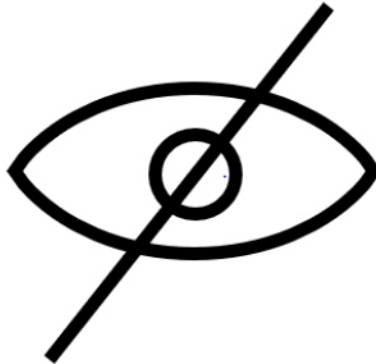




File: 292-30/WLR-2024-41566

**WARNING**

**Sensitive Content**



**From:** s. 15, s. 19  
**To:**  
**Subject:** Management area update  
**Sent:** 01/21/2024 15:57:18

You don't often get email from s. 15, s. 19 [Learn why this is important](#)

**[EXTERNAL]** This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning,

Here is the update for the management area January 15th-20th.

January 15th:  
flew 5.7hr on the track survey.

Jan 16th:  
flew 7.5hrs, found old wolf sign approx 2 miles south of Hummamilt lake. The tracks indicated 2-3 wolves in the area. Flew down to meadow creek area to look at the tracks found on the survey with no sign of new tracks.

Jan 17th:  
flew 7.1hrs, beeped in the collar at Hummamilt lake area and removed one wolf which had an old collar on it. Unknown freq. and left the working collared wolf alone. Only 2 were seen in that location.  
Tracked out and saw 2 cougars

s. 15, s. 19

Jan 18th:  
Flew 7.1hrs with no sign of tracks in the areas flown

Jan 19th:  
Flew 7.5hrs with no sign of tracks in areas flown. South by Poplar/meadow creek all tracks found in the area were from household dogs.

Jan 20th:  
Flew 7.5hrs with no sign of wolf tracks in the areas flown.

s. 15, s. 19 we found a day or two old Cougar track just north of the Downy creek area in a very thick block with poor access and were not able to freshen the tracks up yet.

Hope this helps. If there's anything else you would like to see in the update emails please let me know.

Thank you,

s. 15, s. 19

The information on this communication

is confidential and intended only for whom it is addressed. If you have received this communication in error, please notify the sender, delete and shred any copies of it.

**From:** s. 15, s. 19  
**To:**  
**Subject:** Management area update  
**Sent:** 01/26/2024 14:32:12

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**[EXTERNAL]** This email came from an external source. Only open attachments or links that you are expecting from a known sender.

Good morning s. 15, s. 19

Update for Jan 21-22

Jan 21,  
7.2 hours  
149,500 black was removed at  
s. 15, s. 19

Nothing else seen

Jan 22,  
7.0 hours  
Nothing seen

Thank you,

s. 15, s. 19

The information on this communication is confidential and intended only for whom it is addressed. If you have received this communication in error, please notify the sender, delete and shred any copies of it.



## BC Wildlife Health Program - Wolf Capture Data Form

## CAPTURE

Study Area: Thompson Pack: Ischa-Buchu Date: (DD/MM/YYYY): 17 Feb 24  
 Number of wolves in pack: 7 on sightings / 10<sup>th</sup> known Pack color composition: Gray  
 Other collared wolves in pack (freqs): N/A  
 Weather: OVC / Partly Cloudy Ambient temperature: -6 °C Personnel: s. 19, s. 22  
 Capture method: Net gun / Dart / Hand-injection / Ground trap  
 Trap type: \_\_\_\_\_ Trap size: \_\_\_\_\_  
 Haze time (mins): 3 Chase (mins): 30 sec Net Gun capture time (HH:MM): 12  
 First dose (Zoletil) (HH:MM): \_\_\_\_\_ Vol: \_\_\_\_\_ Second dose (HH:MM): \_\_\_\_\_ Vol: \_\_\_\_\_  
 Wolf down (HH:MM): 1352 Released (HH:MM): 1404  
 Waypoint: \_\_\_\_\_ UTM Zone: \_\_\_\_\_ East: \_\_\_\_\_ North: \_\_\_\_\_ or Lat: \_\_\_\_\_ Long: \_\_\_\_\_

## ANIMAL IDENTIFICATION

WLH ID: 2323 72 Other ID: \_\_\_\_\_ Recapture No / Yes Previous WLH ID: \_\_\_\_\_  
 Collar type: VECTRONICS Frequency: 151.830 Serial number: 97632  
 Sex: M / F Size: Small / Medium / Large Weight: 85 lbs kg measured / estimate Pelt colour: Gray  
 Age class: Pup / Yearling / Adult / Old Adult Age estimate: 3 Tooth wear/staining: Light / Moderate / Heavy  
 Lactating: No / Yes Labia: Undeveloped / Enlarged / Swollen

## HEALTH ASSESSMENT

Rectal temp: \_\_\_\_\_ °C Injuries: None / Yes - Net or Capture / Trap / Other (describe in comments on reverse)  
 General body condition: Emaciated / Poor / Fair / Good  
 Hair missing/skin crusting: None / Low / Moderate / High (describe/ draw on body sketch in comments on reverse)  
 External parasites: No / Yes \*\*Collect separate samples of parasites if possible in empty vial\*\*  
 Body length: \_\_\_\_\_ cm Tail length: \_\_\_\_\_ cm Neck girth: \_\_\_\_\_ cm Chest girth: \_\_\_\_\_ cm  
 Shoulder height: \_\_\_\_\_ cm Ground clearance: \_\_\_\_\_ cm Front pad length: \_\_\_\_\_ cm Front pad width: \_\_\_\_\_ cm  
 Humerus: \_\_\_\_\_ cm Radius-Ulna: \_\_\_\_\_ cm Metacarpals-Digits: \_\_\_\_\_ cm  
 Femur: \_\_\_\_\_ cm Tibia-Fibula: \_\_\_\_\_ cm Metatarsus-Digits: \_\_\_\_\_ cm

## SAMPLES COLLECTED \*\* PLEASE READ PROTOCOL \*\*

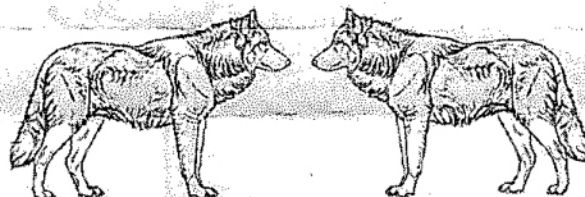
	Yes (#)	No
Blood: 2 x Gold Top SST tubes (serum) - please fill each tube as full as possible	<input checked="" type="checkbox"/>	
Hair: Small envelope full, plucked from top of shoulder	<input checked="" type="checkbox"/>	
Skin/ear biopsy: Small envelope	<input checked="" type="checkbox"/>	
Pictures	<input checked="" type="checkbox"/>	

## Checklist

Dart removed ☒ Magnet removed ☒ Collar fitted, and nuts tightened ☒ Frequency checked ☒

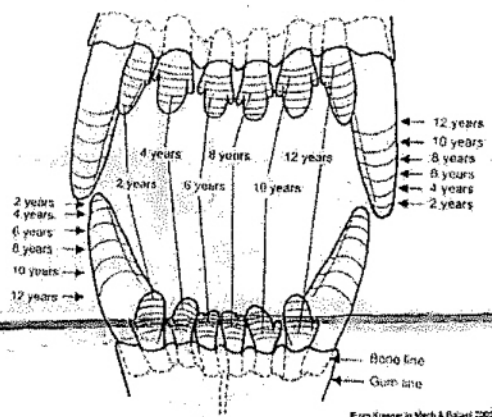
\* EMERGENCY VETERINARY CONTACT: s. 19, s. 22

COMMENTS				
Time				
Temperature				
Heart Rate				
Respiratory Rate				

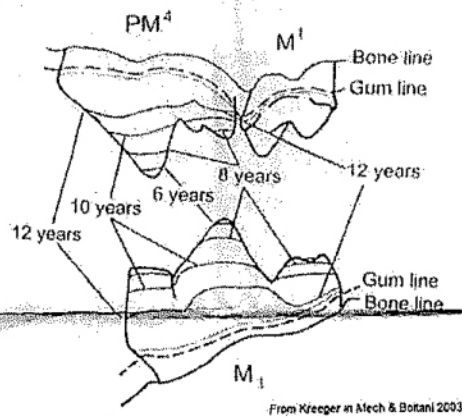


Take Pictures /Draw / Describe abnormal

AGE CLASS	PATTERN OF TOOTH WEAR	FIELD AGE
Pup	All deciduous teeth; delicate, white teeth have little wear.	< 1Year
Yearling	Most adult teeth erupted; after 6 - 8 months permanent canine teeth are present, white with little or no wear.	1 Year
Adult	All teeth are showing wear and staining. There may be some damage so examine all teeth in mouth.	2-6 Years
Aged	All teeth are worn, possibly to the gumline and may be heavily stained, damaged or missing. Wolves very rarely live this long.	7+ Years



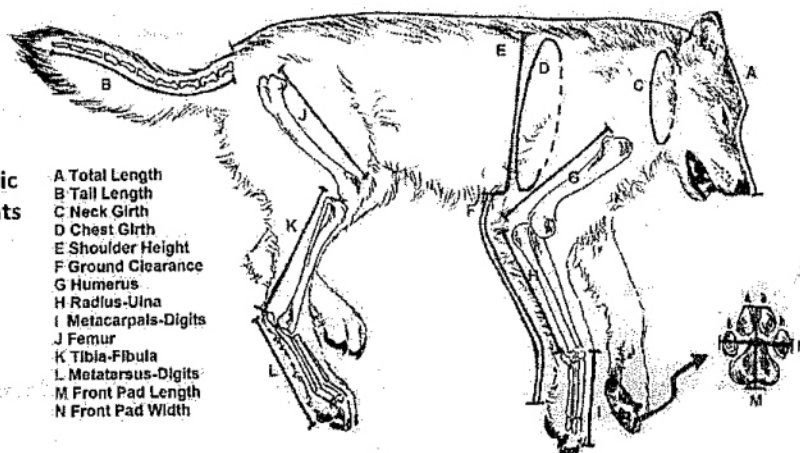
Tooth wear - front



Tooth wear - rear

### Morphometric measurements

- A Total Length
- B Tail Length
- C Neck Girth
- D Chest Girth
- E Shoulder Height
- F Ground Clearance
- G Humerus
- H Radius-Ulna
- I Metacarpals-Digits
- J Femur
- K Tibia-Fibula
- L Metatarsus-Digits
- M Front Pad Length
- N Front Pad Width





## BC Wildlife Health Program - Wolf Capture Data Form

## CAPTURE

Study Area: THREDSMUR Pack: CHESLATA Date: (DD/MM/YYYY): 09 FEB 24  
 Number of wolves in pack: 8-9? ESTIMATED Pack color composition: Black & Grey  
 Other collared wolves in pack (freqs): NO  
 Weather: OK Ambient temperature: -12 °C Personnel: s. 19, s. 22  
 Capture method: Net gun / Dart / Hand-injection / Ground trap  
 Trap type: \_\_\_\_\_ Trap size: \_\_\_\_\_  
 Haze time (mins): 1 min Chase (mins): 30 sec Net Gun capture time (HH:MM): 18  
 First dose (Zoletil) (HH:MM): \_\_\_\_\_ Vol: \_\_\_\_\_ Second dose (HH:MM): \_\_\_\_\_ Vol: \_\_\_\_\_  
 Wolf down (HH:MM): \_\_\_\_\_ Released (HH:MM): \_\_\_\_\_  
 Waypoint: \_\_\_\_\_ UTM Zone: \_\_\_\_\_ East: \_\_\_\_\_ North: \_\_\_\_\_ or Lat: s. 15, s. 19

## ANIMAL IDENTIFICATION

WLH ID: 23-2369 Other ID: \_\_\_\_\_ Recapture No Yes Previous WLH ID: \_\_\_\_\_  
 Collar type: VECTRONICS Frequency: 151.860 Serial number: 97646  
 Sex: M / F Size: Small / Medium / XL Large Weight: 115 lbs kg measured / estimate Pelt colour: Grey  
 Age class: Pup / Yearling / Adult / Old Adult Age estimate: 5 Tooth wear/staining: Light / Moderate / Heavy  
 Lactating: No / Yes Labia: Undeveloped / Enlarged / Swollen

## HEALTH ASSESSMENT

Rectal temp: \_\_\_\_\_ °C Injuries: None / Yes - Net or Capture / Trap / Other (describe in comments on reverse)  
 General body condition: Emaciated / Poor / Fair / Good  
 Hair missing/skin crusting: None / Low / Moderate / High (describe/ draw on body sketch in comments on reverse)  
 External parasites: No / Yes \*\*Collect separate samples of parasites if possible in empty vial\*\*  
 Body length: \_\_\_\_\_ cm Tail length: \_\_\_\_\_ cm Neck girth: \_\_\_\_\_ cm Chest girth: \_\_\_\_\_ cm  
 Shoulder height: \_\_\_\_\_ cm Ground clearance: \_\_\_\_\_ cm Front pad length: \_\_\_\_\_ cm Front pad width: \_\_\_\_\_ cm  
 Humerus: \_\_\_\_\_ cm Radius-Ulna: \_\_\_\_\_ cm Metacarpals-Digits: \_\_\_\_\_ cm  
 Femur: \_\_\_\_\_ cm Tibia-Fibula: \_\_\_\_\_ cm Metatarsus-Digits: \_\_\_\_\_ cm

## SAMPLES COLLECTED \*\* PLEASE READ PROTOCOL \*\*

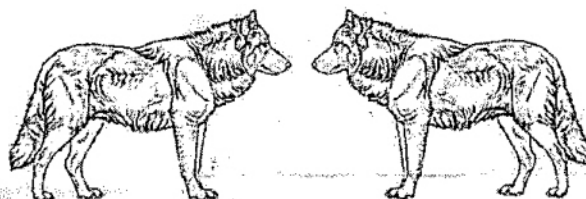
	Yes (#)	No
Blood: 2 x Gold Top SST tubes (serum) - please fill each tube as full as possible	✓	
Hair: Small envelope full, plucked from top of shoulder	✓	
Skin/ear biopsy: Small envelope	✓	
Pictures	✓	

## Checklist

Dart removed ☒ Magnet removed ☒ Collar fitted, and nuts tightened ☒ Frequency checked ☒

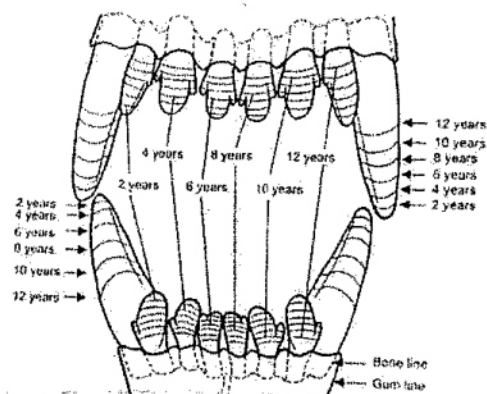
\* EMERGENCY VETERINARY CONTACT: s. 19, s. 22

COMMENTS				
Time				
Temperature				
Heart Rate				
Respiratory Rate				

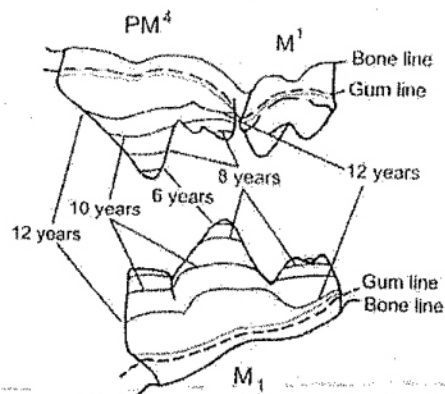


Take Pictures /Draw / Describe abnormal

AGE CLASS	PATTERN OF TOOTH WEAR	FIELD AGE
Pup	All deciduous teeth; delicate, white teeth have little wear.	< 1Year
Yearling	Most adult teeth erupted; after 6 - 8 months permanent canine teeth are present, white with little or no wear.	1 Year
Adult	All teeth are showing wear and staining. There may be some damage so examine all teeth in mouth.	2-6 Years
Aged	All teeth are worn, possibly to the gumline and may be heavily stained, damaged or missing. Wolves very rarely live this long.	7+ Years



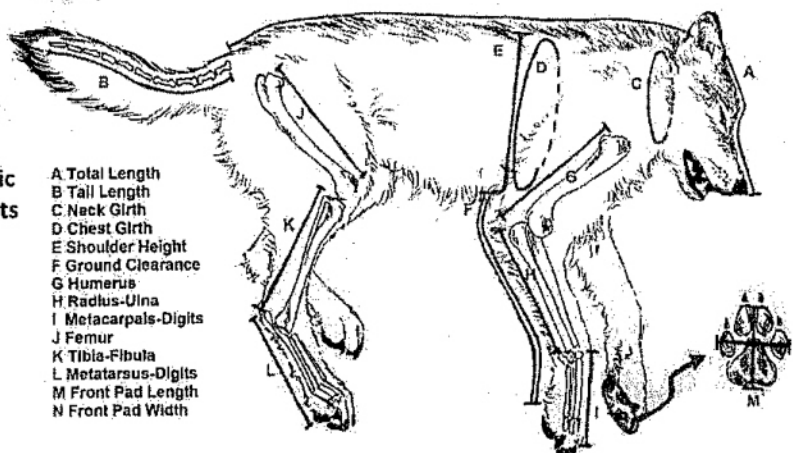
Tooth wear - front



Tooth wear - rear

### Morphometric measurements

- A Total Length
- B Tail Length
- C Neck Girth
- D Chest Girth
- E Shoulder Height
- F Ground Clearance
- G Humerus
- H Radius-Ulna
- I Metacarpals-Digits
- J Femur
- K Tibia-Fibula
- L Metatarsus-Digits
- M Front Pad Length
- N Front Pad Width





## BC Caribou Research Program - Capture Data Form

## CAPTURE

Herd: Tweedsmuir Date: (DD/MM/YYYY): 20 Feb 24 Ambient temperature: 0 °CWeather: OK Calm Personnel: s. 19, s. 22Haze time (mins): 0 Chase (mins): 30 sec Net on (HH:MM): 1145 Release (HH:MM): 1130Haze time 2 (mins): 0 Chase 2 (mins): - Net 2 on (HH:MM): - No second net ☒Waypoint: - UTM Zone: - East: - North: - or Lat: s. 15, s. 19

## ANIMAL IDENTIFICATION

WLH ID: 23-2191 Other ID: Yuan #11 Recapture No / Yes Previous WLH ID: -Collar type: VECTRONICS Frequency: 151.540 Serial number: 97620Ear tag(s) (number and colour): Left: - Right: 0-5185Sex: M / F Calf at heel (circle): Uncertain No / Yes Lactating (circle): No / YesAge class (circle): Yearling Subadult (2-3) / Adult (4-7) / Old Adult (8+)Field age (degree of incisor wear) (circle): Yearling 2-3 / 4-5 / 6-7 / 8-9 / 10-11 / 12+**\*\*Take three photos of teeth and jaw – one from each side and one from the front showing the incisors\*\***

