

FINAL

Barren-Ground Caribou 2011/2012 Harvest & Monitoring Summary

The second year of limited harvesting activities for 300 Bathurst caribou within R/BC/02 and R/BC/03 began in the Fall 2011. Environment and Natural Resources Officers, Tłıchǫ community monitors, and Yellowknives Dene First Nation wildlife monitors recorded the caribou harvest as reported to them within the North Slave Region during the 2011/2012 fall and winter harvesting seasons¹. Harvest was assigned to each herd based on collar locations at specific times of the year.

HARVEST

Table 1: Bathurst Caribou Herd Total Reported Harvest – 2011/2012

	# Bulls Taken	# Cows Taken	# Calves Taken	# Unknown Taken	Total Harvested
TOTAL	110	25	0	*70	205

* Annual allotment of commercial tags from Government of Nunavut to Pellatt Lake. Total Harvest is an estimate as reported harvest numbers were unavailable at time report was written.

Table 2: Bluenose-East Caribou Herd Total Reported Harvest – 2011/2012

	# Bulls Taken	# Cows Taken	# Calves Taken	# Unknown Taken	Total Harvested
TOTAL	479	784	19	484	1766

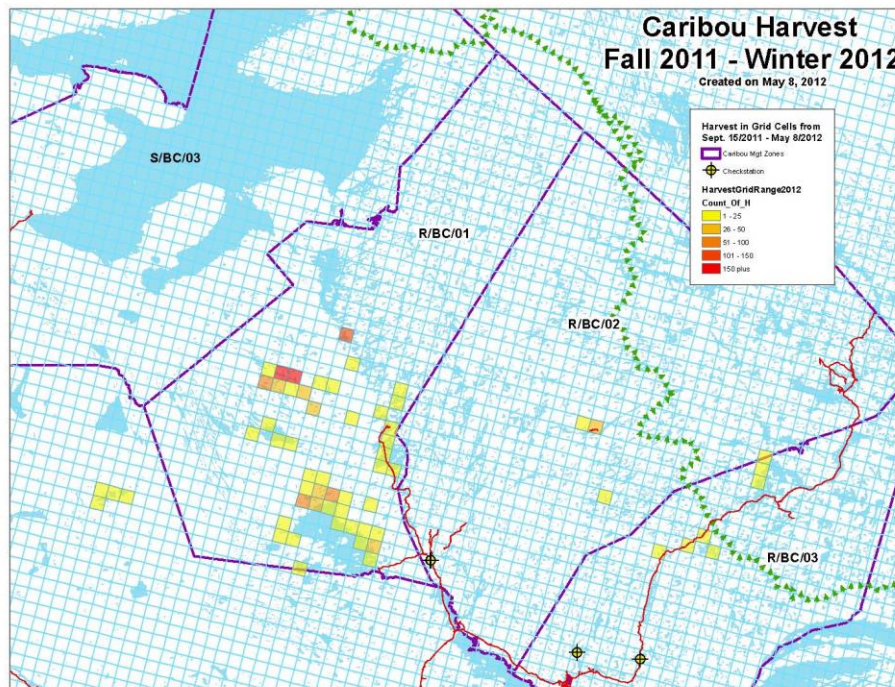


Figure 1: Bluenose-East & Bathurst Caribou Herd Total Reported Harvest – 2011/2012

¹ For the purpose of this report, the 2011/2012 harvest season is August 1, 2011 to July 31, 2012 therefore any information that has been gathered or released after July 31, 2012 is in the 2012-2013 annual harvest summary.

MONITORING ACTIVITIES

Bathurst Caribou

Satellite Collars

- Between March 24 & 25, 2012, an additional 13 collars were placed on females in the area where some of the existing Bathurst caribou spent the winter.
- Blood samples were taken from the females captured during the collaring activities to determine pregnancy. The results indicate 13 out of the 13 samples collected were pregnant.

