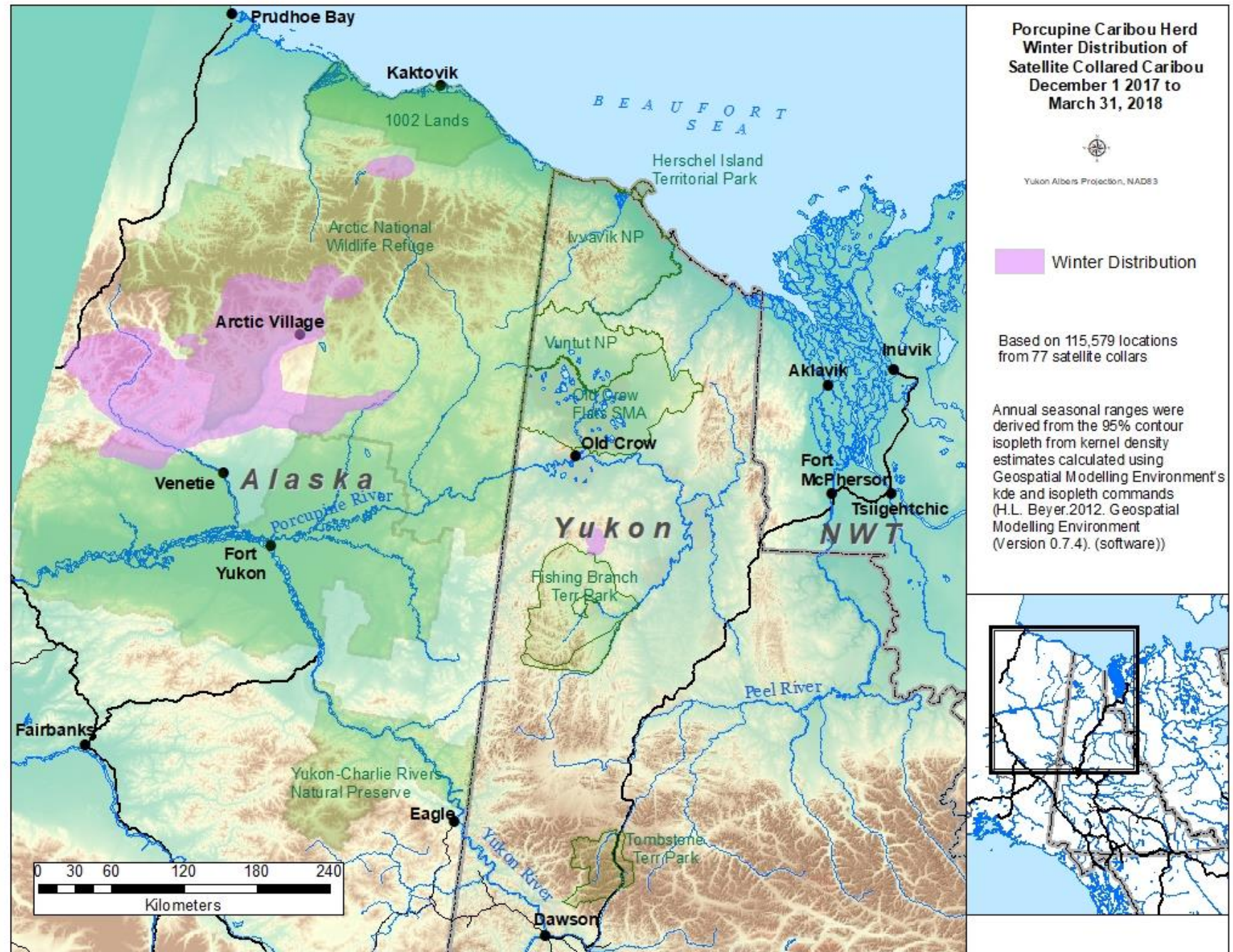
■ cost of gas/equipment, n=16

■ no time, n=15

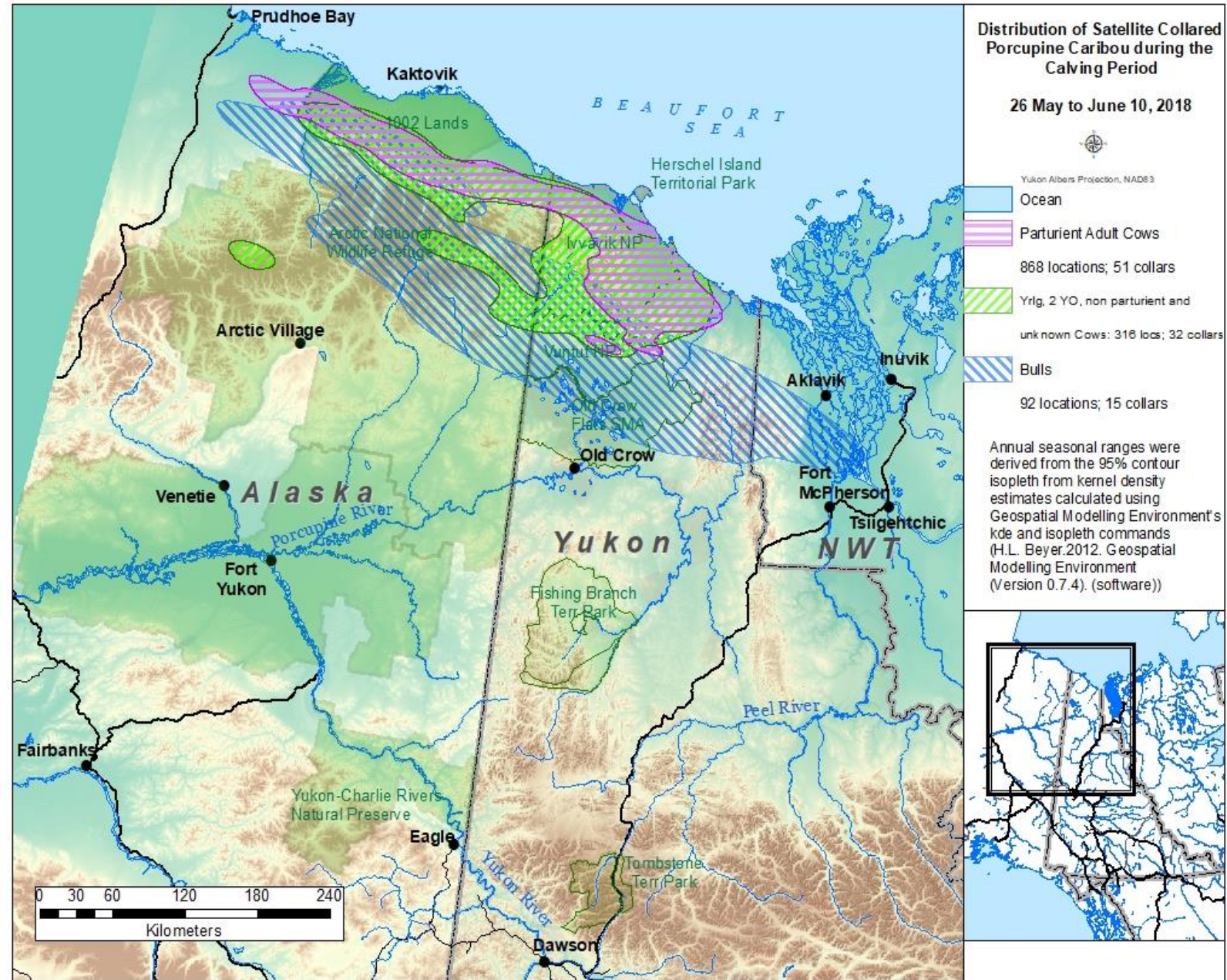
■ not enough sharing, n=10

■ other, n=3

December- March



May-June



Body Condition