## HEALTH ASSESSMENT

Rectal temp: - °C Injuries (circle): None / Yes - Net or Capture / Other (describe in comments on reverse)Antlers (circle): None / One / Two Broken (Net) / Deformity / Retained Velvet **\*\*Take pictures if abnormal\*\***General body condition (circle): Emaciated / Poor / Fair Good **\*\*Take pictures if condition is less than fair\*\***CARMA BCS (see page 2): Shoulder: 4 Ribs: 3 Hips/Spine: 4 Total Score: -Ticks: No / Yes **\*\*Collect 10-15 ticks\*\*** Hair loss (circle): None / Mild / Moderate / Severe / Extreme

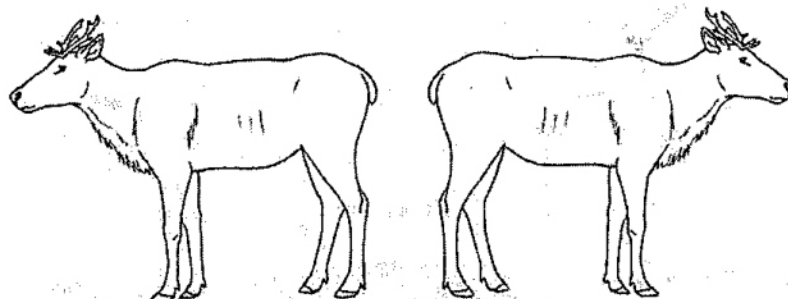
Tick burden estimate (circle): None / Mild (Approx. 0-15 ticks per 10cm transect) / Moderate (15-30) / Severe (&gt;30)

**\*OPTIONAL\*** Tick count (lowest priority): # on shoulder: - or # on rump: - No count performed**\*OPTIONAL\*** Neck circumference: - cmSAMPLES COLLECTED **\*\* PLEASE READ PROTOCOL \*\***

	Yes (#)	No
Blood: 4 x Gold Top SST tubes (serum) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Blood: 1 x Royal Blue Top Trace tube (trace nutrients) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Blood: 1 x Purple Top EDTA tube (buffy coat / plasma) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Blood: 1 x Green Top RNA tube (whole blood) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Hair: Large envelope full, plucked from top of shoulder Circle: <u>Clean</u> / Contaminated <u>Dry</u> / Wet	<input checked="" type="checkbox"/>	
Skin biopsy: Small envelope	<input checked="" type="checkbox"/>	
Feces: 20 – 30 pellets if possible, collected from (circle): rectum / off ground / off snow	<input checked="" type="checkbox"/>	
Pictures: <u>PRIORITY</u> = Incisors / Abnormalities / Hair loss / Poor condition IF TIME = Body / Head / Profile	<input checked="" type="checkbox"/>	

**\* EMERGENCY VETERINARY CONTACT: s. 19, s. 22**

## COMMENTS



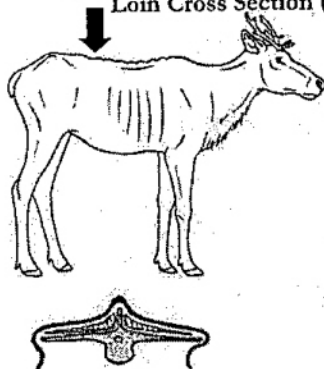
Take Pictures /Draw / Describe abnormal

FIELD AGE	PATTERN OF INCISOR WEAR	AGE CLASS
2-3	Very white teeth with rounded caps (little or no wear)	Subadult
4-5	First incisors are flattening, and second incisors are beginning to wear	Adult
6-7	All teeth in the incisor bar are flattening and appear to be a straight line across the top	Adult
8-9	All teeth in the incisor bar are flattened significantly (teeth appear shorter)	Old Adult
10-11	All teeth in the incisor bar are stubs (shorter still)	Old Adult
12+	All teeth in the incisor bar are worn to the gum line	Old Adult

SHOULDER	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	V-shaped scapula, very bony, hollows behind scapula and immediately behind the scapular spine	
2	Somewhat V shaped, less bony, hollows still present	
3	U-shaped withers, hollows filled	
4	U-shaped, very broad, difficult to feel edges of bone	
RIBS	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Deep groves between ribs including behind the shoulder	
2	Ribs fairly well covered immediately behind shoulder	
3	Can still feel ribs, groves are not too deep	
4	Ribs nearly flush with tissue between them	
HIPS/SPINE	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Hip bones very distinct, no fat on back or tail head, spine very distinct	
2	Some padding on hips, spine remains very distinct	
3	Hips fairly well padded, spine partly covered along each side	
4	Hips well padded, spine is flush with or nearly covered with fat	
Total CARMA Condition Score (sum of shoulder, ribs, hips/spine)		

# Assigned numbers may be in increments of 0.5 points. Area scores may not be the same.

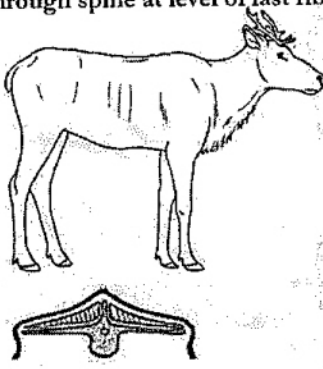
Loin Cross Section (through spine at level of last rib)



EMACIATED

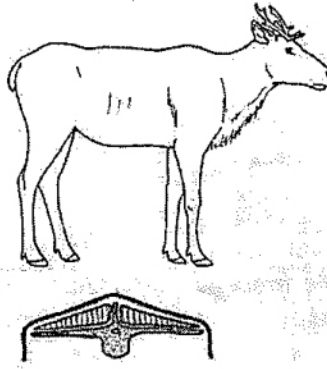
- Hips/tail head prominent
- Saw-tooth spine and ribs very prom.
- Significant muscle atrophy

CARMA 1



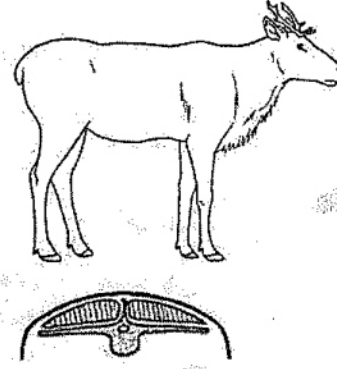
POOR

CARMA 2



FAIR

CARMA 3



GOOD +

- Hips and tail head well padded
- Spine and ribs flush to rounded
- No muscle atrophy

CARMA 4



## BC Caribou Research Program - Capture Data Form

## CAPTURE

Herd: Tweedsmuir Date: (DD/MM/YYYY): 13 Feb 24 Ambient temperature: -7 °C  
 Weather: Clear ice Personnel: s. 19, s. 22  
 Haze time (mins): 0 Chase (mins): 30 sec Net on (HH:MM): 1451 Release (HH:MM): 1503  
 Haze time 2 (mins): \_\_\_\_\_ Chase 2 (mins): \_\_\_\_\_ Net 2 on (HH:MM): \_\_\_\_\_ No second net ☒  
 Waypoint: \_\_\_\_\_ UTM Zone: \_\_\_\_\_ East: \_\_\_\_\_ North: \_\_\_\_\_ or Lat: s. 15, s. 19

## ANIMAL IDENTIFICATION

WLH ID: 23-2190 Other ID: Yuan 9 Recapture No / Yes Previous WLH ID: no  
 Collar type: VELTANICS Frequency: 151.510 Serial number: 97617  
 Ear tag(s) (number and colour): Left: \_\_\_\_\_ Right: 0-5184  
 Sex: M / F Calf at heel (circle): Uncertain / No / Yes Lactating (circle): No / Yes  
 Age class (circle): Yearling / Subadult (2-3) / Adult (4-7) / Old Adult (8+)  
 Field age (degree of incisor wear) (circle): Yearling / 2-3 / 4-5 / 6-7 / 8-9 / 10-11 / 12+

**\*\*Take three photos of teeth and jaw – one from each side and one from the front showing the incisors\*\***

## HEALTH ASSESSMENT

Rectal temp: \_\_\_\_\_ °C Injuries (circle): None / Yes - Net or Capture / Other (describe in comments on reverse)  
 Antlers (circle): None / One / Two Broken (Net) / Deformity / Retained Velvet **\*\*Take pictures if abnormal\*\***  
 General body condition (circle): Emaciated / Poor / Fair / Good + **\*\*Take pictures if condition is less than fair\*\***  
 CARMA BCS (see page 2): Shoulder: 3 Ribs: 3 Hips/Spine: 3 Total Score: 3  
 Ticks: No / Yes **\*\*Collect 10-15 ticks\*\*** Hair loss (circle): None / Mild / Moderate / Severe / Extreme  
 Tick burden estimate (circle): None / Mild (Approx. 0-15 ticks per 10cm transect) / Moderate (15-30) / Severe (>30)  
 \*OPTIONAL\* Tick count (lowest priority): # on shoulder: \_\_\_\_\_ or # on rump: \_\_\_\_\_ No count performed  
 \*OPTIONAL\* Neck circumference: \_\_\_\_\_ cm

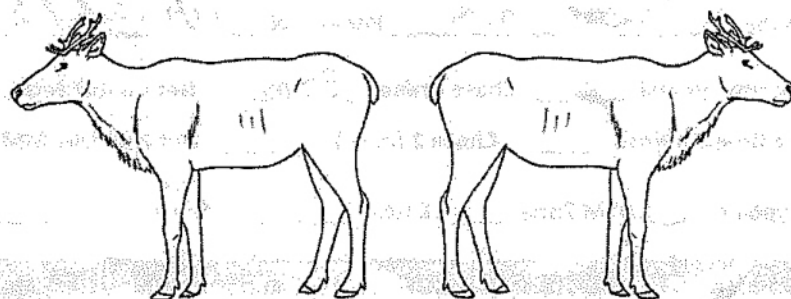
SAMPLES COLLECTED **\*\* PLEASE READ PROTOCOL \*\***

	Yes (#)	No
Blood: 4 x Gold Top SST tubes (serum) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Blood: 1 x Royal Blue Top Trace tube (trace nutrients) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Blood: 1 x Purple Top EDTA tube (buffy coat / plasma) * Must invert for 30 seconds to 1 min after collected *	<input checked="" type="checkbox"/>	
Blood: 1 x Green Top RNA tube (whole blood) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Hair: Large envelope full, plucked from top of shoulder Circle: Clean / Contaminated / Dry / Wet	<input checked="" type="checkbox"/>	
Skin biopsy: Small envelope	<input checked="" type="checkbox"/>	
Feces: 20 – 30 pellets if possible, collected from (circle): rectum / off ground / off snow	<input checked="" type="checkbox"/>	
Pictures: PRIORITY = Incisors / Abnormalities / Hair loss / Poor condition IF TIME = Body / Head / Profile	<input checked="" type="checkbox"/>	

**\* EMERGENCY VETERINARY CONTACT: s. 19, s. 22**



## COMMENTS



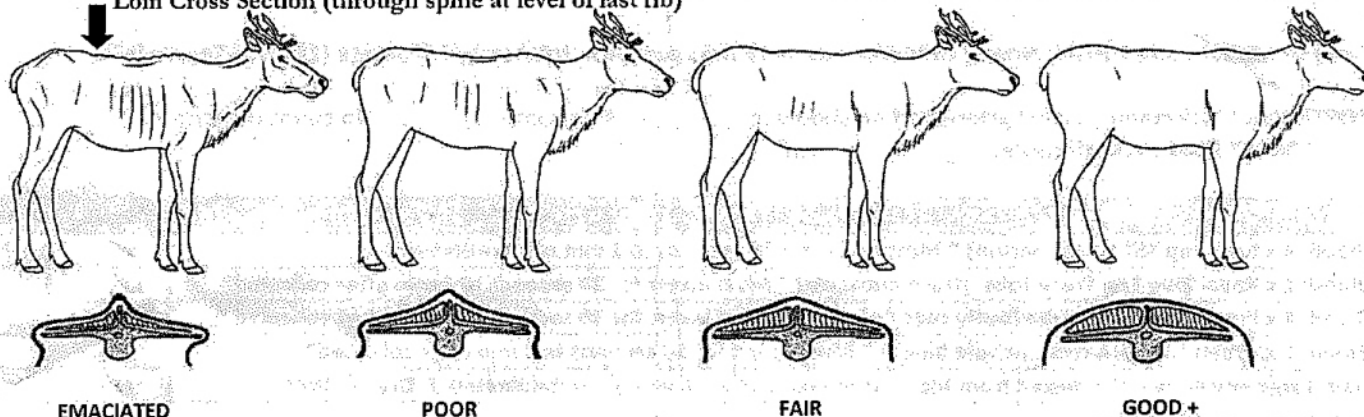
Take Pictures /Draw / Describe abnormal

FIELD AGE	PATTERN OF INCISOR WEAR	AGE CLASS
2-3	Very white teeth with rounded caps (little or no wear)	Subadult
4-5	First incisors are flattening, and second incisors are beginning to wear	Adult
6-7	All teeth in the incisor bar are flattening and appear to be a straight line across the top	Adult
8-9	All teeth in the incisor bar are flattened significantly (teeth appear shorter)	Old Adult
10-11	All teeth in the incisor bar are stubs (shorter still)	Old Adult
12+	All teeth in the incisor bar are worn to the gum line	Old Adult

SHOULDER	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	V-shaped scapula, very bony, hollows behind scapula and immediately behind the scapular spine	
2	Somewhat V shaped, less bony, hollows still present	
3	U-shaped withers, hollows filled	
4	U-shaped, very broad, difficult to feel edges of bone	
RIBS	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Deep groves between ribs including behind the shoulder	
2	Ribs fairly well covered immediately behind shoulder	
3	Can still feel ribs, groves are not too deep	
4	Ribs nearly flush with tissue between them	
HIPS/SPINE	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Hip bones very distinct, no fat on back or tail head, spine very distinct	
2	Some padding on hips, spine remains very distinct	
3	Hips fairly well padded, spine partly covered along each side	
4	Hips well padded, spine is flush with or nearly covered with fat	
Total CARMA Condition Score (sum of shoulder, ribs, hips/spine)		

# Assigned numbers may be in increments of 0.5 points. Area scores may not be the same.

Loin Cross Section (through spine at level of last rib)



- Hips/tail head prominent
- Saw-tooth spine and ribs very prom.
- Significant muscle atrophy

CARMA 1

CARMA 2

CARMA 3

CARMA 4

- Hips and tail head well padded
- Spine and ribs flush to rounded
- No muscle atrophy



## BC Caribou Research Program - Capture Data Form

## CAPTURE

Herd: Tweedsmuir Date: (DD/MM/YYYY): 13 Feb 24 Ambient temperature: -11 °C

s. 19, s. 22

Weather: Clear, 10 km wind Personnel: \_\_\_\_\_Haze time (mins): 0 Chase (mins): 1 Net on (HH:MM): 10 Release (HH:MM): 1530Haze time 2 (mins): \_\_\_\_\_ Chase 2 (mins): \_\_\_\_\_ Net 2 on (HH:MM): \_\_\_\_\_ No second net ☒

s. 15, s. 19

Waypoint: \_\_\_\_\_ UTM Zone: \_\_\_\_\_ East: \_\_\_\_\_ North: \_\_\_\_\_ or Lat: \_\_\_\_\_

## ANIMAL IDENTIFICATION

WLH ID: 23-2188 Other ID: Yellow Crown Recapture No / Yes Previous WLH ID: \_\_\_\_\_Collar type: Vectronic Frequency: 151-530 Serial number: 97619Ear tag(s) (number and colour): Left: 0-5182 Right: \_\_\_\_\_Sex: M / F Calf at heel (circle): Uncertain / No / Yes Lactating (circle): No / YesAge class (circle): Yearling / Subadult (2-3) / Adult (4-7) / Old Adult (8+)Field age (degree of incisor wear) (circle): Yearling / 2-3 / 4-5 / 6-7 / 8-9 / 10-11 / 12+

\*\*Take three photos of teeth and jaw – one from each side and one from the front showing the incisors\*\*

## HEALTH ASSESSMENT

Rectal temp: \_\_\_\_\_ °C Injuries (circle): None / Yes - Net or Capture / Other (describe in comments on reverse)

Antlers (circle): None / One / Two Broken (Net) / Deformity / Retained Velvet \*\*Take pictures if abnormal\*\*General body condition (circle): Emaciated / Poor / Fair / Good + \*\*Take pictures if condition is less than fair\*\*CARMA BCS (see page 2): Shoulder: 3 Ribs: 3 Hips/Spine: 3 Total Score: \_\_\_\_\_Ticks: No / Yes \*\*Collect 10-15 ticks\*\* Hair loss (circle): None / Mild / Moderate / Severe / ExtremeTick burden estimate (circle): None / Mild (Approx. 0-15 ticks per 10cm transect) / Moderate (15-30) / Severe (>30)

\*OPTIONAL\* Tick count (lowest priority): # on shoulder: \_\_\_\_\_ or # on rump: \_\_\_\_\_ No count performed

\*OPTIONAL\* Neck circumference: \_\_\_\_\_ cm

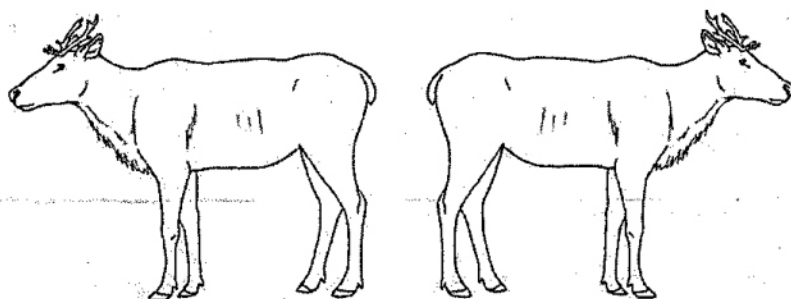
## SAMPLES COLLECTED \*\* PLEASE READ PROTOCOL \*\*

	Yes (#)	No
Blood: 4 x Gold Top SST tubes (serum) * Must invert for 30 seconds to 1 min after collected*	<u>4</u>	
Blood: 1 x Royal Blue Top Trace tube (trace nutrients) * Must invert for 30 seconds to 1 min after collected*	<u>1</u>	
Blood: 1 x Purple Top EDTA tube (buffy coat / plasma) * Must invert for 30 seconds to 1 min after collected *	<u>1</u>	
Blood: 1 x Green Top RNA tube (whole blood) * Must invert for 30 seconds to 1 min after collected*	<u>1</u>	
Hair: Large envelope full, plucked from top of shoulder Circle: Clean / Contaminated / Dry / Wet	<u>1</u>	
Skin biopsy: Small envelope	<u>1</u>	
Feces: 20 – 30 pellets if possible, collected from (circle): rectum / off ground / off snow	<u>1</u>	
Pictures: PRIORITY = Incisors / Abnormalities / Hair loss / Poor condition IF TIME = Body / Head / Profile	<u>1</u>	<u>1</u>

DANGGIT!  
NOT OF  
TEETH

\* EMERGENCY VETERINARY CONTACT: s. 19, s. 22

## COMMENTS



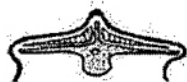
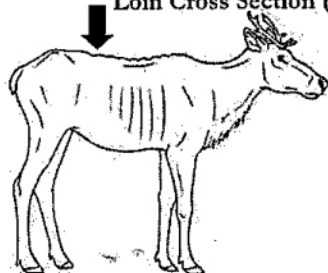
Take Pictures /Draw / Describe abnormal