Fall Composition Survey

- Survey was conducted between October 23 and 26, 2011.
- The preliminary analysis indicates a 59:100 bull/cow ratio for the Bathurst herd.
- The preliminary analysis indicates a 33:100 calf/cow ratio for the Bathurst herd. This number represents the number of calves per 100 cows that were born in the spring of 2011 that survived to the fall of 2011.
- Ratios below 30:100, if sustained, suggest a declining natural trend.
- *NOTE: See 2012-2013 Annual harvest summary for graphs.*

Recruitment (spring survival) Survey

- Survey was conducted from March 28, 2012 to April 2, 2012.
- The preliminary analysis indicates a 25:100 calf/cow ratio for the Bathurst herd. This ratio represents the number of calves that were born in the spring of 2011 that are still surviving.
- Calf:cow ratios for the Bathurst spring survey was 48:100 in 2010 and 50:100 2011.
- Ratios below 30:100, if sustained, suggest a declining natural trend.

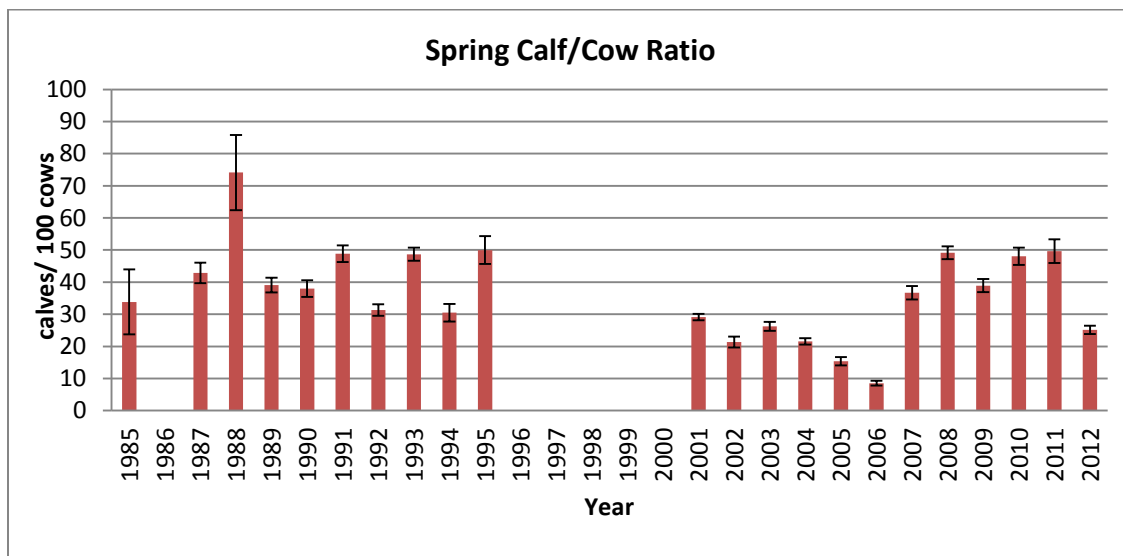


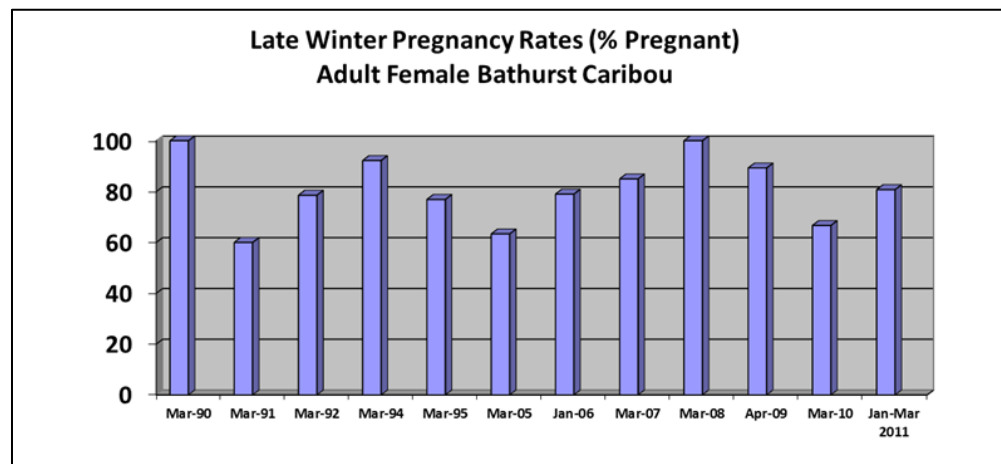
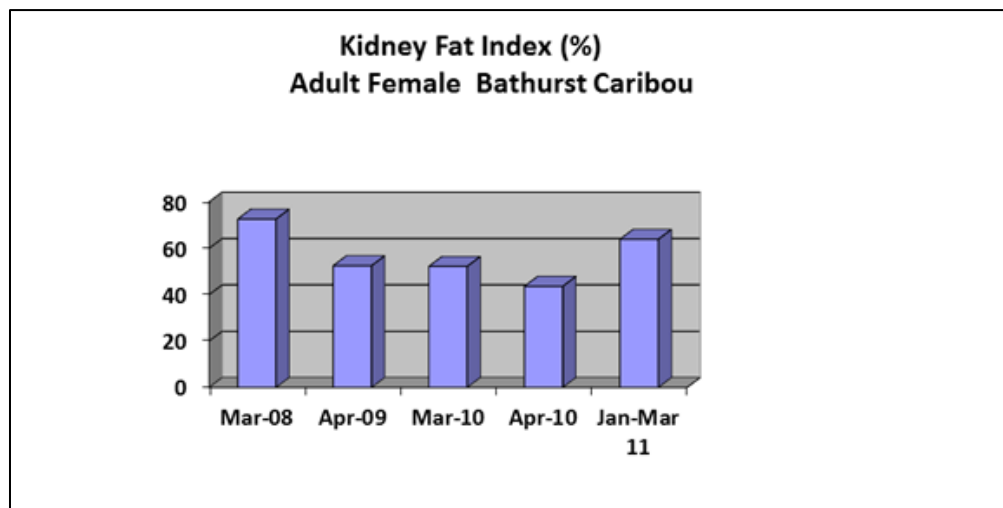
Figure 3: Bathurst caribou herd - Recruitment Survey – Spring 2012

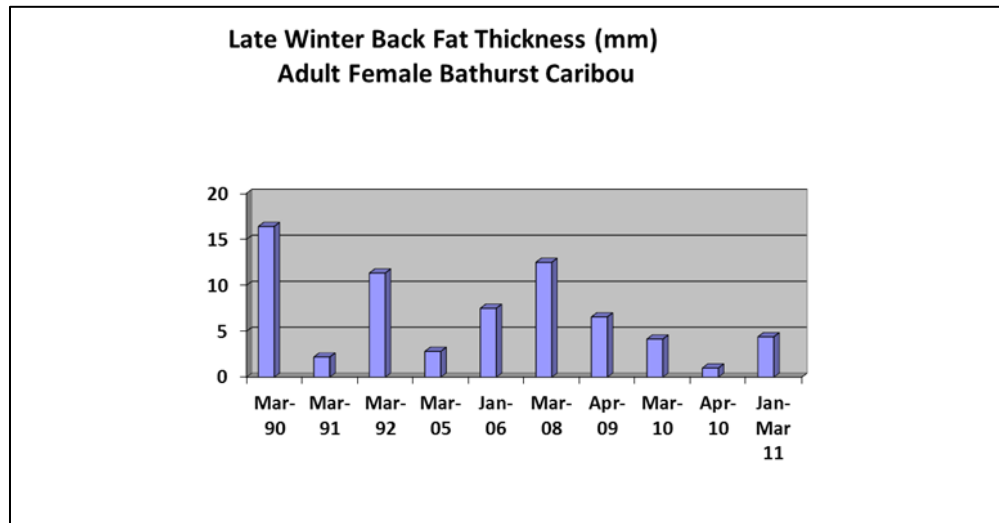
Calving Ground Photographic & Composition Survey

- Survey was conducted between June 3 and 8, 2012 to estimate the total number of breeding cows for the herd and overall total herd size. The results were released in November 2012 and are available in the 2012/2013 Harvest & Monitoring Summary.