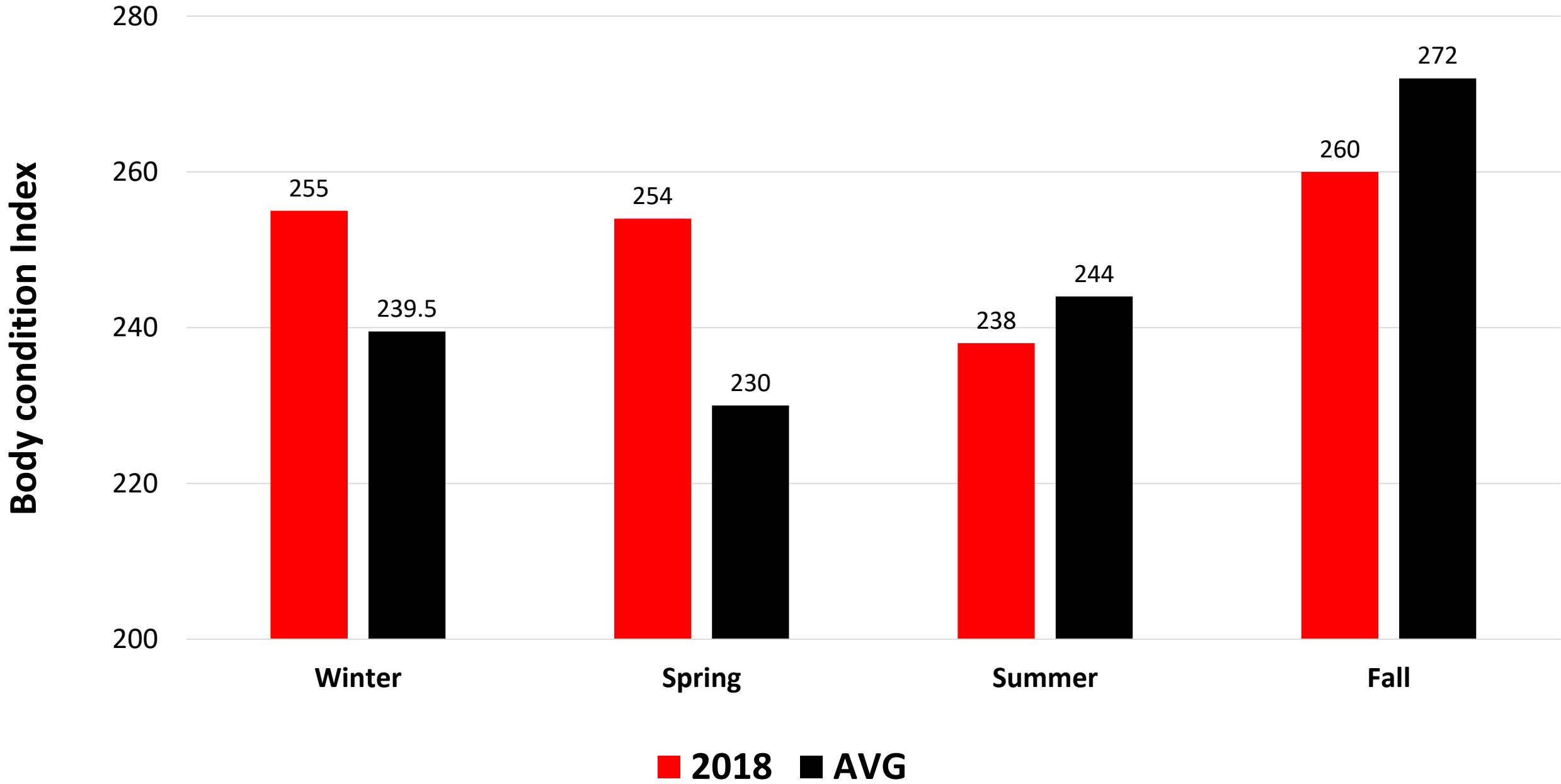
Of the animals seen or taken, the interviewees were asked to indicate the relative body condition. The categories of answers varied among interview session, community and year but were collapsed into “good”, “mixed”, and “poor”. To directly compare from one interview session to the next an index of caribou condition was developed, i.e. collapsing all responses into one metric. The caribou condition index (CC) was calculated as:

$$CC = 3 * (\text{good}) + 2 * (\text{mixed}) + (\text{poor}),$$

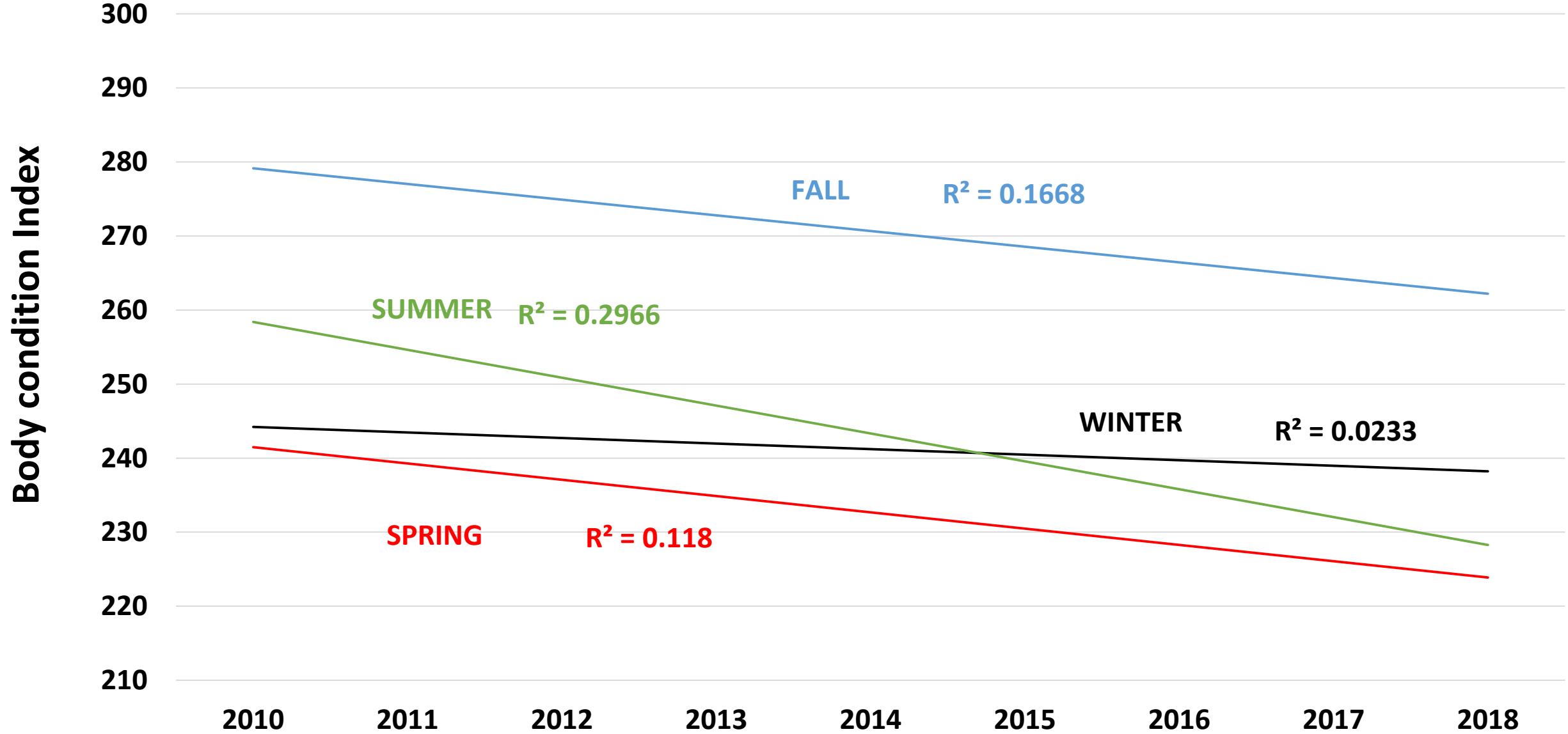
where “good”, “mixed” and “poor” were the frequency of those responses for an interview session.

Don Russell provides an updated index below using 2018 interview data:

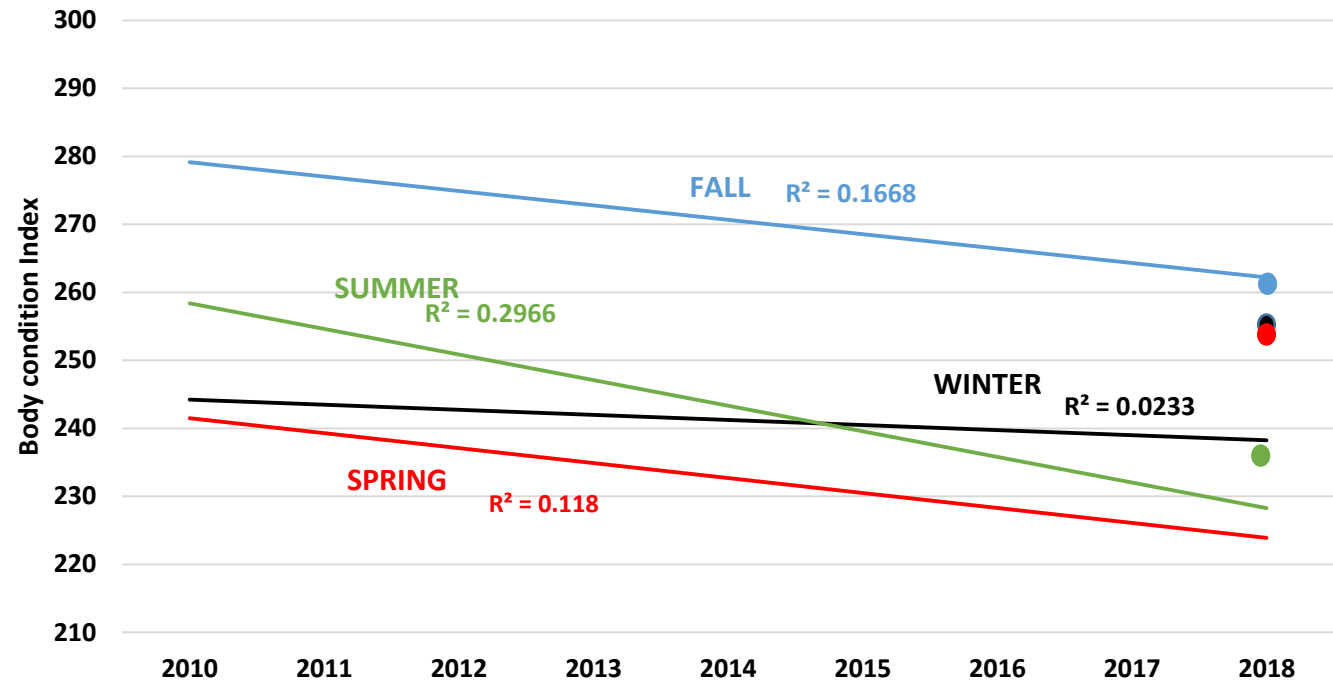
2018 seasonal Body condition compared to 2010-2017 average