FIELD AGE	PATTERN OF INCISOR WEAR	AGE CLASS
2-3	Very white teeth with rounded caps (little or no wear)	Subadult
4-5	First incisors are flattening, and second incisors are beginning to wear	Adult
6-7	All teeth in the incisor bar are flattening and appear to be a straight line across the top	Adult
8-9	All teeth in the incisor bar are flattened significantly (teeth appear shorter)	Old Adult
10-11	All teeth in the incisor bar are stubs (shorter still)	Old Adult
12+	All teeth in the incisor bar are worn to the gum line	Old Adult

SHOULDER	CARMA DESCRIPTION	SCORE <sup>a</sup>
1	V-shaped scapula, very bony, hollows behind scapula and immediately behind the scapular spine	
2	Somewhat V shaped, less bony, hollows still present	
3	U-shaped withers, hollows filled	
4	U-shaped, very broad, difficult to feel edges of bone	
RIBS	CARMA DESCRIPTION	SCORE <sup>a</sup>
1	Deep groves between ribs including behind the shoulder	
2	Ribs fairly well covered immediately behind shoulder	
3	Can still feel ribs, groves are not too deep	
4	Ribs nearly flush with tissue between them	
HIPS/SPINE	CARMA DESCRIPTION	SCORE <sup>a</sup>
1	Hip bones very distinct, no fat on back or tail head, spine very distinct	
2	Some padding on hips, spine remains very distinct	
3	Hips fairly well padded, spine partly covered along each side	
4	Hips well padded, spine is flush with or nearly covered with fat	
Total CARMA Condition Score (sum of shoulder, ribs, hips/spine)		

# Assigned numbers may be in increments of 0.5 points. Area scores may not be the same.

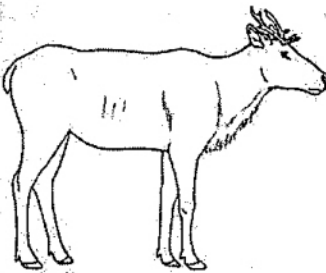
Loin Cross Section (through spine at level of last rib)



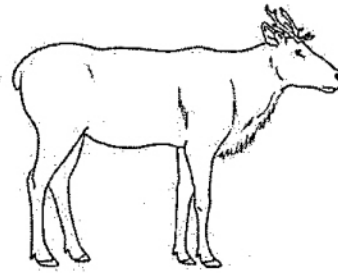
EMACIATED



POOR



FAIR



GOOD +

- Hips/tail head prominent
- Saw-tooth spine and ribs very prom.
- Significant muscle atrophy

CARMA 1

CARMA 2

CARMA 3

- Hips and tail head well padded
- Spine and ribs flush to rounded
- No muscle atrophy

CARMA 4



## BC Caribou Research Program - Capture Data Form

## CAPTURE

Herd: Twigg's Date: (DD/MM/YYYY): 13 Feb 24 Ambient temperature: -1 °CWeather: Clear, -12 Personnel: s. 19, s. 22Haze time (mins): 0 Chase (mins): 1 Net on (HH:MM): 1549 Release (HH:MM): 1601Haze time 2 (mins):        Chase 2 (mins):        Net 2 on (HH:MM):        No second net ☒

s. 15, s. 19

Waypoint:        UTM Zone:        East:        North:        or Lat:       

## ANIMAL IDENTIFICATION

WLH ID: 23-2193 Other ID: Yellow crown Recapture ☒ Yes Previous WLH ID:       Collar type: Wetronics Frequency: 151.550 Serial number: 97621Ear tag(s) (number and colour): Left:        Right: 5187Sex: M ☐ F ☒ Calf at heel (circle): Uncertain / No / Yes Lactating (circle): No / YesAge class (circle): Yearling / Subadult (2-3) / Adult (4-7) / Old Adult (8+)Field age (degree of incisor wear) (circle): Yearling / 2-3 / 4-5 / 6-7 / 8-9 / 10-11 / 12+**\*\*Take three photos of teeth and jaw – one from each side and one from the front showing the incisors\*\***

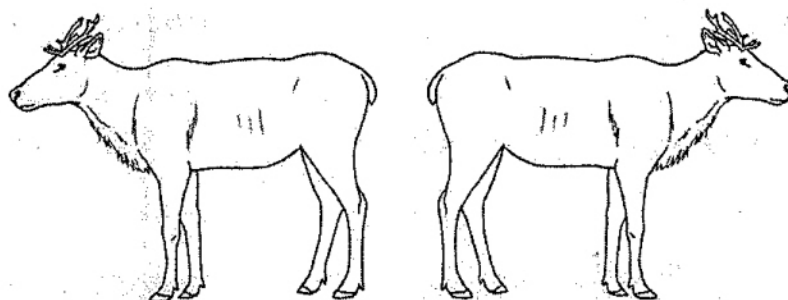
## HEALTH ASSESSMENT

Rectal temp:        °C Injuries (circle): None / Yes - Net or Capture / Other (describe in comments on reverse)Antlers (circle): None / One Two Broken (Net) / Deformity / Retained Velvet **\*\*Take pictures if abnormal\*\***General body condition (circle): Emaciated / Poor / Fair / Good+ **\*\*Take pictures if condition is less than fair\*\***CARMA BCS (see page 2): Shoulder: 3 Ribs: 2 Hips/Spine: 3 Total Score:       Ticks: No / Yes **\*\*Collect 10-15 ticks\*\*** Hair loss (circle): None / Mild / Moderate / Severe / ExtremeTick burden estimate (circle): None / Mild (Approx. 0-15 ticks per 10cm transect) / Moderate (15-30) / Severe (>30)**\*OPTIONAL\*** Tick count (lowest priority): # on shoulder:        or # on rump:        No count performed**\*OPTIONAL\*** Neck circumference:        cmSAMPLES COLLECTED **\*\* PLEASE READ PROTOCOL \*\***

	Yes (#)	No
Blood: 4 x Gold Top SST tubes (serum) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blood: 1 x Royal Blue Top Trace tube (trace nutrients) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blood: 1 x Purple Top EDTA tube (buffy coat / plasma) * Must invert for 30 seconds to 1 min after collected *	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Blood: 1 x Green Top RNA tube (whole blood) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hair: Large envelope full, plucked from top of shoulder Circle: Clean / Contaminated / <u>Dry</u> / Wet	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Skin biopsy: Small envelope	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Feces: 20 – 30 pellets if possible, collected from (circle): rectum / off ground / off snow	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pictures: <b>PRIORITY</b> = Incisors / Abnormalities / Hair loss / Poor condition <b>IF TIME</b> = Body / Head / Profile	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**\* EMERGENCY VETERINARY CONTACT:** s. 19, s. 22

## COMMENTS



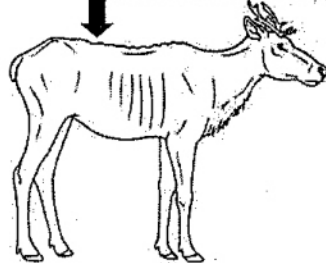
Take Pictures /Draw / Describe abnormal

FIELD AGE	PATTERN OF INCISOR WEAR	AGE CLASS
2-3	Very white teeth with rounded caps (little or no wear)	Subadult
4-5	First incisors are flattening, and second incisors are beginning to wear	Adult
6-7	All teeth in the incisor bar are flattening and appear to be a straight line across the top	Adult
8-9	All teeth in the incisor bar are flattened significantly (teeth appear shorter)	Old Adult
10-11	All teeth in the incisor bar are stubs (shorter still)	Old Adult
12+	All teeth in the incisor bar are worn to the gum line	Old Adult

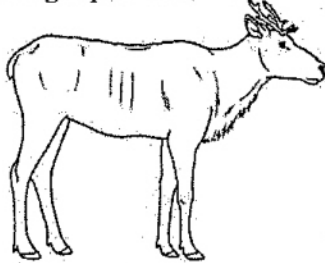
SHOULDER	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	V-shaped scapula, very bony, hollows behind scapula and immediately behind the scapular spine	
2	Somewhat V shaped, less bony, hollows still present	
3	U-shaped withers, hollows filled	
4	U-shaped, very broad, difficult to feel edges of bone	
RIBS	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Deep groves between ribs including behind the shoulder	
2	Ribs fairly well covered immediately behind shoulder	
3	Can still feel ribs, groves are not too deep	
4	Ribs nearly flush with tissue between them	
HIPS/SPINE	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Hip bones very distinct, no fat on back or tail head, spine very distinct	
2	Some padding on hips, spine remains very distinct	
3	Hips fairly well padded, spine partly covered along each side	
4	Hips well padded, spine is flush with or nearly covered with fat	
Total CARMA Condition Score (sum of shoulder, ribs, hips/spine)		

# Assigned numbers may be in increments of 0.5 points. Area scores may not be the same.

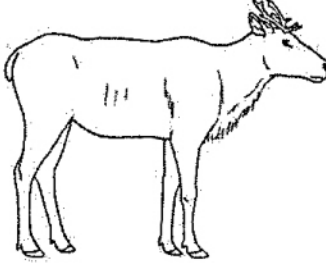
Loin Cross Section (through spine at level of last rib)



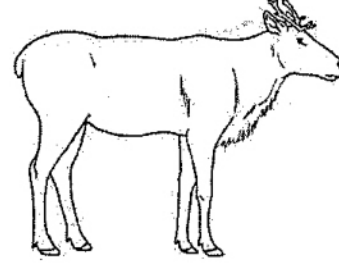
EMACIATED



POOR



FAIR



GOOD +

- Hips/tail head prominent
- Saw-tooth spine and ribs very prom.
- Significant muscle atrophy

CARMA 1

CARMA 2

CARMA 3

- Hips and tail head well padded
- Spine and ribs flush to rounded
- No muscle atrophy

CARMA 4



## BC Caribou Research Program - Capture Data Form

## CAPTURE

Herd: TWSEDSmur Date: (DD/MM/YYYY): 19 FEB 24 Ambient temperature: 41 °CWeather: Clear Personnel: s. 19, s. 22Haze time (mins): 3 Chase (mins): 30 sec Net on (HH:MM): 1012 Release (HH:MM): 1022Haze time 2 (mins): \_\_\_\_\_ Chase 2 (mins): \_\_\_\_\_ Net 2 on (HH:MM): \_\_\_\_\_ No second net ☒Waypoint: \_\_\_\_\_ UTM Zone: \_\_\_\_\_ East: \_\_\_\_\_ North: \_\_\_\_\_ or Lat: s. 15, s. 19

## ANIMAL IDENTIFICATION

WLH ID: 23-2192 Other ID: Yellow Canine 12 Recapture ☒ Yes Previous WLH ID: \_\_\_\_\_Collar type: VETRONIC 5 Frequency: 151.500 Serial number: 97616Ear tag(s) (number and colour): Left: \_\_\_\_\_ Right: 0-5186Sex: M ☒ F ☒ Calf at heel (circle): Uncertain / No / Yes Lactating (circle): No / YesAge class (circle): Yearling / Subadult (2-3) / Adult (4-7) / Old Adult (8+)Field age (degree of incisor wear) (circle): Yearling (2-3) / 4-5 / 6-7 / 8-9 / 10-11 / 12+**\*\*Take three photos of teeth and jaw – one from each side and one from the front showing the incisors\*\***

## HEALTH ASSESSMENT

Rectal temp: \_\_\_\_\_ °C Injuries (circle): None / Yes - Net or Capture / Other (describe in comments on reverse)Antlers (circle): None / One (Two) Broken (Net) / Deformity / Retained Velvet **\*\*Take pictures if abnormal\*\***General body condition (circle): Emaciated / Poor / Fair / Good + **\*\*Take pictures if condition is less than fair\*\***CARMA BCS (see page 2): Shoulder: 3 Ribs: 3 Hips/Spine: 3 Total Score: \_\_\_\_\_Ticks: No / Yes **\*\*Collect 10-15 ticks\*\*** Hair loss (circle): None / Mild / Moderate / Severe / Extreme

Tick burden estimate (circle): None / Mild (Approx. 0-15 ticks per 10cm transect) / Moderate (15-30) / Severe (&gt;30)

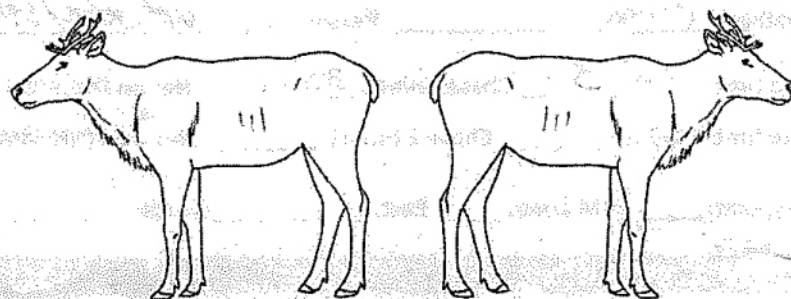
**\*OPTIONAL\*** Tick count (lowest priority): # on shoulder: \_\_\_\_\_ or # on rump: \_\_\_\_\_ No count performed**\*OPTIONAL\*** Neck circumference: \_\_\_\_\_ cmSAMPLES COLLECTED **\*\* PLEASE READ PROTOCOL \*\***

	Yes (#)	No
Blood: 4 x Gold Top SST tubes (serum) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Blood: 1 x Royal Blue Top Trace tube (trace nutrients) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Blood: 1 x Purple Top EDTA tube (buffy coat / plasma) * Must invert for 30 seconds to 1 min after collected *	<input checked="" type="checkbox"/>	
Blood: 1 x Green Top RNA tube (whole blood) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Hair: Large envelope full, plucked from top of shoulder Circle: Clean / Contaminated / Dry / Wet	<input checked="" type="checkbox"/>	
Skin biopsy: Small envelope	<input checked="" type="checkbox"/>	
Feces: 20 – 30 pellets if possible, collected from (circle): rectum / off ground / off snow	<input checked="" type="checkbox"/>	
Pictures: <b>PRIORITY</b> = Incisors / Abnormalities / Hair loss / Poor condition <b>IF TIME</b> = Body / Head / Profile	<input checked="" type="checkbox"/>	

**\* EMERGENCY VETERINARY CONTACT: s. 19, s. 22**



## COMMENTS



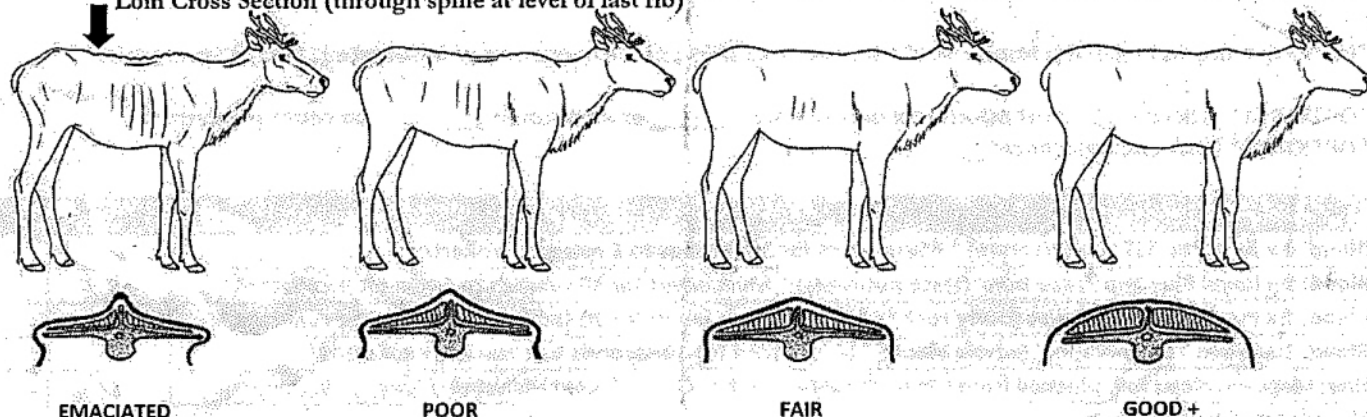
Take Pictures / Draw / Describe abnormal

FIELD AGE	PATTERN OF INCISOR WEAR	AGE CLASS
2-3	Very white teeth with rounded caps (little or no wear)	Subadult
4-5	First incisors are flattening, and second incisors are beginning to wear	Adult
6-7	All teeth in the incisor bar are flattening and appear to be a straight line across the top	Adult
8-9	All teeth in the incisor bar are flattened significantly (teeth appear shorter)	Old Adult
10-11	All teeth in the incisor bar are stubs (shorter still)	Old Adult
12+	All teeth in the incisor bar are worn to the gum line	Old Adult

SHOULDER	CARMA DESCRIPTION	SCORE
1	V-shaped scapula, very bony, hollows behind scapula and immediately behind the scapular spine	
2	Somewhat V shaped, less bony, hollows still present	
3	U-shaped withers, hollows filled	
4	U-shaped, very broad, difficult to feel edges of bone	
RIBS	CARMA DESCRIPTION	SCORE
1	Deep groves between ribs including behind the shoulder	
2	Ribs fairly well covered immediately behind shoulder	
3	Can still feel ribs, groves are not too deep	
4	Ribs nearly flush with tissue between them	
HIPS/SPINE	CARMA DESCRIPTION	SCORE
1	Hip bones very distinct, no fat on back or tail head, spine very distinct	
2	Some padding on hips, spine remains very distinct	
3	Hips fairly well padded, spine partly covered along each side	
4	Hips well padded, spine is flush with or nearly covered with fat	
Total CARMA Condition Score (sum of shoulder, ribs, hips/spine)		

# Assigned numbers may be in increments of 0.5 points. Area scores may not be the same.

Loin Cross Section (through spine at level of last rib)



- Hips/tail head prominent
- Saw-tooth spine and ribs very prom.
- Significant muscle atrophy

CARMA 1

CARMA 2

CARMA 3

CARMA 4

- Hips and tail head well padded
- Spine and ribs flush to rounded
- No muscle atrophy



RE-CAP KIT SKN-003

V3.1 November 2018

## BC Caribou Research Program - Capture Data Form

## CAPTURE

Herd: TwoSquirrels (mt mals) Date: (DD/MM/YYYY): 22 Feb 24 Ambient temperature: +6 °CWeather: WINDY, CLOUDY Personnel: S. 19, S. 22Haze time (mins): 1 Chase (mins): 30 sec Net on (HH:MM): 1637 Release (HH:MM): 1550Haze time 2 (mins): \_\_\_\_\_ Chase 2 (mins): \_\_\_\_\_ Net 2 on (HH:MM): \_\_\_\_\_ No second net ☒Waypoint: \_\_\_\_\_ UTM Zone: \_\_\_\_\_ East: \_\_\_\_\_ North: \_\_\_\_\_ or Lat: S. 15, S. 19