Health & Body Condition Sampling

- There were 26 samples taken from Bathurst males in August 2011. The preliminary analysis indicates an average depth of 36mm for back fat for the bulls.
- There was no health & body condition sampling conducted over the 2012 winter harvest season.





Bluenose-East Caribou Herd

Satellite Collars

- Between March 4-23, 2012, an additional 60 collars were placed on the Bluenose East caribou herd (18 on the males and 42 on the females).

Recruitment (spring survival) Survey

- Survey was conducted between March 28, 2012 and April 2, 2012.
- The preliminary analysis indicates a 25:100 calf/cow ratio for the Bluenose East herd, which is indicative of a below normal overwinter calf survival.
- Calf:cow ratios for the BNE spring survey was 47:100 in 2010 and 41:100 2011.
- Ratios below 30:100, if sustained, suggest a declining natural trend.

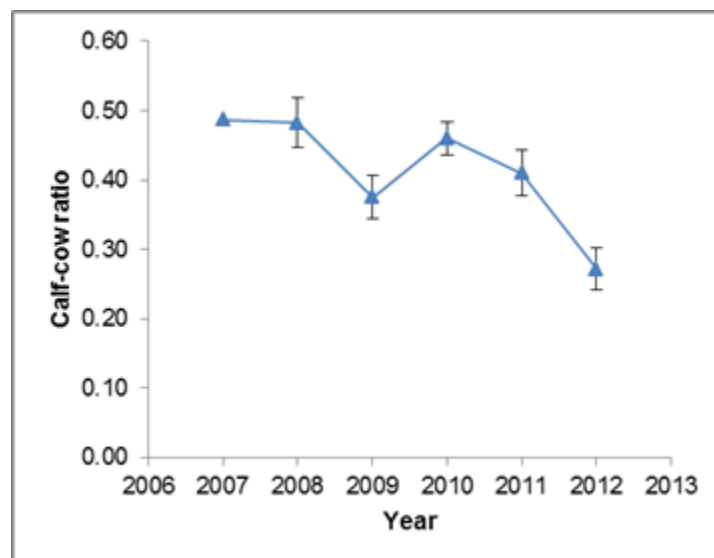


Figure 7: Bluenose East caribou herd - Recruitment Survey – Spring 2012

Post-Calving Ground Photographic Survey

- Survey was conducted between July 4 and 22, 2012.
- Due to cool weather and low numbers of insects, the caribou did not form post-calving aggregations and the survey could not be completed.

Health & Body Condition Sampling

- Health & body condition sampling was conducted over the 2012 winter harvest season to record pregnancy rates, age, index body mass, condition index, fatness and presence of parasites and disease in the herd.
- There were 31 samples taken from females during February and March of 2012.
- The preliminary analysis indicates a 58% pregnancy rate and an average depth (mm) of 3.2 for back fat for the Bluenose-East herd.

Ahiak and Beverly Caribou Herd

Satellite Collars

- On March 21-22, 2012, an additional 27 collars were placed on females in the area where some of the existing Ahiak and Beverly caribou collars were located during the winter in 2012, bringing the total number of collars up to 32.
- In June 2012, 19 of the cows from this collar deployment calved along the Queen Maud Gulf coast (Beverly and Ahiak herds) and 2 of these cows calved near Qamanirjuaq Lake (Qamanirjuaq herd). There were 6 mortalities among cows collared during this deployment between March and June.
- Blood samples were collected from 26 of the 27 cows during the collaring process. The preliminary analysis indicates that 16 of these 26 cows (63%) were pregnant.