PCH trend in seasonal body condition



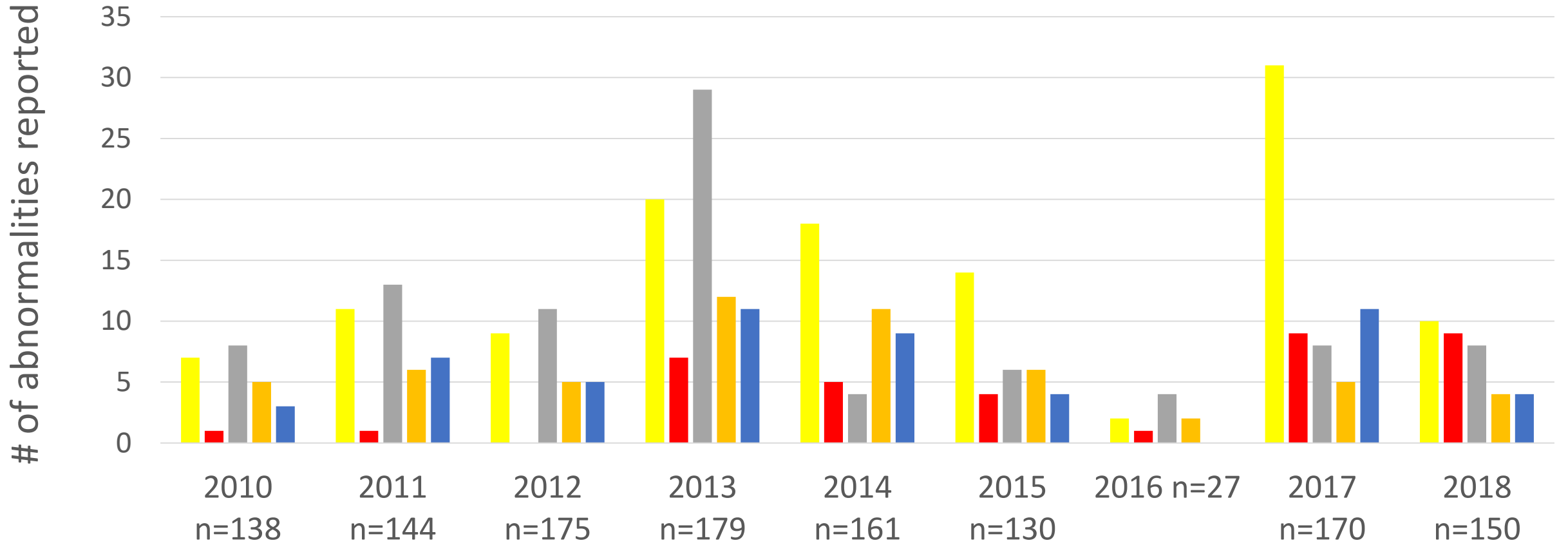
PCH trend in seasonal body condition compared to 2018 index values



In summary (from Don Russell):

- Would be valuable to tie 2017-2018 data to climate conditions (presently downloading 2017 and 2018 climate data)
- Monitoring implications of lower summer and fall body condition – for the George River herd Couturiere found smaller body size in cows preceded the eventual herd decline.
- Generally lower fall condition relates to lower probability for pregnancy
- Lower spring conditions relate to lower spring recruitment and eventual adult cow survival (but there is a lag effect).
- In light of potential development on 1002, more important than ever to use all monitoring sources to help explain changes in herd size .

Caribou abnormalities reported by year, 2010-2018



■ cysts, white spots

■ sores, pus

■ wounded, limping

■ swollen joints, testes, glands

■ bad liver