## ANIMAL IDENTIFICATION

WLH ID: (RECAP KIT SKN-003) Other ID: \_\_\_\_\_ Recapture No ☒ Yes Previous WLH ID: 19-1589NEW Collar type: VECTRONICS Frequency: 151.520 Serial number: 97618Ear tag(s) (number and colour): Left: 0-2085 Right: \_\_\_\_\_Sex: M / ☒ F Calf at heel (circle): Uncertain / No / ☒ Yes Lactating (circle): No / YesAge class (circle): Yearling / Subadult (2-3) / Adult (4-7) / ☒ Old Adult (8+)Field age (degree of incisor wear) (circle): Yearling / 2-3 / 4-5 / 6-7 / 8-9 / ☒ 10 / 11 / 12+

\*\*Take three photos of teeth and jaw—one from each side and one from the front showing the incisors\*\*

## HEALTH ASSESSMENT

Rectal temp: \_\_\_\_\_ °C Injuries (circle): None / Yes - Net or Capture / Other (describe in comments on reverse)

Antlers (circle): None / One / ☒ Two Broken (Net) / Deformity / Retained Velvet \*\*Take pictures if abnormal\*\*General body condition (circle): Emaciated / ☒ Poor / Fair / Good + \*\*Take pictures if condition is less than fair\*\*CARMA BCS (see page 2): Shoulder: 2 Ribs: 2 Hips/Spine: 2 Total Score: \_\_\_\_\_Ticks: ☒ No / Yes \*\*Collect 10-15 ticks\*\* Hair loss (circle): None / Mild / Moderate / Severe / Extreme

Tick burden estimate (circle): None / Mild (Approx. 0-15 ticks per 10cm transect) / Moderate (15-30) / Severe (&gt;30)

\*OPTIONAL\* Tick count (lowest priority): # on shoulder: \_\_\_\_\_ or # on rump: \_\_\_\_\_ No count performed

\*OPTIONAL\* Neck circumference: \_\_\_\_\_ cm

## SAMPLES COLLECTED \*\* PLEASE READ PROTOCOL \*\*

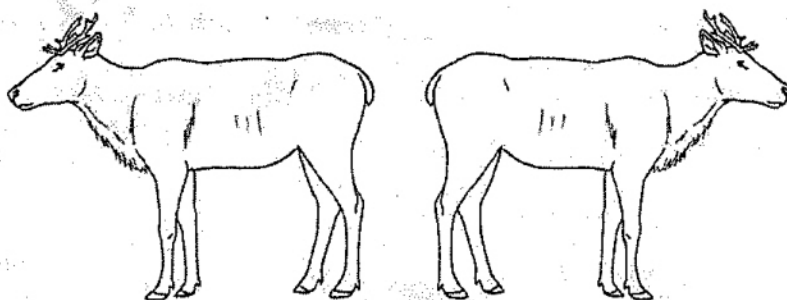
	Yes (#)	No
Blood: 4 x Gold Top SST tubes (serum) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Blood: 1 x Royal Blue Top Trace tube (trace nutrients) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Blood: 1 x Purple Top EDTA tube (buffy coat / plasma) * Must invert for 30 seconds to 1 min after collected *	<input checked="" type="checkbox"/>	
Blood: 1 x Green Top RNA tube (whole blood) * Must invert for 30 seconds to 1 min after collected*	<input checked="" type="checkbox"/>	
Hair: Large envelope full, plucked from top of shoulder Circle: Clean / Contaminated / Dry / Wet	<input checked="" type="checkbox"/>	
Skin biopsy: Small envelope	<input checked="" type="checkbox"/>	
Feces: 20 - 30 pellets if possible, collected from (circle): rectum / off ground / <input checked="" type="radio"/> off snow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Pictures: PRIORITY = Incisors / Abnormalities / Hair loss / Poor condition IF TIME = Body / Head / Profile	<input checked="" type="checkbox"/>	

\* EMERGENCY VETERINARY CONTACT: S. 19, S. 22

★ OLD COLLAR was 42148 - 149.085 MHz



## COMMENTS



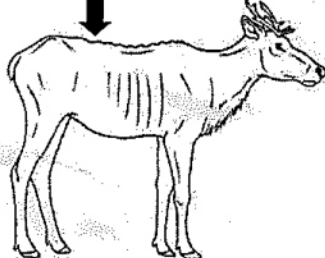
Take Pictures /Draw / Describe abnormal

FIELD AGE	PATTERN OF INCISOR WEAR	AGE CLASS
2-3	Very white teeth with rounded caps (little or no wear)	Subadult
4-5	First incisors are flattening, and second incisors are beginning to wear	Adult
6-7	All teeth in the incisor bar are flattening and appear to be a straight line across the top	Adult
8-9	All teeth in the incisor bar are flattened significantly (teeth appear shorter)	Old Adult
10-11	All teeth in the incisor bar are stubs (shorter still)	Old Adult
12+	All teeth in the incisor bar are worn to the gum line	Old Adult

SHOULDER	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	V-shaped scapula, very bony, hollows behind scapula and immediately behind the scapular spine	
2	Somewhat V shaped, less bony, hollows still present	
3	U-shaped withers, hollows filled	
4	U-shaped, very broad, difficult to feel edges of bone	
RIBS	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Deep groves between ribs including behind the shoulder	
2	Ribs fairly well covered immediately behind shoulder	
3	Can still feel ribs, groves are not too deep	
4	Ribs nearly flush with tissue between them	
HIPS/SPINE	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Hip bones very distinct, no fat on back or tail head, spine very distinct	
2	Some padding on hips, spine remains very distinct	
3	Hips fairly well padded, spine partly covered along each side	
4	Hips well padded, spine is flush with or nearly covered with fat	
Total CARMA Condition Score (sum of shoulder, ribs, hips/spine)		

# Assigned numbers may be in increments of 0.5 points. Area scores may not be the same.

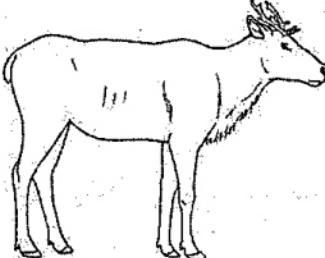
Loin Cross Section (through spine at level of last rib)



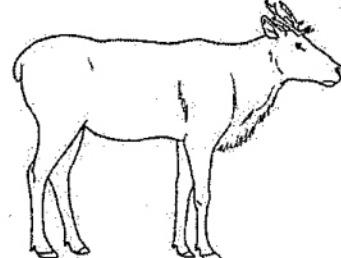
EMACIATED



POOR



FAIR



GOOD +

- Hips/tail head prominent
- Saw-tooth spine and ribs very prom.
- Significant muscle atrophy

CARMA 1

CARMA 2

CARMA 3

- Hips and tail head well padded
- Spine and ribs flush to rounded
- No muscle atrophy

CARMA 4



SKN-002 / RE-CAP KIT — THIS COW HAD AN OLD EARTAG # 0-1605  
SO WE USED A RE-CAP KIT ON HER

13 November 2018

### BC Caribou Research Program - Capture Data Form

#### CAPTURE

Herd: TwoDsmuir Date: (DD/MM/YYYY): 20 Feb 24 Ambient temperature: -3 °C

s. 19, s. 22

Weather: VC Calm Personnel: \_\_\_\_\_

Haze time (mins): 0 Chase (mins): 30 sec Net on (HH:MM): 0918 Release (HH:MM): 0930

Haze time 2 (mins): \_\_\_\_\_ Chase 2 (mins): \_\_\_\_\_ Net 2 on (HH:MM): \_\_\_\_\_ No second net ☒

s. 15, s. 19

Waypoint: \_\_\_\_\_ UTM Zone: \_\_\_\_\_ East: \_\_\_\_\_ North: \_\_\_\_\_ or Lat: \_\_\_\_\_

#### ANIMAL IDENTIFICATION

AS PER SHARE

s. 19, s. 22 ADVISED

s. 19, s. 22 ADVISED

WLH ID: 18 Other ID: 7WC1040 Recapture No / Yes / Previous WLH ID: 18-13304

Collar type: INSTALLED ELTRONICS (COLLAR WAS OLD USED) Frequency: 148+623 Serial number: 81229 → NEWLY DEPLOYED COLLAR

Ear tag(s) (number and colour): Left: 0-1605 OLD TAG FOUND. Right: \_\_\_\_\_

Sex: M / F Calf at heel (circle): Uncertain / No / Yes Lactating (circle): No / Yes

Age class (circle): Yearling / Subadult (2-3) / Adult (4-7) / Old Adult (8+)

Field age (degree of incisor wear) (circle): Yearling / 2-3 / 4-5 / 6-7 / 8-9 / 10-11 / 12+

\*\*Take three photos of teeth and jaw – one from each side and one from the front showing the incisors\*\*

#### HEALTH ASSESSMENT

Rectal temp: \_\_\_\_\_ °C Injuries (circle): None / Yes - Net or Capture / Other (describe in comments on reverse)

Antlers (circle): None / One / Two Broken (Net) / Deformity / Retained Velvet \*\*Take pictures if abnormal\*\*

General body condition (circle): Emaciated / Poor / Fair / Good \*\*Take pictures if condition is less than fair\*\*

CARMA BCS (see page 2): Shoulder: 4 Ribs: 4 Hips/Spine: 4 Total Score: \_\_\_\_\_

Ticks No / Yes \*\*Collect 10-15 ticks\*\* Hair loss (circle): None / Mild / Moderate / Severe / Extreme

Tick burden estimate (circle): None / Mild (Approx. 0-15 ticks per 10cm transect) / Moderate (15-30) / Severe (>30)

\*OPTIONAL\* Tick count (lowest priority): # on shoulder: \_\_\_\_\_ or # on rump: \_\_\_\_\_ No count performed

\*OPTIONAL\* Neck circumference: \_\_\_\_\_ cm

#### SAMPLES COLLECTED \*\* PLEASE READ PROTOCOL \*\*

	Yes (#)	No
Blood: 4 x Gold Top SST tubes (serum) * Must invert for 30 seconds to 1 min after collected*	✓	
Blood: 1 x Royal Blue Top Trace tube (trace nutrients) * Must invert for 30 seconds to 1 min after collected*	✓	
Blood: 1 x Purple Top EDTA tube (buffy coat / plasma) * Must invert for 30 seconds to 1 min after collected*	✓	
Blood: 1 x Green Top RNA tube (whole blood) * Must invert for 30 seconds to 1 min after collected*	✓	
Hair: Large envelope full, plucked from top of shoulder Circle: <u>Clean</u> / Contaminated <u>Dry</u> / Wet	✓	
Skin biopsy: Small envelope		✓
Feces: 20 – 30 pellets if possible, collected from (circle): rectum / off ground / off snow	✓	
Pictures: <u>PRIORITY</u> = Incisors / Abnormalities / Hair loss / Poor condition IF TIME = Body / Head / Profile	✓	

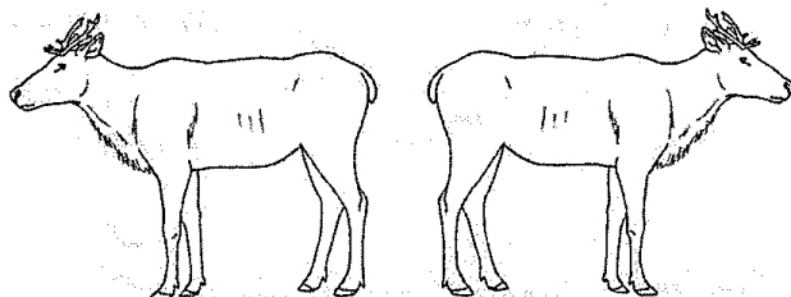
RE-CAP KIT

\* EMERGENCY VETERINARY CONTACT: s. 19, s. 22

★ RE-CAP KIT SKN-002 ★



## COMMENTS



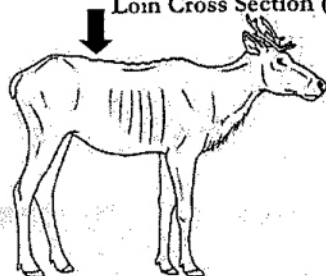
Take Pictures /Draw / Describe abnormal

FIELD AGE	PATTERN OF INCISOR WEAR	AGE CLASS
2-3	Very white teeth with rounded caps (little or no wear)	Subadult
4-5	First incisors are flattening, and second incisors are beginning to wear	Adult
6-7	All teeth in the incisor bar are flattening and appear to be a straight line across the top	Adult
8-9	All teeth in the incisor bar are flattened significantly (teeth appear shorter)	Old Adult
10-11	All teeth in the incisor bar are stubs (shorter still)	Old Adult
12+	All teeth in the incisor bar are worn to the gum line	Old Adult

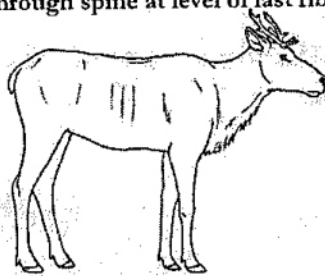
SHOULDER	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	V-shaped scapula, very bony, hollows behind scapula and immediately behind the scapular spine	
2	Somewhat V shaped, less bony, hollows still present	
3	U-shaped withers, hollows filled	
4	U-shaped, very broad, difficult to feel edges of bone	
RIBS	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Deep groves between ribs including behind the shoulder	
2	Ribs fairly well covered immediately behind shoulder	
3	Can still feel ribs, groves are not too deep	
4	Ribs nearly flush with tissue between them	
HIPS/SPINE	CARMA DESCRIPTION	SCORE <sup>#</sup>
1	Hip bones very distinct, no fat on back or tail head, spine very distinct	
2	Some padding on hips, spine remains very distinct	
3	Hips fairly well padded, spine partly covered along each side	
4	Hips well padded, spine is flush with or nearly covered with fat	
Total CARMA Condition Score (sum of shoulder, ribs, hips/spine)		

# Assigned numbers may be in increments of 0.5 points. Area scores may not be the same.

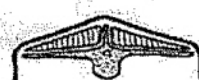
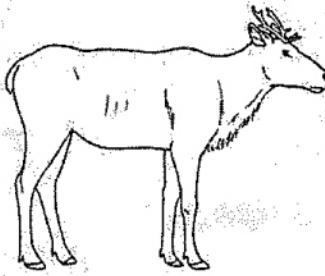
Loin Cross Section (through spine at level of last rib)



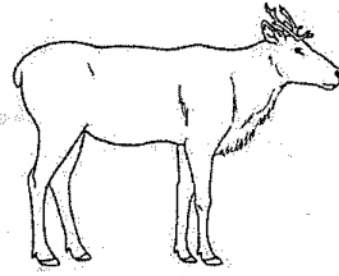
EMACIATED



POOR



FAIR



GOOD +

- Hips/tail head prominent
- Saw-tooth spine and ribs very prom.
- Significant muscle atrophy

CARMA 1

CARMA 2

CARMA 3

- Hips and tail head well padded
- Spine and ribs flush to rounded
- No muscle atrophy

CARMA 4

**From:** s. 15, s. 19  
**To:**  
**Subject:** Selkirks area work  
**Sent:** 03/09/2024 15:09:20

**[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

March 4 2024

Two aircraft resumed control work starting at the wood arm due to coming from grande cache, s. 15, s. 19  
Search was conducted down each side of main reservoir and a single track was found on the flats north side of gold stream drainage . That animal was removed at 13:47 coords  
s. 15, s. 19  
Patrolled down reservoir to Revelstoke then remainder of day south selkirks with nothing observed.

Mar 5 2024

Both A/C flew 3 fuel cycles one up north covering drainages to mica and area the second to the west Adam's lake hummamilt to TumTum lake the third south to nakusp meadow creek Duncan area the only observation was 1 old cougar track above the farm south by galeana and a possible single wolf track west side of downie creek at the power line nothing else found.

Mar 6/24

Both A/C flew 3 fuel cycles one in each of the 3 areas , one single track was observed west side downie creek at the power line , it swam the reservoir and came up north side of downie arm then south side of drainage over top of mtns and was found in a bowl south side at bend in downie the animal was removed at 13:30 at s. 15, s. 19

s. 15, s. 19

The information on this communication is confidential and intended only for whom it is addressed. If you have received this communication in error, please notify the sender, delete and shred any copies of it.

**From:** s. 15, s. 19  
**To:**  
**Subject:** Wolf caribou work  
**Sent:** 03/09/2024 15:24:18

**[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Mar 7 2024

s. 15, s. 19 went to Blue River for caribou capture while s. 15, s. 19 covered drainages in all three areas , at days end tracks of more than 2 wolves were found roughly 10 km north of Adam's lake but due to them moving to bare ground and low fuel not found nothing else observed.

Mar 8 2024

s. 15, s. 19 resumed search north of Adam's lake due to an inch of new snow , tracks were found and 4 animals were found and removed at s. 15, s. 19 The remainder of contract time was spent on drainages up to mica nothing else observed .

Summary

On this work session we had very optimal snow conditions and sunny calm days making it a very effective process. There were no tracks observed that weren't answered for in terms of animals left . We feel very confident that likelihood of any animals remain would be slim , on a note 4 caribou were observed 10 km north of power lines at downie creek 1 calf in group and 6 caribou seen south of power line s. 15, s. 19 area .

s. 15, s. 19

The information on this communication is confidential and intended only for whom it is addressed. If you have received this communication in error, please notify the sender, delete and shred any copies of it.