Fall Composition Survey

2011

- Survey was conducted from October 25 to 29, 2011.
- The preliminary analysis indicates a 69:100 bulls/cow ratio and a 54:100 calf/cow ratio for the Ahiak and Beverly herds.
- No graph is available for the this survey as there are only two data points (2009 and 2011)

2009

- Survey was conducted from October 28 to 30, 2009.
- The preliminary analysis indicates a 53.8:100 bulls/cow ratio and a 46.4:100 calf/cow ratio for the Ahiak and Beverly herds.

Calving Ground Abundance Survey

- With many collaborators and partners, including ENR, the Government of Nunavut successfully conducted an extensive calving ground survey of the Queen Maud Gulf, traditional Beverly calving ground, and northeast mainland from June 4-21, 2011. The sex ratios from survey data will help refine estimates of total herd size.
- A photographic survey was not conducted due to fog and low cloud cover, but environmental conditions and the density and distribution of caribou on the calving grounds were suitable for visual survey.

- The data analysis is ongoing.
- No survey was conducted in 2012.
- No graph is available for this survey as there has only been one calving ground survey conducted on this herd.

Health & Body Condition Sampling

- Health & body condition sampling was conducted over the 2012 winter harvest season to record pregnancy rates, age, index of body mass, condition index, fatness, and presence of parasites and disease in the herd.
- There were 20 samples taken from females between January and March.
- The preliminary analysis indicates a 79% pregnancy rate and an average depth (mm) of 1.4 for back fat for the Ahiak and Beverly herds.