DATE	DAILY HOURS FLOWN	TOTAL HOURS FLOWN	COMMENTS FOR THE DAY
16/Jan/24	4.7	4.7	Minus 12, light snow, new snow overnight, good tracking conditions, Flew Torpy, Parsnip, beeped in Kennedy Siding collar, observed only collared wolf, flew Missinchinka, Pine Pass, Pine River, refuelled Chetwynd, Flew Hullcross, Moberly, cut tracks from 2 wolves on upper Moberly, followed and observed 2 grays, euthanized both, flew entire Carbon Creek, old tracks on road in Carbon possible they are just coyote tracks as well observed coyote in same area, flew Peace Arm to Bennett Dam, Moosecall Lake, Lower Moberly, Chetwynd, no other tracks observed.
17/Jan/24	7.0	11.7	Minus 18, overcast with some sunny breaks and light snow periods, Good tracking conditions. Flew Sukunka, cut tracks from a pair of wolves, followed and observed gray collared wolf, re-captured and replaced non-functioning collar, tracked out and euthanized additional wolf. Possible that there is more with those two wolves. Flew Bullmoose, Murray near Quintette, refuelled Tumbler flew Flatbed, Thunder Mountain area, cut tracks of 8 plus wolves, tracked for some time and eventually got eyes on large pack, refuelled and returned, deployed collar on white female and euthanized 2 black wolves, flew West Kiskatanaw to Salt, Murray to Pine River and return to Chetwynd with no further tracks observed.
18/Jan/24	7.3	19.0	Minus 18, overcast, east wind 15km/h, great tracking conditions, Flew Commotion Creek, Hullcross, Pete Creek, reports of wolf tracks at 18-22km on Johnson Creek and 67km on Johnson, both location had many coyote tracks no wolf tracks observed, flew Gething, Gaylard, Bullhead, Beryl Prairie, refuelled at s. 15, flew Lower Graham, old tracks on Graham a few KM upstream from s. 15, s. 17, Flew Aylard to Peace Arm, tracks of 3 wolves observed where Peace Arm meets Williston, windswept ice and unable to follow, older tracks from several wolves south of Scott Creek, observed single gray on Williston near Cut Thumb Creek, deployed collar on gray male, refuelled Mackenzie, beeped in Kennedy collar observed collar plus 3, euthanized 2 gray, flew Old Friend, Hasler back to Chetwynd
19/Jan/24	6.5	25.5	Minus 22, overcast, light winds, great tracking conditions, wolves running very fast in shallow snow in timber. Flew Sukunka to Dickenbusche, Trapper Creek, Mt. Robb, cut tracks from 6-7 wolves on Jezebel creek, followed and collared gray female, also euthanized one gray, flew Murray south and beeped in Kinuso collar, observed additional black wolf, euthanized black wolf, checked tracks and indicate just the 2 wolves, cut older tracks of 6 wolves just north of Tumbler Ridge, followed for a while but lost tracks on plowed roads, refuelled Tumbler, Flew upper Murray River, cut tracks from 2 wolves, followed and observed two large black wolves, euthanized one but lost other one in timber and shallow snow, flew Kinuso, Stony Lake, Red Willow, Cut tracks of 2 wolves just North of the Red Deer River at the Alberta border, followed for some time but had to refuel at Tumbler, flew east of Murray to check for tracks from 6 pack but no tracks found, beeped in new Murray collar but only observed collared wolf, flew Pine Back to Chetwynd.
20/Jan/24	7.1	32.6	Minus 14, overcast, light winds, 4 cm new snow, great tracking conditions, Flew north of Chetwynd, Upper Moberly burn, Lower Carbon creek, cut tracks of 4 pack out of Carbon onto Peace Arm, followed tracks NW and euthanized all 4 grays, Flew Schooler Creek to s. 15, s. 17 for fuel, Flew Graham River to Needham, Ospika, older tracks in lower Ospika, flew Williston to Scott Creek, icing conditions to the South so headed towards Peace Arm, Picked up tracks from 4 wolves near Finlay Bay, observed 3 grays and 1 black, euthanized all 4, returned to Chetwynd for fuel. Beeped in Jezebel collar, euthanized 2 gray wolves, should still be 2 others with collar, beeped in Lone Prairie collar observed 2 additional wolves and euthanized both. Returned to Chetwynd.
21/Jan/24	1.5	34.1	Minus 17, Overcast, wind 10km/h from the NE, beeped in Sukunka(Jasper) collar, observed only collared wolf, backtracked and confirmed just on track, attempted flight further south but turned around in icing conditions, returned to Chetwynd.
23/Jan/24	5.3	39.4	Crew s. 15, s. 17 Low ceiling, snowing to the south and fog, -2 to 0 degrees. North side of mountains was up to +4 degrees. Searched from Hart to Chetwynd. McGregor, Arctic Pacific, Table, Parsnip, Pine Pass. Refueled and headed direct to collar 055012. Located the collar on a moose kill. Observed and euthanized 4 other wolves with the collar. (1 black, 3 grays). It was difficult to determine / track out if there were any additional wolves there due to the multitude of tracks in the wide vicinity of the kill site. Should check the collar again another day. Returned to Chetwynd for fuel and day end. Enroute, we did see tracks of at least two wolves at Muskeg Lake s. 15, s. 19 but were unable to follow up at any length due to time and fuel.
25/Jan/24	6.1	45.5	Crew s. 15, s. 17 Partly cloudy, 0 - +4 degrees, strong winds. Searched Sukunka to Bullmoose, Wolverine, Murray. Located old tracks of 4(?) wolves on the Murray headed up onto the Quintette Mine site. Unable to track them out due to snow conditions and heavy ungulate tracking. Murray River to the falls, Kinuso River. Located the tracks of one wolf, back and forth on the Kinuso canyon. Unable to track it out before needing to head for fuel at Tumbler. Searched north on the Murray river and observed a southbound track headed to Tumbler, which is presumed to be the Kinuso collar. Located older tracks on the river near the mouth of Gwillam River. Beeped in the Jezebel collar, which wasn't too far away. Managed to get eyes on the collar and one other gray wolf, which we euthanized. Murray River to Salt Creek. Was in the process of trying to discern old tracks on Muskeg Lake of multiple wolves, when the other machine s. 15, s. 17 called on the radio to assist them about 8 miles north with a pack they'd discovered. (Pugin's) They collared one (in s. 15, s. 19 report) and we euthanized one before needing to head for fuel and day end.
25/Jan/24	5.2	50.7	Crew s. 15, s. 19 Worked on caribou collaring for a couple hours first thing in the morning. Flew Upper Sukunka, Monkman, Onion, Refueled Tumbler, flew Bearhole, Wapiti, cut tracks from 2 wolves in upper South Red Willow, followed and observed one black and one gray, had malfunction with rifle so deployed collar on gray, repaired rifle and ended up euthanizing black wolf, this collar could be removed and redeployed, beeped in Flatbed collar and observed 3 additional, euthanized all 3 dark Gray/black wolves, refuelled Tumbler, flew north of Bearhole, south of Kelly Lake, West Kiskatanaw, cut fresh tracks near Murray River followed east and found pack of 7 on small lake, called in other crew nearby and deployed collar on gray, end of day
26/Jan/24	6.2	56.9	Crew s. 15, s. 19 Windy, Partly cloudy, up to +9 degrees. Searched East Pine towards Puggins. Beeped in that collar but found no other wolves with it. Followed tracks back from the original capture site and found an out track of the rest of the pack. Tracked for about 5 miles to Coldstream Ck. Lost the track in heavy ungulate activity and poor snow just before needing to leave for fuel. Searched Sukunka to a location where tracks of 4 wolves had been reported. Searched for about an hour in the Sukunka Flats before heading to beep the Jezebel collar. Located the collar but was unable to determine if there was another wolf with it, or locate other wolves. Searched the Murray river to East Pine and the Pine river back to Chetwynd for end of day.
26/Jan/24	7.0	63.9	Crew s. 15, s. 19 Flew, Salt Creek, Kiskatanaw, beeped in Flatbed collar, observed accompanying black wolf and euthanized it, flew Chain Lakes, refueled Tumbler, flew Wapiti, Upper Red Deer, lots of coyote tracks, Whatley, Belcourt, Upper Narraway, Winfrey, Huggenot, Holtzlander Lower Red Deer, beeped in Red Willow collar and surprised to find additional black wolf with it, euthanized black wolf, this was probably the small pack that we observed tracks from on the north side of the Red Deer back on January 19, flew Lower Wapiti, Fearless, cut single track at top of Kinuso creek, refueled Tumbler, followed track at top of Kinuso for some time but didn't catch up with wolf, we believe it to be the large black off of the Upper Murray that we lost sight of on January 19 as tracks lead right back to that area. Flew Hook Lake, Sukunka beeped in Sukunka collar, appears alone. End of day.
27/Jan/24	5.8	69.7	Crew s. 15, s. 19 Partly cloudy - Chetwynd, Overcast, low vis and rain Mackenzie side. 0 to +8 degrees and windy. Flew the Pine Pass to beep in Kennedy collar. Located tracks of three wolves. Tracked out and euthanized one gray wolf. Was unable to action the other after they got to thick mature timber, before needing to leave for fuel. Fueled Mackenzie and direct to Tudy Lake to beep McLeod collar. Located the pack. Tracked out and euthanized three gray wolves before needing to leave back to Chetwynd, via the Pine Pass again in low ceiling. End of day.
28/Jan/24	6.1	75.8	Crew s. 15, s. 19 Partly cloudy, windy. Up to +10. Searched Dickenbush and Jezebel to Gwillam River. Dropped doors to beep in Jezebel on kill site on east end of Gwillam Lake. Located a gray wolf with a collar, so we let it go. Searched for the other wolf and located a gray wolf with a black collar. Telemetry was able to confirm this was the new collar. Were unable to relocate the non-functioning yellow collar for removal. Other crew updated with that info. Direct to beep in Puggins collar. Located the collar and was able to euthanize one gray wolf with it. Direct to fuel Chetwynd. Refueled and searched north to Moberly Lake, Pete Lake, Johnson Creek, Gething Creek, West Williston, Dunlevy mouth, Aylard mouth, Carbon Creek, Eleven Mile Creek, then up to the highlands of Bockock Mtn. Silversands, Mt Bickford (saw group of 22 caribou), Mt Hullcross, Mt Cruiser, Dokie and then Pine River to Chetwynd for day end.
28/Jan/24	4.8	80.6	Crew s. 15, s. 19 Snow conditions deteriorating. Searched Sukunka, Windfall, Upper Burnt. Cut older tracks from pair of wolves on Mink Creek followed to edge of Brule mine blast area. Tried to pick up track outside of blast area but no luck. Beeped in Sukunka collar and observed only collared wolf alone. Refueled Chetwynd. Followed older tracks of 4 wolves in Lower Burnt, Sukunka area for a couple hours but didn't catch up to them. Flew High Hat, Hasler, Brazion, Falling, Goodrich, Lone Prairie and Pine River back to Chetwynd.
29/Jan/24	4.6	85.2	Crew s. 15, s. 19 Snow conditions deteriorating, temps up to plus 17, SW winds 25-35 km/h. Beeped in Puggins collar, only observed collared wolf and single fresh track, searched area for a while but appears not with pack right now, beeped in Jezebel collar and observed only collared wolf near recent deer kill, flew Gwillam Creek and observed non-functioning collared wolf and euthanized it, it was an old collar deployed in 2020, flew Murray river, lots of old tracks from 5-6 pack 2-10 miles north of Tumbler Ridge. Refueled Tumbler, beeped in Flatbed collar, observed additional black wolf with it but quickly lost sight of it, beeped in Kinuso collar, observed only collared wolf, flew Murray River north, Pine River back to Chetwynd.
31/Jan/24	5.2	90.4	Crew s. 15, s. 19 Snow conditions making tracking difficult. Flew higher ridges to the West of Chetwynd. Pine Lemoray, Stephanson, Burnt, Old Friend, Brule, Lower Sukunka. Refueled Chetwynd. Beeped in Puggins collar, observed collar plus 2, euthanized 2 grays, should still be 2 more with the collared wolf. Beeped in Jezebel collar, only observed collared wolf. Attempted to beep in Flatbed collar but couldn't get beeps, beeped in Kinuso collar, only observed collared wolf, searched windmills area, Salt Creek, appears there is likely a pack of 5-6 wolves tucked in that area North of Tumbler, Murray River south of Salt Creek. Flew Murray River north, beeped in Lone Prairie collar, only observed collared wolf, returned to Chetwynd.
1/Feb/24	2.9	93.3	Crew s. 15, s. 19 Mostly sun to the East cloudy to the West. Minus 2 to plus 10. Winds SW 10-15km/h. Attempted to fly to Kennedy Siding collar but got turned around in light freezing rain. Searched Upper Hasler, Brule, Mink, Burnt, beeped in Sukunka collar, alone, Beeped in Jezebel collar, only observed collared wolf, beeped in Puggins collar and observed one additional gray and euthanized it, should still be one more with collared wolf, flew Murray north, beeped in Lone Prairie collar, only observed collared wolf, returned to Chetwynd.
8/Feb/24	1.8	95.1	Crew s. 15, s. 19 Light snow, minus 10, light winds. Flew Pine River west to Kennedy Siding. Beeped in Kennedy collar, observed only collared animal. Searched area extensively. Flew to last GPS position 4 miles south, found dead moose only lightly fed on. Couldn't clearly determine number of wolves so left collared animal for now.
11/Mar/24	1.8	96.9	Crew s. 15, s. 19 After caribou collaring flew lower Graham area, old tracks of 2 wolves observed 5 miles west of s. 19, s. 22, searched ridges south of s. 19, s. 22 Butler Ridge, Bullhead, Beeped in Cut Thumb collar near Cameron Lake, only observed collared wolf, tracks seem to suggest it is alone.
15/Mar/24	2.8	99.7	Crew s. 15, s. 19 Beeped in Kinuso collar, observed additional gray, euthanized both wolves, beeped in Lone Prairie collar, observed just collared wolf, euthanized it, beeped in Jezebel collar, only observed collar but tracks suggest the possibility of one additional wolf with it. Left collar for now. Flew Lone Prairie area. Returned Chetwynd








DATE	PERSONNEL	WOLVES REMOVED	YEAR TOTAL	WOLVES COLLARED	PACK	REMAINING PACK SIZE ESTIMATE	UPDATED PACK REMAINING	LATS. (decimal degrees)	LONGS (decimal degrees)	COLLAR SERIAL #	COLLAR FREQUENCY	SEX	COLOUR	AGE ESTIMATE	SIZE	SAMPLES TAKEN?	WILDLIFE HEALTH ID#
	s. 15, s. 19							s. 15, s. 19									
15/Jan/24		3	3	1	Kennedy	3 plus collar				81238	153.470	f	gray	1	avg	y	23-2386
16/Jan/24		2	5	0	Moberly	0						unk	gray gray	unk			
17/Jan/24		1	8	1	Sukunka	?				87236 old 055017 new	154.380 new	M	gray	5	large	no	n/a
17/Jan/24		2	10	1	Flatbed	6 +				55012	152.510	F	White	4+	large	yes	23-2387
18/Jan/24		0	10	1	Cut Thumb	?				151298	153.890	m	Gray	5	large	yes	23-2390
18/Jan/24		2	12	0	Kennedy	collar plus 1						unk	gray gray	unk	unk	no	n/a
19/Jan/24		1	13	1	Jezebel	collar plus 4				151297	151.200	f	gray	1	med	no	no
19/Jan/24		1	14	0	Kinuso	just collar						unk	black	unk	med		n/a
19/Jan/24		1	15	0	Upper Murray	1 black						m	black	4	Large		n/a
20/Jan/24		4	19	0	Nabesche	0						unk	4 grays	unk			
20/Jan/24		4	23	0	Finlay Bay	0							3 gray 1 black	unk			
20/Jan/24		2	25	0	Jezebel	collar plus 2							2 grays	unk			
20/Jan/24		2	27	0	Lone Prairie	collar							2 grays	unk			
												F ?	black gray gray gray	2-3 ? ?	All avg	no	N/A
23/Jan/24		4	31	0	Flatbed	collar plus ?						?	gray	?	Avg	no	N/A
25/Jan/24		1	32	0	Jezebel	collar plus 1						?	gray	?	Avg	no	N/A
25/Jan/24		1	33	0	Puggins	collar plus 5						?	gray	?	Avg	no	N/A
25/Jan/24		1	34	1	Redwillow	collar				55016	154.280	m	gray	2 or 3	Avg	no	n/a
													dark gray/black	unk	avg		
25/Jan/24		3	37	0	Flatbed	collar				81239	153.570	m	gray	1	avg	no	n/a
25/Jan/24		0	37	1	Puggins	5 plus collar							black		avg		
26/Jan/24		1	33	0	Flatbed	collar							black		avg		
26/Jan/24		1	34	0	Redwillow	collar							black		avg		
27/Jan/24		1	35	0	Kennedy	still collar +1						?	gray	?	avg	no	N/A
28/Jan/24		1	30	0	Puggins	collar plus 4?						?	gray	?	large	no	N/A
29/Jan/24		1	40	0	Jezebel	collar plus 1?				old 84809	old 153.600	female	gray	6+	large		
31/Jan/24		2	42	0	Puggins	collar plus 2?							gray		avg		
1/Feb/24		1	43	0	Puggins	collar plus 1							gray		lrg		
10/Mar/24		2	45	0	Missinchinka	0							grays		avg		
15/Mar/24		2	47	0	Kinuso	0				89101	154.380		grays				
15/Mar/24		1	48	0	Lone Prairie	0				89100	153.490		gray				
17/Mar/24		2	50	0	Kennedy	0				81238	153.470		grays				

DATE	Caribou Ward	WOLVES REMOVED	WOLVES COLLARED	PACK	Lat	Long	CREW	COMMENTS	Collar ID	Frequency	Sex	Size	Colour	Wt.HD	Age Estimate	Sampled?
Jan.15	Kennedy Siding		1	Kennedy				Located pack of 3 on a caribou kill site. collared 1 gray.								
Jan.15	Kennedy Siding	3		Kennedy				Removed 3 pups accompanying collared wolf near caribou kill site.	81238	153.470	Female	Medium	Gray	23-2386	1 or 2	Yes
Jan.16	Kinase Za	2		Upper Moberly				Located two tracks, and then two grays in Upper Moberly and removed both.								
Jan.17	Quintette	1		Sukukia				Tracked out and removed one gray wolf that was with the collared wolf.								
Jan.17	Quintette		1	Sukukia				Cut two tracks, located and recaptured and old collared wolf (887236) and replaced with ATS collar 055017	55017	154.380	Male	Large	Gray	n/a	5	No
Jan.17	Quintette		1	Flatbed				Collared white female from large pack (8u)	55012	152.510	Female	Large	White	23-2387	4+	Yes
Jan.17	Quintette	2		Flatbed				Removed 2 black wolves that were part of the large Flatbed pack.								
Jan.18	Kinase Za		1	Cut Thumb				Located large gray male on Williston ice and deployed collar.	151298	153.890	Male	Large	Gray	23-2390	5	Yes
Jan.18	Kennedy Siding	2		Kennedy				Removed 2 grays that were accompanying the collared wolf								
Jan.19	Quintette		1	Jacobell				Located pack of 6-7 wolves, collared gray female	151297	151.200	Female	Medium	Gray	n/a	4	No
Jan.19	Quintette	1		Jacobell				Removed one gray from the pack of 6-7								
Jan.19	Quintette	1		Kinuso				Bleeped in collared wolf. observed just two tracks, and removed a black wolf accompanying collared wolf								
Jan.19	Quintette	1		Upper Murray				Located tracks of two wolves, observed two large Blacks and was able to remove one of them.								
Jan.20	Kinase Za	4		Carbon/Nabesche				Tracked 4 wolves from Carbon creek mouth towards Nabesche, removed all 4 grays.								
Jan.20	Kinase Za	4		Firley Bay				Located tracks of 4 wolves near Firley Bay, located 3 grays and 1 black and were able to remove all.								
Jan.20	Quintette	2		Jacobell				Removed 2 grays accompanying collared wolf.								
Jan.20	Quintette	2		Lone Prairie				Removed 2 grays accompanying collared wolf.								
Jan.23	Quintette	4		Flatbed				Removed 1 black and three grays accompanying the collared wolf at a moose kill site.								
Jan.25	Quintette	1		Jacobell				Removed 1 gray accompanying the collared wolf								
Jan.25	Quintette		1	Puggins				Located pack of 7 on small lake, and collared a gray male.	81239	153.570	Male	Medium	Gray	n/a	1 or 2	No
Jan.25	Quintette	3		Puggins				Removed one of the gray wolves that was in the pack of 7.								
Jan.25	Quintette			Flatbed				Removed 3 dark grays that were accompanying the collared wolf.								
Jan.25	Norway		1	Redbellow				Located 1 black and 1 gray wolf, collared gray male.	55016	154.280	Male	Medium	Gray	n/a	2 or 3	No
Jan.25	Norway	1		Redbellow				Removed the black wolf that was accompanying the gray collared wolf.								
Jan.26	Quintette	1		Flatbed				Removed black wolf accompanying the collared wolf								
Jan.26	Norway		1	Redbellow				Removed an additional black wolf that was accompanying collared wolf								
Jan.27	Kennedy Siding	1		Kennedy				Located collared wolf, appeared to be 3 tracks in total, removed one of the grays that was observed.								
Jan.28	Quintette	1		Puggins				Removed one gray wolf accompanying collared wolf.								
Jan.29	Quintette	1		Jacobell				Removed an old gray female with a non-functioning collar (M8036)								
Jan.31	Quintette	2		Puggins				Removed 2 grays accompanying collared wolf.								
Feb.1	Quintette	1		Puggins				Removed one large gray accompanying the collared wolf.								
Mar.11	Kennedy Siding	2		Musatchewa				Removed pair of grays off of river.								
Mar.15	Quintette	2		Kinuso				Removed collared wolf and the remaining uncollared wolf accompanying it.								
Mar.15	Quintette	1		Lone Prairie				Removed lone collared wolf.								
Mar.17	Kennedy Siding	2		Kennedy				Removed collared wolf and the remaining uncollared wolf accompanying it.								

Packs	Size	Remaining
Carbon/Nabesche	4	0
Cut Thumb	1	1
Finaly Bay	4	0
Flatbed	11	1
Jezebel	5	1
Kennedy	9	0
Kinueso	3	0
Lone Prairie	3	0
Missinchinka	2	0
Puggins	6	1
Red Willow	2	0
Sukunka	2	0
Upper Moberly	2	0
Upper Murray	2	1
Brule Mine	4	4

**From:** s. 15, s. 19

**To:**

**Subject:** Re: March 7th and 8th Reporting

**Sent:** 05/27/2024 19:11:57

**[EXTERNAL] This email came from an external source. Only open attachments or links that you are expecting from a known sender.**

Hi s. 15, s. 19 I had sent an email with that info but can't find it so obviously I did it wrong sorry , I will attach the map for mar 8 but at days end mar 7 found new tracks of a four pack that came from the north but time of day and fuel had to return revy . Mar 8 returned to area and tracked out a pack of 4 found them in a cut lock area and removed all s. 15, s. 19  
Nothing else found finished hrs remaining and ferried to grand cache  
Thanks s. 15, s. 19

s. 15, s. 19

The information on this communication is confidential and intended only for whom it is addressed. If you have received this communication in error, please notify the sender, delete and shred any copies of it.

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**From:** s. 15, s. 19

**Sent:** Monday, May 27, 2024 10:55:44 AM

**To:** s. 15, s. 19

**Subject:** RE: March 7th and 8th Reporting

Hi s. 15, s. 19

Air Ops did the direct reporting to yourself on the project this Winter, they shall provide a response on your requirement.

Thank you.

s. 15, s. 19

**From:** s. 15, s. 19

**Sent:** Monday, May 27, 2024 10:54 AM

**To:** s. 15, s. 19

**Cc:**

**Subject:** March 7th and 8th Reporting

Hi folks,

I was updating my predator removal data and realize I don't have a report from March 7 and 8<sup>th</sup>. I checked my emails and texts but couldn't find anything. I believe the last day there was a pack removed in the Hummamilt area. I will need details on that.

Can you please write me up something ASAP?

Thanks a bunch.

s. 15, s. 19

s. 15, s. 19

Predator Management – Caribou Recovery  
?amk?is Ktunaxa (Ktunaxa Traditional Territory)  
Region 3 & 4  
2023/24 Annual Final Report

Prepared and submitted by s. 19, s. 22

on July 2, 2024

July 2, 2024

**Attention:** s. 15, s. 19 **Ministry of Water, Land and Resource Stewardship**  
**Subject: Final Report for Predator (Cougar) Management – Caribou Recovery**

### **Summary:**

Predator management, (cougars specifically in this case) has been implemented for the purpose of caribou recovery. Unsustainable levels of predation have been identified as a leading cause of caribou population decline. The objective of our work is to reduce the density of cougars in caribou ranges, to reduce cougar encounters with caribou thereby decreasing mortality rates among the caribou until other recovery actions can begin to benefit and support their recovery.

Disturbance across the landscape within ʔamkʔis Ktunaxa and beyond has led to increased early seral forest conditions within and adjacent to caribou regions. Early seral forests create favorable conditions for alternate prey (moose, elk, deer) which now occur at artificially high densities in caribou ranges. Higher densities of prey lead to higher densities of predators (ie: cougars and wolves) This increase in predators has lead to the increase of predator/caribou encounters and ultimately unsustainable rates of caribou mortalities and a rapidly declining population.

Cougar management began in Columbia North in 2018 and then the Central Selkirks in 2020. s. 15, s. 19 has been involved since 2021.

### **How:**

s. 15, s. 19 has been involved with this predator management project since 2021. s. 19, s. 22  
, has been a hounds man for s. 22

experience working in various capacities related to wildlife conservation within ʔamkʔis Ktunaxa. s. 19, s. 22 is a Ktunaxa First Nation citizen and is living and raising his family in the community of s. 19, s. 22 Wildlife conservation has been a lifelong passion for s. 19, s. 22 , but also a Ktunaxa cultural priority.

s. 15, s. 19 once again hired a hounds man from s. 19, s. 22 to harvest cougars in his traditional territory - the Region 3 Shuswap Control Area as well as one other hounds man local to Region 4.

Together, they have been able to remove the following:

**Effort:**

Region 3	31 Days	2 males, 1 female removed
Region 4	28 Days	2 males, 1 female removed

**Removal:**

Date	Zone	Sex	Location
Dec 12, 2023	Region 3	Male	Mount Taylor s. 15, s. 19
Dec 11, 2023	Region 3	Male	Ceyenne Creek s. 15, s. 19
Jan 9, 2024	Region 3	Female	Momich Lake s. 15, s. 19
Jan 13, 2024	Region 4	Male	Wilson Creek s. 15, s. 19
Jan 9, 2024	Region 4	Male	Kuskanax Ck Hot Springs s. 15, s. 19
Jan 11, 2024	Region 4	Female	Bruce Creek s. 15, s. 19

**Successes:**

We were happy with 6 removals this year, however had several significant challenges with hired houndsman. We have concluded we will not be bringing back two of the hounds man and as a result hope to increase these numbers in the coming year.

Unrelated to the actual removals, this project has allowed s. 15, s. 19 to increase knowledge and awareness of conservation and the realities of predation issues within the Ktunaxa Nation. While this project was not cited specifically, it has opened the door for a much needed and ongoing conversation within the Ktunaxa Nation Council with leadership and Lands Sector management. We believe this will be a success with lasting effects.



**Challenges & Barriers:**

In comparison to previous years, we did have more challenges with contracted and sub-contracted hounds man. We felt they were not diligent in their roles and several accounts of their hunts did not appear to be accurate. We have determined we will not hire them back in the coming year. Weather continues to be, and will likely always be the biggest hurdle and only real variable when it comes to cougar removal. Lack of fresh snow is a challenge, too much snow is a challenge, and significant temperature drops (hard packed snow) can all impact how successful the cougar removal process is. We do our best to mitigate this by following the weather patterns closely and working within the ideal weather condition windows as much as possible.

Public perception of predation management is another challenge that will likely be an ongoing one. s. 13, s. 15, s. 16, s. 19, s. 22

**Recommendations:**

Overall, I think everyone involved was happy with the number of removals this year. As mentioned, we were not happy with our sub-contractors and will not hire them in the future.

The only recommendation we have is that an earlier start may be helpful. As mentioned above, as the season progresses the snow becomes for challenging and unpredictable to work with.

**Conclusion:**

In conclusion, s. 15, s. 19 is happy with how the 23/24 Predator Management Project went, we have established some best practices that will help us in terms of efficiency of cougar removal within caribou ranges moving forward. We look forward to continuing our work in wildlife conservation within s. 15, s. 19's Ktunaxa.

Thank you, and please contact with us any questions or additional information you require.

s. 19, s. 22

DATE	Caribou Herd	WOLVES REMOVED	WOLVES COLLARED	PACK	Lat	Long	CREW	COMMENTS	WLHD	Collar ID	Frequency	Sex	Colour	Size	Age
Feb.11	Graham	1		Upper Graham				Tracked two wolves off the river, located one gray male and removed him. Couldn't track out the other wolf.							
Feb.15	Pink Mtn		1	Trimble				Placed traps for elk kill and collared large gray male on the lake.	23-2389	89103	152.350	M	Gray	Large	3-4
Feb.26	Pink Mtn		1	Kluachosi				Tracked gray male off of kill, able to deploy a collar. Not clear if he is part of the pack in the area or not.	23-2388	87227	153.480	M	Gray	Medium	2-3
Feb.28	Pink Mtn	1		Trimble				Removed one gray wolf accompanying the collared wolf.							
Feb.29	Pink Mtn	3		Mid Bess				Removed a pack of 3 from the Bess, 2 grays and 1 black.							
Jan.24	Muskewa		1	Tessie-Muskewa				Collared large gray male out of 6 pack of wolves - just for collaring/monitoring purposes	22-2574	81242	154.100	Male	Gray	Large	Old
Feb.29	Pink Mtn	2		Trimble				Removed 2 grays from collared pack, they killed a large bison in the river.							
Mar.1	Pink Mtn	1		Prophet				Tracked one lone white male up the Prophet and removed it.							
Mar.1	Pink Mtn	2		Blueberry Ranch				Tracked a pair of wolves up the Halfway past the ranch. Removed a black female and gray male.							
Mar.1	Pink Mtn	3		Marion Creek				Tracked 4-5 wolves up Marion creek, removed 3 grays, saw one white wolf but unable to relocate.							
Mar.3	Pink Mtn	1		Trimble				Removed one gray from the collared pack.							
Mar.4	Pink Mtn	2		Lower Sikanni				Observed pack of 3 on a kill on the river, removed a black and a white/gray- unable to get the 3rd gray							
Mar.4	Pink Mtn	1		Trimble				Removed a gray accompanying the collared wolf.							

Pack	Size	Remaining
Big Mtn/Trimble	6	1 Pink
Marion-Halfway	6 ?	Pink
Kluachesi	3	3 Pink
Lower Gatho	2	2 Pink
Besa Klingzut	6	6 Pink
Mid-Besa	3	0 Pink
Marion Creek	4	1 Pink
Prophet	1	0 Pink
Blueberry Ranch	2	0 Pink
Muskwa Lodge	3	3 Pink
Lower Sikanni	3	1 Pink
Lone Kluachesi	1	0 Pink
Upper Graham	2	1 Graham



DATES	Comments
Feb.11	Shot one gray male, 1 shot to chest, 1 shot to upper neck area, dispatch < 3 secs.
Feb.28	Shot one gray, 1 shot down thru upper spine, instant dispatch  Removed 5 wolves - 1 black wolf, 1 shot thru mid-body, 2 follow up shots to chest and neck, <10 sec dispatch. 1 gray removed with 1 shot thru upper neck area, instant dispatch. 1 gray shot thru chest, and follow up shot was required ~10 seconds later to chest as well. 1 gray shot down thru upper spine into chest, quick follow up shot to chest <3 sec dispatch. 1 gray shot thru back of skull, 1 shot, instant dispatch.
Feb.29	
Mar.1	6 wolves removed - 1 gray/white male 1 shot high spine, 2nd shot high chest, and 3rd shot to neck, dispatched <5-10 secs; 1 black wolf shot down thru upper spine into chest, instant dispatch; 1 gray shot down thru mid spine and immediate follow-up shot to chest/shoulder, <3 sec dispatch; 1 gray shot down thru spine into chest, instant dispatch, 2nd shot to chest to be certain; 1 gray shot mid body, back of chest, 2nd shot to chest and 3rd shot to neck, <5 sec dispatch; 1 gray shot thru upper spine, instant dispatch.
Mar.3	1 gray wolf, shot once thru chest, <5 sec dispatch time.  3 wolves removed - 1 black shot down thru spine, appeared to be instant dispatch, 1 follow-up shot to chest to confirm, <2 secs. 1 gray shot once in chest/shoulder, 2 follow up shots in neck/chest area <8 sec dispatch. 1 gray shot down thru spine into chest, instant dispatch.
Mar.4	



[illegible]





DATE	DAILY HOURS FLOWN	WOLF HOURS	CARIBOU HOURS	TOTAL HOURS	COMMENTS FOR THE DAY
29-Jan-24	4.1	4.1		4.1	Clear, good vis, +8 degrees. Searched to Ootsa Lake, Skins Lake. Found tracks of apx 4 wolves on east side of Ootsa and tracked them into the regen near Deerhorn Hill. Unable to follow the older tracks once they got into the open hillsides. Searched Natalkuz to Chedakuz Arm and Creek. Located old tracks of unknown number on Chedakuz creek. Searched to Tatalkuz, to Tsacha. Located tracks of apx 6 wolves on Tsacha and will follow up, along with local reports of a pack in the area. Searched to <sup>s. 15, s. 19</sup> then north across Cow Lake to Entiako Lake / River. To Cheslasie Arm, Double Box and back to Takysie for day end.
30-Jan-24	6.3	6.3		10.4	Partly cloudy, good viz, up to +10 degrees. Searched to Ootsa and a killsite reported by <sup>s. 19</sup> located melted out tracks at the site but unable to determine number of wolves or direction of travel. Searched to Cheslasie Arm, Tetachuk to another reported kill site. Located tracks of multiple wolves (4-5?) but the site had been abandoned with nothing left at it. Heavy wolf tracking in the area, so there is a pack around there somewhere. Once we get some fresh snow, it will help to locate them. Searched to Eutsuk Peak. Observed 3 bull caribou on the east side near treeline. Searched to Captain Harry, Qualcho and located old tracks of multiple wolves on a little lake east of Qualcho but not much to go on to find them. Searched thru Gatcho, Eliguk, West Road River to Tatalkuz fuel. Refueled and searched through Kuyakuz, Euchiniko to Tsacha. Searched extensively in the Tsacha area looking for the pack of wolves that are in that area. Unable to locate any fresh tracks to go on. Searched to Mathews Creek, Laidman, Fawnie. Saw 7 goats in two groups on the Fawnies but no caribou up high, nor wolf tracks. Searched thru Knewstubb, Lucas. Observed old tracks of maybe one or two wolves on Lucas Lake. Searched thru Bird to Cheslatta. Observed old heavy wolf tracking on the south side of Cheslatta Lake (midway) from what appears to be at least 7 wolves. Located their moose kill from the past week but the lake is melted / melting and we were unable to find where they headed. Refueled DoubleBox and to Takysie for day end.
31-Jan-24	6.0	6.0		16.4	Clear in the morning to raining and low cloud / fog in afternoon. Searched to Tatalrose and found old tracks of one or two wolves running between three bait / cull piles on the ranches. Searched to Francois and Nadina to look at a report from fixed wing. Located a couple of bait sites but they had only been visited by coyotes. Searched Nadina River and located an older kill site of a cow and calf moose. Snow and track conditions prevented us from following up on it much but it appeared they headed south. Continued to Ootsa, Whitesail and Porkchop Island. Searched to Tahtsa Reach and located tracks of four wolves. Tracked them past the barge landing northbound to the north side of Mosquito Hills. We spent a total of about three hours tracking the wolves through regen and were forced to abandon the track once the fog and low ceiling impeded our ability to follow further. Back to fuel at Double Box and to Takysie for day end. Once at camp, we heard a report from loggers about (13?) wolves near Andrews Bay. It could be the wolves from the cow/calf kill site on Nadina River. Will follow that up tomorrow or another day.
1-Feb-24	6.7	6.7		23.1	Fog and low cloud layers in the morning. +1 degrees. Was later getting up because of the fog this morning at Takysie. Searched where we could with the weather, which was to Cheslatta, Deerhorn Hill, Lucas, Kenney Dam, Newstubb. Located tracks of two wolves on Newstubb and managed to track them out down the south shore of Newstubb and about 9 miles up the Entiako River. Located the two-pack and euthanized both black wolves. Direct to fuel at Tatalkuz. Searched to Tsacha and extensively in the area. Unable to locate the pack leaving the old tracks. Searched to Naglico, Moose, Johnny to Cow Lake. Located tracks of a 5 pack on Cow Lake. Tracked them down the creek towards Johnny Lake and located the pack. Getting down on fuel, we managed to haze one of the pack down to the meadows along the creek. We got three nets on it at two different locations, but the lack of snow allowed the wolf to back out and escape both times. Due to our fuel situation, we elected to euthanize the wolf and headed for fuel on the Blackwater. Refueled and headed back with about 15 minutes of operational time left before heading to Takysie. Managed to track out the four remaining wolves and euthanized all of them. Headed to Takysie for day end.
2-Feb-24	6.1	6.1		29.2	Fog layers and -1 degrees. Searched to Wisteria and found tracks of 4 wolves to the west a bit. Tracked them off the lake and through the timber, blocks and regen for a fuel cycle. Returned to Tak for fuel. Resumed tracking but was unable to locate an outtrack once they got back into themselves and heavy ungulate presence. Searched further west to Andrew's Bay and back to the pack we had 2 days ago at Mosquito Hills. Tracked that 4 pack for about 10 miles, headed to the east and had to leave for fuel just about where we first picked up the Wisteria pack. We now assume that it is one and the same pack. Refueled Double Box and to Takysie for day end.
3-Feb-24	5.0	5.0		34.2	Clear and -18 degrees in the morning, up to -5 in the afternoon. Snow was hard due to the previous warm days. We decided to focus on the lakes, hoping to catch a pack out on the ice. Searched Wistaria, Ootsa, Marilla, Cheslatta, Binta, Ootsanee, Murray, Bird, Lucas, Natalkuz, Euchu, Tetachuk Narrows to Tatalkuz fuel. Searched to Tsacha, Blackwater, Eliguk, Entiako, Cheslasie Arm, Double Box, Takysie for day end.
4-Feb-24	4.6	4.6		38.8	Clear and -20 degrees in the morning to -12 in afternoon. Searched to Ootsa, Andrew's Bay, Tahtsa Reach, Glatheili, Ghitzeili, Chief Louis. Found old tracks of two wolves on the river and Chief Louis Lake. Searched to Cheslasie Arm, Euchu, Bryan Arm, Tetachuck, Michel Ck, Blanchett, Sabina - Takysie refuel. Searched to Uncha, Binta, Knapp, Cheslatta Highlands and Lake. Called to Tatalkuz by the fixed wing spotter. The rancher reported 3 wolves on a deer kill from 0730 to 1000 hrs today, however, he didn't advise us until they'd left. We searched the area and found a coyote on what was left, but unable to even locate an out track on the frozen lake ice. To Takysie for day end.
5-Feb-24	4.5	4.4	0.2	43.3	Low viz in ice snow in morning, to partly clear most of the day. -12 degrees. Picked up PH in the morning at Uncha. Searched Uncha, to Cheslatta to fixed wing reported kill at Wistaria. Searched Ootsa, Cheslasie Arm, Euchu, Entiako, Tatalkuz. Searched Tsacha, Tsilbekuz, Moose, Johnny, Entiako. Beeped in caribou and located a group of 5 caribou with 2 collars already in it. Searched to Cheslasie and Chief Louis to Uncha and Takysie for day end.
6-Feb-24	5.0	5.0		48.3	Searched to Ootsa, Intata, Euchu, Tetachuck then called to Wistaria by fixed wing to look at moose kill. Located the killsite and searched the area. Appears the kill is a couple / few days old and the snow condition didn't allow for tracking from the site. To Takysie for the fuel. Refueled and direct to Chief Louis Arm to a fixed wing report of a lone wolf on a ranch dead pile. Located the wolf on the dead pile and was able to determine that it was a lone young gray wolf. Euthanized the wolf and then searched to Cheslatta, Bird, Lucas, Knewstubb, Natalkuz, Cheslasie Arm, Cheslasie River, Chief Louis Lake. Located same old 2 pack track from the other day, further south on the lake. Searched Uduk to Takysie.
7-Feb-24	4.2	4.2		52.5	Fresh skiff of snow but fog in the morning. Searched to Wisteria moose kill. Nothing has been back to it. Searched Ootsa, Andrew's Bay, Mosquito Hills, Tahtsa Reach, Nadina River, Southside, Marilla, Intata, Natalkuz, Chedakuz, Tatalkuz fuel. Searched to Euchu, Tetachuk, Eutsuk, Nahlouza, Qualcho, Eliguk, Tsilbekuz, Tsetzi, Laidman, Cheslasie Arm, Intata to Takysie for end of day.