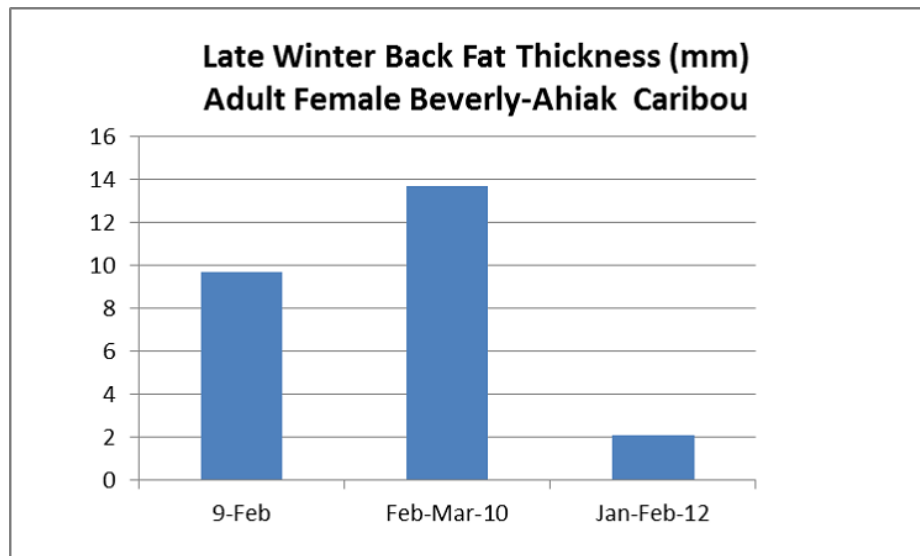


Figure 8: Beverly and Ahiak Herds – Back Fat Thickness – Winter 2012

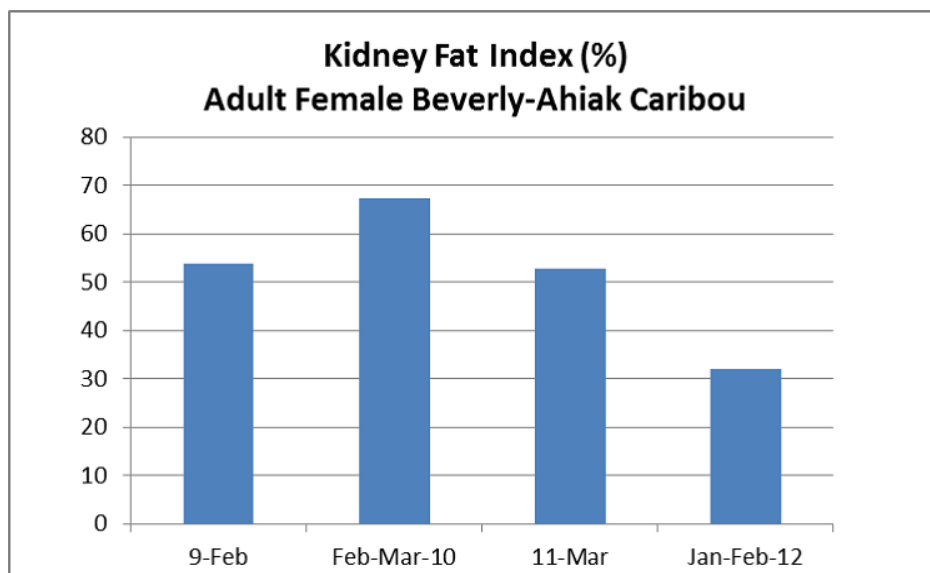


Figure 9: Beverly and Ahiak Herds – Kidney Fat Index – Winter 2012

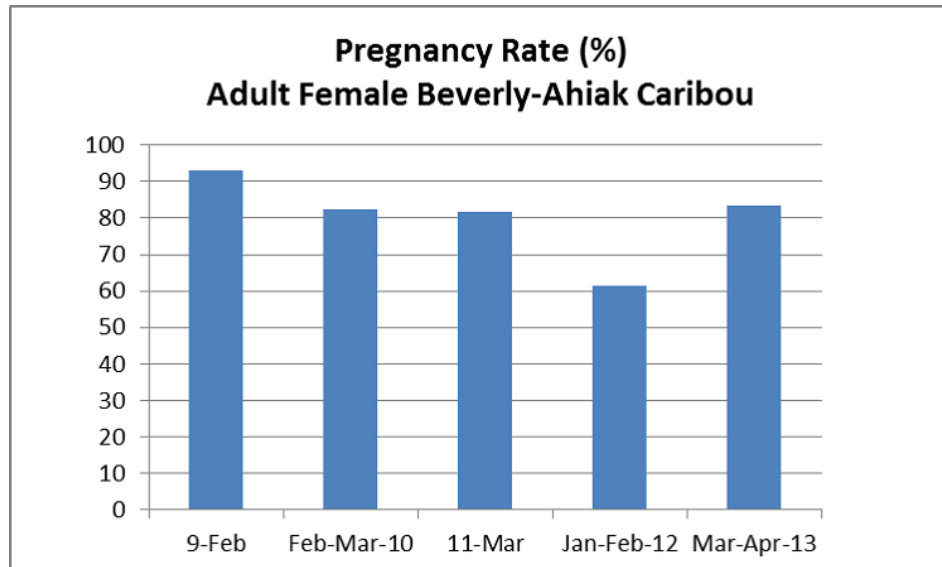


Figure 10: Beverly and Ahiak Herds – Pregnancy Rate – Winter 2012
NOTE: includes 2013 information as it is a picture that could not be modified.