8-Feb-24	4.3	4.3		56.8	Partly cloudy, fresh skiff of snow from yesterday remains. - 7 degrees. Searched to Marilla. Located two wolves out on Intata ice by Double Box. Confident they were alone, both gray wolves were euthanized. The male wore non-functioning collar 45402, which had been deployed by the same crew on the Cheslatta Highlands on 05 Feb 2023. The large, apx 4 year old collared male was in the company of an average sized female wolf, aged at apx 2 years old. Searched further south on Intata and located fresh tracks of three (3) wolves in the skiff of snow. We tracked them south for a couple miles and they departed the lake eastbound. We were unable to track them beyond the lake as that area has little to no snow and hard crust where there is. Searched for them through the area lakes, including Lucas Lake. To refuel at Tatalukuz. Direct to Moose Lake to investigate fixed wing report of tracks he discovered when landing for fuel. We tracked the three (3) wolves southwest for apx 7 miles and ended up losing them in the timbered hill above Eliguk Lake. Will follow up again. Departed direct to Takysie for fuel and day end.
9-Feb-24	4.8	4.8		61.6	Overcast and -18, to -5 in afternoon. Searched to Cheslatta Lake. Located tracks of that pack (8-9?) on the lake and tracked them west and then to the north uphill through the burn. Called the fixed wing to assist in searching ahead. Fixed wing located the pack north of Cheslatta Lake about 1 mile. We collared an XL gray male and euthanized two gray wolves and two black wolves. Refueled Takysie and searched south to follow up on the Moose Lake pack left at Eliguk. Searched the area along with the fixed wing and we were unable to locate an out track from the mountain directly north of Eliguk Lake. Direct back to Takysie for day end.
10-Feb-24				61.6	Day Off - For Flight and Duty Time
11-Feb-24				61.6	Day Off - For Flight and Duty Time
12-Feb-24	8.2	8.2		69.8	Clear, great light, -20 up to -5 degrees. New snow (4 - 5 inches) in the Blackwater area, so we headed down there direct. Fog in the valleys enroute. Searched for the pack of Tsacha, south Tsacha, Blackwater, Tsetzi, Tsilbekuz, West Road River, Eliguk, Gatcho, Qualcho, Cow, Laidman, Kluskus to Tatalukuz fuel. No new tracks observed, despite the great conditions. Refueled and searched back to north Tsacha, Johnny, Moose and found tracks of the 3 wolves (likely ones from Eliguk the other day) apx 4 miles west of Moose Lake. Tracked the wolves until heading for fuel at Lampert. Refueled and returned to continue searching. Was unable to track them out of a large thick mature conifer stand, in the same vicinity. Searched back north thru Cheslasie Arm to Ootsa. Located tracks of two wolves on the ice adjacent to Double Box Ranch (dead cow nearby) and tracked them north and across the lake to the west into the old cutblocks and regen until needing to head to Takysie for dark.
13-Feb-24	4.4	3.4	1.0	74.2	Fogged in first thing in the morning but it burned off and became clear. -12 degrees or so. Searched to Skins, Wistaria, Ootsa, Tahtsa Reach, Mosquito Hills. Picked up a fresh track of a lone wolf in the Mosquito Hills. Tracked it out for a few miles and managed to euthanize the lone black male wolf. Searched to Whitesail, Pork Chop Island to Mount Wells. Observed a group of 56 - 60 caribou on the top of Mount Wells. We landed to check the snow conditions and decided to return to Takysie to reconfigure for caribou captures. Conference with S. 15 and returned to Mount Wells and captured / collared (3) caribou cows. Once complete, we searched for wolves along Ootsa to Double Box. It appears that the two wolves from yesterday had revisited the dead cow overnight but we were unable to locate them amidst the million coyote and cow tracks in the cattle feeding area. Searched north towards Takysie and observed additional wolf tracks on the Chief Louis Arm ranch dead pile, but again, unable to decipher amongst the 'animal highways' coming and going to the pile. North to Takysie for dark and fuel.
14-Feb-24	7.0	7.0		81.2	Clear and -15 degrees. Searched south and located tracks of two wolves near Cheslatta. Tracked them out and euthanized both gray wolves. (1 male 3 yrs old, 1 female 3-4 yrs old) Searched further south to Ootsa, Chief Louis Arm and observed tracks of two wolves that had been hanging around the Double Box again. Tracked an outtrack south and across the lake for a few miles but left it in endless thick regen pine. Searched further south to Intata, Euchu and located tracks of two wolves near Cheslasie Arm. Tracked them east and then overland to Intata and then north. It appears they could be the same two wolves that were at Double Box. Headed south and located tracks of three wolves on Natakuz. Tracked them south to Knewstubb and then overland to Nechako Reservoir. Left them on the Kenney Dam road, headed northeast as we needed to go for fuel. Refueled Tatalukuz and searched to Tsacha. Searched the Blackwater extensively and located tracks of a large pack northwest of Lampert fuel cache. Tracked this pack (appears to be 10 wolves) north to Moose Lake, Johnny Lake and to some timbered hills east of Cow Lake. Just before needing to leave for fuel we got eyes on a single gray wolf, feeding on an old moose kill, on the trail of the 10 pack. The moose was not a fresh kill. Perhaps this single wolf was a subordinate straggler that had lagged behind to feed on it...? Due to fuel concerns, we were unable to action anything further and departed to Lampert fuel cache. Refueled and searched direct north to Double Box and Takysie for the day. Will follow up with this pack in a couple days, once the scheduled helicopter maintenance is completed. No fly day tomorrow for maintenance.
15-Feb-24				81.2	No Fly Day - Helicopter Maintenance Inspection
16-Feb-24				81.2	No Fly Day - Helicopter Maintenance Inspection
17-Feb-24	7.4	7.4		88.6	Overcast - Partly Cloudy. -10 to -5. Searched to Double Box and saw the same two wolf tracks hanging around the dead cows. Searched Intata and Natakuz. Tracks of the 3 wolves back on the ice on north side, back and forth. One appears to have a Peg-Leg, based on the tracks. Unable to track where they went in as there is no snow at all. Searched to top up with fuel at Tatalukuz. Searched direct to Cow Lake where we'd left the large 10 pack on the 14th. Picked up the tracks and resumed tracking. Tracked them north for another 15 miles to Euchu Reach. Located 7 gray wolves in the track. Euthanized 5 wolves and collared one. It appeared that 4 wolves had split off this pack a mile before we found them. Hopefully the collar reunites with all of them. Worked this pack until we needed to head for fuel at Tatalukuz. Returned and worked the packs again for a bit, then searched towards Natakuz. Located the tracks of 3 wolves and tracked them towards Natakuz and across to the north side. From the tracks, it was evident this was the Peg Leg pack again and it tied in where we'd left them in the morning. Unable to track in the conditions, we cut a line for Bird Lake, hoping to find them there. Enroute, we saw ravens lift and then located the three wolves on a moose kill beside a small unnamed lake. Managed to euthanize all three. Two blacks and one gray. Searched enroute direct to Cheslatta Lake. Observed tracks of two wolves on the west end of Cheslatta, however, it was getting to dark to track so we continued on to Takysie for day end.
18-Feb-24	6.5	6.5		95.1	Partly cloudy, -10 to 0 degrees. Searched direct to Nahlouza area to collared wolf 97637 (Cariboo Region wolf) that had entered the zone, with 5 wolves reported to be with it. Located the pack and euthanized 5 wolves, leaving the collar remaining. Searched back to Takysie for fuel. Searched direct to the Tsacha-Euchu collar #97632's latest position on Entiako Lake. Located the collar and verified by tracks that it was alone. It was loosely following their in-track from yesterday. It appears that the collar has not packed up with the one known companion from yesterday yet. Searched back to Euchu Lake to look for tracks. It appears that the split pack had not returned to visit the site either. Will check the collar again in a day or so, as there should be at least one more with it. Searched to Cow Lake to check their old kill site. No evidence of much for wolf activity at that site. Mostly wolverine sign. Searched to the Natakuz site from yesterday and confirmed no additional wolves in that pack at the site. Searched to Lucas, Bird and Cheslatta. Only old wolf sign observed. To Takysie for day end.



19-Feb-24	5.9		5.9	101.0	Clear, up to +1 degrees. Direct to caribou 81228, near Udak Lake. Beeped her in and located a group of 12-14 caribou. Collared one cow with that group, as per CG request. Searched to Collar 42140, near the Fawnies. Beeped her in and found that it was sounding a mortality beep. Looked for a carcass, but instead we found the collar alive and well, in a group of five caribou. Both cows in the group had collars, and were with a bull, a yearling and a calf. We would have recaptured the collar giving off the mortality beep, however, the was zero snow in the nearby meadow so risk of injury would be very high. Departed direct for fuel at Tatelkuz. Refueled and headed to beep in 48851 or 81223, north of Captain Harry Lake. Located the collars in a group of four caribou, two cows with collars and two calves. No other caribou observed in the greater vicinity. Departed to the winter ground east of Eutsuk Peak to beep 81225. Located the collar in a group of four caribou in heavy timber and a long ways from a suitable capture area. Two of the four caribou had collars on them. We left to search the greater vicinity for a cow to collar. Located day old tracks of 10 caribou but after extensive searching, we were unable to locate a candidate. Departed to Takysie for day end.
20-Feb-24	6.5	3.8	1.7	107.5	Overcast and up to +1 degrees. To Blanchet River to collar a caribou. The one we happened to catch ended up having an existing ear tag in it (#0-1605), so we used Re-Cap Kit #SKN-002 on this cow. (s. 19, s. 22 later confirmed the WLHID # for this cow as 18-13304 / TWC1040). We then searched direct to Tatelkuz, topped up with fuel and crew changed s. 19, s. 19 Searched direct to Eutsuk area and beeped in a caribou to find another to collar. Located a group of 17 caribou (mixed, cows, calves and a couple young bulls) and collared one of the cows. From there, searched Eutsuk and Tetachuk. Old tracks of what looks like two wolves on the south shore of Eutsuk, but unable to find a direction of departure, due to the age and multiple passes. Searched to Tetachuk and located old tracks of a pack of unknown number (5-7?) headed towards Euchu. These tracks tied in the the trail that the Tsacha-Eutsuk collar had been following when we caught them. Perhaps an earlier track of theirs, in their circuit? To Takysie fuel. Searched Ootsa, Wistaria, Andrew's Bay, Tahtsa. Located the tracks of the 4 pack traveling Ootsa Lake, north and south shores. Unable to track them further, once they got into the cutblocks devoid of snow near Wistaria. Hoping to catch them on the ice one of these days. To Takysie for day end. ** OF NOTE: The other crew (s. 15, s. 19) happened to come upon the Tsacha Lake 5 pack out on the ice of Tsacha Lake when they traveled to Tatelkuz for crew change. They managed to euthanize all five. **
21-Feb-24	6.3	6.3		113.8	Clear and up to +3 degrees. Searched to Ootsa, Cheslatta, Ootsanee, Binta. Beep collar 97646 and track north. Got eyes on the collar but unable to see others. Landed to howl them and got answers but still unable to locate in dense timber and poor snow conditions. To Takysie for fuel. Searched to Ootsa, Natalkuz, Knewstubb and beeped collar 97632. Tracked out two wolves, one being the collar and the one remaining pack member. Euthanized the gray wolf with the collar. Left the collar intact. Searched to Tsacha, Blackwater, Eliguk. Located tracks of the three pack northwest of Eliguk. Tracked them around locally and in the direction of Moose Lake until we needed to leave for fuel. Searched direct to Takysie.
22-Feb-24	5.7	3.0	2.7	119.5	Clear, Windy and up to +2 degrees. With s. 15, s. 19 today. Searched Ootsa, Intata, Euchu, Tetachuk, Entiako, Capt Harry, Moose, Johnny looking for the 3 pack. Lots of old tracks, on top of old tracks. Unable to locate the wolves. To refuel at Lampert cache. Searched to Eliguk along Blackwater, Tetachuk (tracked old wolf tracks of 2 pack for long while, to no avail) to Eutsuk to Mt Wells to find and re-cap caribou 42148. Located the cow, alone with her calf. Successfully re-collared her with new Vectronics collar 97618. s. 15, s. 19, s. 22 ) To Takysie for day end.
24-Feb-24	6.3	6.3		125.8	New snow at Takysie (3 inches), overcast, snowing and low vis in the morning. Up to +2 in the afternoon, partly cloudy and windy. No new snow down near Tetachuk. Searched Ootsa, Wistaria, Tahtsa Reach, Porkchop Island, Marilla to Double Box. Located tracks of two wolves on Ootsa Lake. Tracked them by Double Box and into the regen to the south. Refueled at Takysie and continued tracking for about 2 hours before we caught up to the two wolves off the end of Cheslasie Arm. Tracked out and euthanized two gray wolves. We were able to land at one of them and confirm it as a breeding female. Searched direct to Tetachuk to look for that pack but they hadn't received the new snow last night. To Takysie for day end and fuel.
25-Feb-24	3.4	3.4		129.2	Snow Squalls in the morning, coupled with high winds (50 - 75 km/hr). Didn't get airborne until about 1000 hrs due to low viz in blizzard snow squalls. Went to beep in the Cheslatta collar 97646 and finally found it apx 16 miles away from it's latest gps fix 8 hours earlier. Unfortunately, the area they were in was very hilly and with mature timber. With the winds at the time, we tried but were unable to track out and action any of the remaining pack members. We then searched through Binta, Cheslatta to Ootsa to a report of a lone wolf. The wind was obliterating tracks as quickly as they were laid down and we were unable to locate the track. Searched Ootsa, Marilla to Wisteria and Andrew's Bay area, then back to Takysie, for the end of the program, close to the allotted hours. In addition to the two collars left out, we know there is a (4) pack frequenting the area between Mosquito Hills and Wisteria, and a (3) pack traveling the area between Eliguk, Gatcho and Moose Lake. There is also sign of a pack in the area of West Tetachuk / East Eutsuk Lake, but the number is unknown as we were only ever able to locate old tracks in heavily travelled areas. Unfortunately, the snow conditions were very difficult (low and no new snow), which certainly were not helpful for the duration of the program. I thgink we were fortunate to have done as well as we did, under those conditions. Let's keep our fingers crossed for next season!
Totals		116.8	11.5	129.2	Program complete

DATE	PERSONNEL	WOLVES REMOVED	YEAR TOTAL	WOLVES COLLARED	PACK	REMAINING PACK SIZE ESTIMATE	UPDATED PACK REMAINING	LATS. (decimal degrees)	LONGS (decimal degrees)	COLLAR SERIAL #	COLLAR FREQUENCY	SEX	COLOUR	AGE ESTIMATE	SIZE	SAMPLES TAKEN?	WILDLIFE HEALTH ID#
1-Feb-24	s. 15, s. 19	2	2	0	Entiako	0	0	s. 15, s. 19		N/A	N/A	? ?	Black Black	Mature Mature	Large Large	No	N/A
1-Feb-24		5	7	0	Cow	0	0			N/A	N/A	? To all	Gray Gray Gray Gray	? To all	Avg - Large	No	N/A
6-Feb-24		1	8	0	Chief Louis Arm	0	0			N/A	N/A	F	Gray	1	Med	No	N/A
8-Feb-24		2	10	0	Marilla	0	0			Non-Functioning 45402	148.805	M F	Gray Gray	4 2	Large Avg	No	collar recovered
9-Feb-24		4	14	1	Cheslatta	3-4 plus collar				97646	151.860	M ? ? F ?	Gray Gray Black Gray Black	Collar - 5 Rest unknown	XL collar Rest avg	Yes	23-2369
13-Feb-24		1	15	0	Mosquito Hills	0				N/A	N/A	M	Black	3	Avg	No	N/A
14-Feb-24		2	17	0	Takysie	0				N/A	N/A	M F	Gray Gray	3 3	Avg Avg	No	N/A
17-Feb-24		5	22	1	Tsacha - Euchu	1 plus collar				97632	151.830	M Rest ?	Gray Rest also gray	2	Avg	Yes	23-2372
17-Feb-24		3	25	0	Natalkuz	0				N/A	N/A	M M F	Gray Black Black	3 ? ?	Large Avg Avg	No	N/A
18-Feb-24		5	30	0	Nahlouza 97637 Cariboo Pack	collar only				N/A	N/A	?	Gray Gray Black Black Black	?	Avg	No	N/A
21-Feb-24		1	31	0	Tsacha - Euchu	collar only				N/A	N/A	F	Gray	1	Avg	No	N/A
24-Feb-24		2	33	0	Ootsa	0				N/A	N/A	? F	Both Gray	? 3	Avg Avg	No	N/A




[illegible]