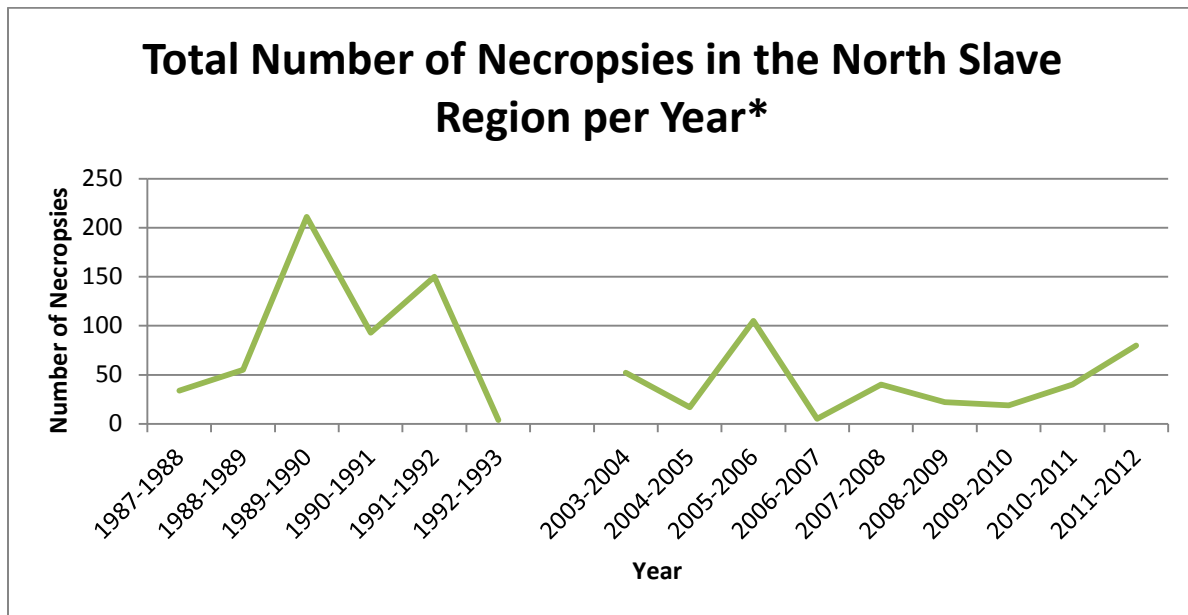
WOLF HARVEST

Wolf Carcass Collection/Necropsy

- Carcass collection is conducted annually between 15 August and 30 April to measure pregnancy, in-utero litter size and body condition.
- The total number of wolf carcasses submitted to ENR in 2011-2012 were 80 (45 male and 35 female).

	# Males Taken	# Females Taken	# Unknown Taken	Total Harvested
North Slave Region Collection*	45	35	0	80

*Three carcasses were harvested from outside the North Slave Region and 1 carcass in an unknown location.



*Years 1993-1994 to 2002-2003 data is not available.

Figure 9: Wolf Carcass Collection/Necropsy – 1987 to 2012

WOLF MONITORING ACTIVITIES

Satellite Collars

- On March 15-18, 2012, 21 GPS satellite collars and 3 VHF-only collars were placed on wolves.

Wolf Den Survey

- Survey was conducted in June, 2012.
- 22 active wolf dens were observed in 4,970 km of flying within the study area. That converts to 4.43 active wolf dens/1000 km, an increase from 3.55 dens/1000 km in 2011, the lowest year recorded. There were 4.01 active dens/1000 km flown in 2010. Occupancy rate was estimated at 0.084, up from 0.060 in 2011 and 0.060 in 2010.

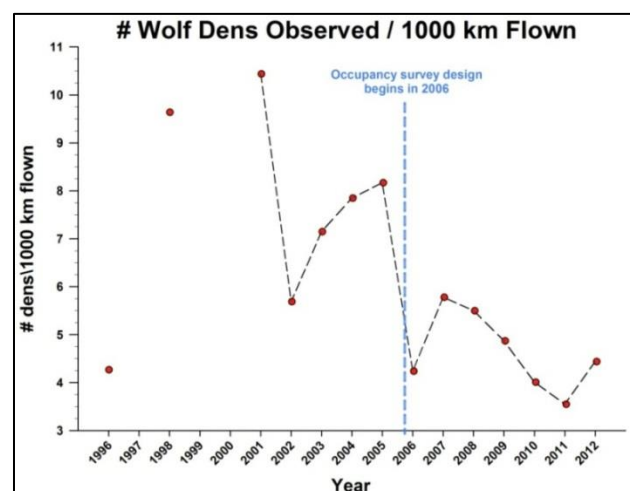


Figure 10: Wolf Dens Survey - Summer 2012