DATE	DAILY HOURS FLOWN	TOTAL HOURS FLOWN	COMMENTS FOR THE DAY
6/Jan/24	1.1	1.1	For this contract, the crew is <del>s. 15, s. 19</del> Searched lower Bowron River and Fraser River west, eastward to Walker Creek. No tracks observed.
7/Jan/24	5.2	6.3	Crew <del>s. 15, s. 19</del> Clear / partly cloudy in afternoon. -10 degrees. Searched Goodson, Walker Creek, McGregor, Kitchi, Buchanan, Bastille, far upper McGregor. Located tracks of 3 - 4 wolves, near Bastille junction. Tracked them for a few hours and had to leave them in thick regen for fuel. Will relocate on another day. Searched back through Walker Creek and P.O.B. Located tracks of 6 - 7 wolves on the small lakes up on the P.O.B. No snow in that area to be able to track them out at this time. Will look for them when snow conditions improve.
8/Jan/24	6.3	12.6	Crew <del>s. 15, s. 19</del> Overcast, limited light dusty snow at times. -16 degrees. Searched lower Snowshoe Creek. Game cam had caught image of a wolf yesterday there. Located tracks of 4-5 wolves, however the lack of snow made tracking not an option. Will follow up once we get some snow. Searched upper Goat River and Wolverine Creek to Issac Lake. Found the Bowron chain of lakes still open water. Searched Huckey Ck, upper Bowron river, Lanezi Lk, Sandy Lk, Babcock Lk, Spectacle Lks, Bowron Lk, Indianpoint Lk, Kuger Ck, Indian Lk, Indianpoint River, and Haggen Ck. Located the tracks of 5-6 wolves on lower Haggen, as well as a single wolf which appeared to be shadowing the larger pack at a distance for a while. Tracked the larger pack out of the Haggen drainage overland to the lower Indianpoint River vicinity, but had to leave them for fuel. Very difficult tracking with current snow conditions in the area. Searched upper Haggen and Dome Ck enroute fuel. Searched Torpy River and found tracks of apx 6 wolves near the mouth at Walker Creek. Tracked them as far as we could and it appears they might be headed towards POB. Perhaps the same pack we saw tracks of yesterday there?? Searched the rest of the Torpy to Pass Lake, lower McGregor, Arctic Pacific, into the headwaters of the Parsnip and over to Herrick Ck. Searched downstream on the Herrick to McGregor, over Dezaiko Range, Mt McCullough (saw two caribou, one with collar on Dezaiko and multiple tracks on both), back onto McGregor, up Hedrick Ck and onto the McGregor to fuel and for the day. Limited snow in the lower elevations making tracking difficult, but we have been located packs to be able to follow up once we get snow. Snow is forecasted to start tonight and temperatures dropping to the mid -30's by mid week, which will help freeze up the open lakes and rivers.
9/Jan/24	0	12.6	Crew <del>s. 15, s. 19</del> No flying today for weather. -6 degrees and apx 15 cms of snow accumulation!
10/Jan/24	4.6	17.2	Crew <del>s. 15, s. 19</del> Overcast, 1 mile viz at times, -20 to -30. Searched Walker Creek to McGregor, Arctic Pacific to the mountain on the south side of the Table River northeast of Parsnip to locate wolf #81238. Tracking indicated she was on a kill, at apx 5000 ft elevation. Located a kill at the location (appears to be a deer) in very little snow. We observed there to be one additional gray wolf with the gray collared wolf. Euthanized the additional wolf and left the collar remaining. No other wolves with the collar at this time. Searched Mt Crocker, part of Sentinel Peak range, Anzac river to fuel at Anzac. Refueled and searched Parsnip highlands to Seebach. Located 3 wolves (2 blacks, 1 gray) at the mouth of the Seebach and McGregor river. We made an attempt to collar one of the wolves but were forced to leave for fuel before we connected. Searched Sinclair Mills, Fraser, Penny and Dome Ck enroute fuel and landing for the day.
11/Jan/24	6.4	23.6	Crew <del>s. 15, s. 19</del> Great tracking conditions. -25. Chetwynd, Flew Hominka, Red Rocky, Firth Lake, Parsnip. Picked up tracks of 7-8 on Parsnip followed east to Tudyah and south towards MacLeod Lake. Observed one gray behind rest of the pack, deployed collar and left remaining wolves due to proximity to Village of McLeod Lake. Flew to Kennedy Siding and picked up tracks that led us to pack of 7 grays on caribou kill. Lots of caribou tracks in area. We were able to euthanize 3 and deployed collar. Searched Parsnip returned to Chetwynd no other tracks observed.
12/Jan/24	6.6	30.2	Crew <del>s. 15, s. 19</del> Great tracking conditions. -29. Chetwynd, Flew Monkman Lake, Upper Herrick, cut tracks of several wolves near mouth of the Torpy River. Refuelled and returned. Tracks going both directions and unable to find outtrack. Flew Fraser River south to Morkill and observed tracks from several groups of wolves. Tall dense timber on banks of the Fraser made tracking difficult and non-productive. Flew Morkill, Forgetmenot, Walker Creek, refueled, flew Upper Macgregor, Bastille, Kakwa Lake, Hedrick Lake, picked up tracks from 27 wolves followed south to mouth of Torpy River ran out of daylight.
13/Jan/24	6.7	36.9	Crew <del>s. 15, s. 19</del> Great tracking conditions. Flew mouth of Torpy no new tracks, flew Fraser to Clam Lakes, cut tracks of 4 pack at Seabach followed and observed one black, attempted capture but wolf got out of nets, euthanized that one wolf, followed track and observed one gray wolf but quickly lost it in dense vegetation, flew Parsnip north to Mackenzie refueled, beeped in Kennedy collar, observed only collared wolf, area all tracked out by caribou, flew Coulbourne, Reynolds, Anzac, Refueled, Flew south back to Seabach picked up tracks from remaining 3 wolves, deployed collar on gray male, flew Torpy back to Fraser, checked Fraser River south of <del>s. 19, s. 22</del>
13/Jan/24	5.6	42.5	Crew <del>s. 15, s. 19</del> Clear and -30 or so. Searched Slim, Tumuch and located tracks of two wolves in the valley south of Tumuch. Tracked them southeast up on the higher ground of Pinkerton. Located and euthanized both wolves. Searched Pinkerton, Haggen, the hills south of Haggen and located lots of caribou tracks and a few small groups. Noted collars on two of the mixed groups of cows, calves and bulls. Searched Everett Ck, Slim and Dome enroute fuel. Searched Goat R, <del>s. 19, s. 22</del> Lake, Indian Point, Indian Lk, Bowron River to Bowron Lake, back over Haggen, Slim, Dome and Fraser to end the day.
14/Jan/24	6.7	49.2	Crew <del>s. 15, s. 19</del> Clear and -22. Searched Fraser River to Goat River area. Located a pack (6 wolves, based on tracks) and collared a gray male. Unable to follow up on others and will revisit. Searched Fraser to McBride. Located a heavily tracked out area with a pack of at least 4 wolves, in the vicinity of the large ranch and it's dead pile. Rancher reports tracks of four wolves on the pile last night. Tracked locally and it appears that the wolves were holed up in mature timber stand near the bait site. Fraser river back to fuel. Searched to West Twin, Dore, Castle, Lanezi, Sandy, Babcock, Spectacle Lake. Located tracks of 8 - 9 wolves on Spectacle and tracked them to the south end of Bowron Lake, where they entered timber to the north. We left them there and headed for fuel and day end. Will follow up tomorrow.
14/Jan/24	6.6	55.8	Crew <del>s. 15, s. 19</del> Fantastic tracking conditions! Cut tracks from 5-6 wolves near mouth of Torpy, followed to MacGregor, searched for several hours but couldn't find out track. Upstream on MacGregor cut tracks from 3 pack. Observed 1 gray, lost in dense re-gen. Refueled returned and got eyes on gray, almost got wolf to river for capture but lost it in dense timber.
15/Jan/24	6.1	61.9	Crew <del>s. 15, s. 19</del> Overcast and -19. Searched to 81237 and beeped it in near Goat Mouth. Collar was in an extensive mature cedar stand so we didn't spend further time on it. Searched Goat River to Issac Lake, Indian Point. Located the tracks of the 8-9 pack from yesterday. Tracked them for the remainder of the fuel cycle up to the top of Itlzul Ridge. Direct to camp for fuel. After refueling, we returned to pick up the tracks again and tracked them down the other side out to Babcock Lake area. Managed to locate and collar a large black female wolf on Babcock Lake. Searched the vicinity afterwards and returned to camp for the day and fuel.
15/Jan/24	6.8	68.7	Crew <del>s. 15, s. 19</del> Great tracking conditions. Returned to Upper MacGregor near Jarvis Creek observed single gray wolf on creek. Deployed collar. Should be 2 more with it somewhere there. Very dense re-gen area. Flew downstream to corner of MacGregor, observed 6 maybe 7 wolves, deployed collar on gray male, other wolves into dense re-gen. Flew MacGregor, Upper Torpy, part of Fraser, Refueled and flew Upper Herrick, Framstead, Lower MacGregor, Beeped in Seebach collar observed additional black and euthanized it, tracks indicate only the 2 wolves but there should be another one there somewhere. Flew Fraser, Clam Lakes, Toneko, refueled, searched Ptarmigan, Slim, Sugarloaf, Dome Creek, Fraser. No other tracks observed.
16/Jan/24	5.4	74.1	Crew <del>s. 15, s. 19</del> Lower vis and snowing. Searched the Fraser to Goat River and beeped in the collar 81237. Located collar but after tracking for a while, we were unable to locate the other pack members. Searched the Fraser to McKale and little further east. Returned to 81237 and searched again. Found the other 6 pack members near the end of the fuel cycle. Expedited to fuel and returned. Tracked and relocated the remaining pack members. Tracked out and euthanized 4 gray wolves (1 female / 3 males), leaving 2 more gray wolves plus the 1 collar. Remaining 3 members are all gray. Searched the POB area enroute fuel at day end.
17/Jan/24	6.8	80.9	Crew <del>s. 15, s. 19</del> Partly cloudy to overcast and -20. Direct to Upper Bowron river to gps fox of collar #93927. Managed to euthanize 3 wolves with the collar, during a fuel cycle and a half of tracking. Topped up with fuel and finished the day in the lower Torpy. Beeped in collar #81244 and managed to euthanize one of the wolves with it.
18/Jan/24	6.4	87.3	Crew <del>s. 15, s. 19</del> Clear and -27 in the morning. Searched to Jarvis mouth to beep in collar #93931. Eyes on the collar but after searching, we were unable to locate others with it. Searched Jarvis, Bastille, Buchanan, Idol, Forgetmenot, Morkill. Located tracks of two wolves near the mouth of the Morkill and tracked them west on the Fraser river for a few miles. Lost the tracks in amongst heavy ungulate (deer and elk) and dense timber. Direct to Babcock to beep in collar #93927. Located them in thick mature timber on Itlzul Ridge. Got eyes on one gray wolf and euthanized it. Unable to locate any others in the area they were in due to timber. Will have to revisit when they're in a better area. Searched through Indianpoint, Haggen, Tumuch, Slim, Driscoll and Fraser to fuel and day end.
19/Jan/24	5.1	92.4	Crew <del>s. 15, s. 19</del> Overcast / snowing, -20 degrees. No new GPS fix but we searched to Torpy and beeped in 81244. Located but unable to take care of others with the collar in dense mature timber and regen. Back to camp to top up with fuel. Searched Walker Creek and McGregor to Jarvis. Beeped in 93931 way up the Jarvis. Was finally able to locate and euthanize the two gray wolves with the collar. Back to camp to refuel. Searched Fraser to the GPS fix of collar 81237. Beeped and located the collar up on the POB bench. Was able to locate and euthanize one female wolf. Searched the Fraser back to camp for an early day end in heavy snow.












DATE	DAILY HOURS FLOWN	TOTAL HOURS FLOWN	COMMENTS FOR THE DAY
9/Feb/24	6.8	6.8	Crew <sup>s. 15, s. 19</sup> Hard pack snow with skiff on top. High overcast, winds SW 10-20 km/h. Following up on report of wolves near Lessard Lake, cut tracks of 3-4 wolves, followed North for many km on Dean River Road, followed tracks for 2 tanks of fuel but didn't get visual on wolves, one wolf backtracked onto road. Refuelled Anahim and headed to 2 wolves spotted on Narcosli Lake, picked up tracks off lake, followed in a big circle. Unable to find correct tracks off of the lake. End of day.
10/Feb/24	5.3	12.1	Crew <sup>s. 15, s. 19</sup> . Light icing conditions to the north, Flew Morrison Meadows area, cut tracks from 2 wolves, followed and euthanized 2 black wolves, flew Aktakin Lake observed older tracks from 6+ wolves headed North, no newer tracks found, challenging tracking conditions, flew 5 Mile area and cut track from single wolf, followed and observed single gray, lost sight of wolf, refuelled and picked up on additional tracks of serval wolves in area, observed single gray, deployed collar. deployed 2 caribou collars closer to Seymour Meadows, flew South of Morrison Meadows and West of Anahim Lake. Ended of day
11/Feb/24	6.4	18.5	Crew <sup>s. 15, s. 19</sup> . Snowing , minus 2, winds 10km/h from the North. Beeped in Terra collar. Only observed collared animal, Searched south to Aktakin, Long, Sucker, Kleena Kleene, Miner, One Eye, cut fresh tracks NE corner of Martin Lake, observed 7 gray wolves, euthanized 4 and collared one. Serched Puntzi, Chilcotin River euthanized single gray on Chilcotin, searched Chansler, Aktakin and back to Anahim.
12/Feb/24	6.9	25.4	Crew <sup>s. 15, s. 18</sup> morning, crew change midday then <sup>s. 15, s. 18</sup> sunny, 10 cm new snow, great tracking conditions. Beeped in Terra collar, observed additional gray and euthanized it, backtracked and only observed the 2 tracks. Flew Lower Chilcotin, Chezacut. Crew change <sup>s. 15, s. 18</sup> cut fresh tracks on Bell Creek, followed and observed 10 wolves mostly dark gray and blacks, Euthanized 5 and deployed collar on gray male that had a non-functioning collar, refuelled Puntzi, searched Seymour Meadows extensively no recent wolf tracks, beeped in 2023 Narcosli collar, observed additional gray and euthanized it. Tracks in thick timber hard to tell if there is others with collared animal. Searched Punk Lake, East edges of ranches, Aktakin, tracked a single near 5 mile for some time but lost track in a patch of thick timber. End of day
13/Feb/24	7.6	33.0	Crew <sup>s. 15, s. 18</sup> good conditions, clear, minus 19 to zero degrees, light winds. Went to co-ordinates from fixed wing spotter at end of day yesterday. Followed tracks and observed 5 wolves. Tracks indicated 6 or more. Euthanized one and then spent considerable time getting one into an area for collar deployment. Deployed collar on large smokey black. Also found tracks of two wolves that went way into alpine in Rainbows and then back down on their up track. Got reports of recent tracks near Baldface. Super deceiving tracks but turned out there was multiple wolverines traveling together there. Searched Narcosli area extensively and south through Cosblinko and Punk Lake, Ranches and back to Anahim.
14/Feb/24	6.3	39.3	Crew <sup>s. 15, s. 18</sup> cut tracks of 2 wolves near Tezla Lake, followed west and euthanized both near Dean River. Beeped in Dean collar only observed collared wolf. Refuelled Anahim. Picked up on tracks of 3 on Aktakin Lake spotted by fixed wing. Led right in kill where Martin collar was at. observed collar plus 3 grays, euthanized 3 grays. Refuelled Puntzi, headed towards Alexis collar but cut tracks of several wolves, followed and caught up to 4 plus wolves near Nazko Lake, deployed collar and managed to euthanize 4. Returned to Anahim. Helicopter swap in Powell River.
15/Feb/24	7.6	46.9	Crew <sup>s. 15, s. 18</sup> picked up on tracks of 2 wolves West end of Charlotte Lake, spotted by fixed wing yesterday, followed in circles, refuelled Anahim, returned finally found out trail, followed and caught up to 2 grays near Atnarko River, managed to euthanize 1 but lost the other in thick short pines, little to no snow near Atnarko, refuelled Anahim, searched Morrison Meadows, found track of single wolf, followed for a bit then responded to Mayday call near Taeseke. Searched around Tatlayko/Chloelquoit on way back Williams Lake.
16/Feb/24	7.4	54.3	Crew <sup>s. 15, s. 18</sup> minus 30 to minus 6 in afternoon, winds east at 20-30km/h, Searched 5 mile Ranch areas, single wolf tracks all over in circles, beeped in Terra collar, only observed collared wolf, flew Aktakin, beeped in Martin collar, only observed collared wolf, refuelled Puntzi, picked up on tracks from 3 wolves at Choequoit Lake, followed for some time but didn't catch up with them, got call from fixed wing of 4 wolves near Nazko Lake, flew to area, one wolf is collared Nazko Ik. collar, euthanized 2 of the 3 others, flew Chilcotin Lake and picked up tracks off several wolves southbound, refuelled Puntzi, followed tracks and caught up with 7 pack gray/whites, deployed collar and euthanized 2. Wolves running very fast in shallow snow/no snow. Flew Seymour Meadows and cut tracks of several wolves near end of day. Returned Anahim.
17/Feb/24	6.8	61.1	Crew <sup>s. 15, s. 18</sup> Minus 12, light winds from east, high overcast. Flew Morrison Meadows, Satah Mountain. Followed up on tracks in Seymour Meadows spotted yesterday afternoon, turned out to be coyote and wolverine trail. Beeped in Chilcotin River collar and observed 3 additional wolves, euthanized all 3, should be one more around there with the collared animal. Refuelled Puntzi. Beeped in Alexis Lake collar, only observed collared wolf, lots of tracks in area, looks like the wolves are hunting horses. Flew Temapho Lake, Chezacut, beeped in old Narcosli collar not sending GPS, backtracked and confirmed alone only single track, euthanized and removed collar, searched Morrison Meadows again, 5 mile, beeped in Terra collar only observed collared wolf. Refuelled Anahim, flew Hotnarko, Tanya Lakes, Nahlouza, Dean River, Itcha Mountains, Corkscrew, 5 mile, Holtry. End of day
18/Feb/24	6.8	67.9	Crew <sup>s. 15, s. 19</sup> Minus 10 to minus 2, part sun light winds. Deployed 5 cow, 1 bull caribou collars in morning. Bit of a challenge finding caribou. Tried to beep in Alexis collar but couldn't locate beeps in vicinity of last GPS position. Searched north and cut tracks from 13+ wolves near Bishop Lake, followed and observed several grays and blacks, deployed collar on black female and euthanized 6. Searched Temapho, refuelled Puntzi, searched for caribou enroute to Anahim, searched for wolf track through Morrison Meadows. End of day.
19/Feb/24	5.5	73.4	Crew <sup>s. 15, s. 19</sup> Minus 8 to plus 1. Mostly sun, light winds. Picked up at Puntzi deployed 2 caribou collars Charlotte aplans, 2 caribou collars, North Seymour Meadows. Dropped off <sup>s. 15, s. 18</sup> for cougar work. Move <sup>s. 15, s. 18</sup> for cougar stuff. Beeped in Alexis Lake collar, observed additional black wolf and euthanized it. Should still be a few more there with collared animal, not much snow for tracking, beeped in Nazko Lake collar, observed additional gray but quickly lost it in thick pine stand, beeped in Bishop Lake collar, observed 5 additional wolves, euthanized all 5. Returned Anahim.
20/Feb/24	3.1	76.5	Crew <sup>s. 15, s. 18</sup> Minus 5, Light snow, light winds. Searched Lessard, Upper Dean, treeline areas north of Itcha Mountains, cut older tracks from 2 wolves 5miles south of <sup>s. 19, s. 22</sup> Blackwater, followed for considerable distance but didn't catch up to wolves, observed 5 wolves on Tsachca Lake, was able to euthanize all 5 grays, refuelled at Tattechuz, searched Itcha Mountains back to Anahim. Packed loaded gear and departed zone for now.
30/Mar/24	8.7	85.2	Crew <sup>s. 15, s. 18</sup> Minus 5 to plus 2. Overcast. Winds 15km/h from SW. Snow patchy and hard. Flew north and beeped in Dean collar. Observed 2 additional wolves with collar on Captain Harry Lake. Euthanized all 3 wolves. Flew to Terra collar East of Anahim. Observed only collared animal and euthanized it. Refuelled Anahim, beeped in Martin collar, only observed collared animal and euthanized it near Chansler Lake. Beeped in Chilcotin collar and observed one additional wolf, euthanized both animals. Refuelled Puntzi. Beeped in Alexis collar and observed 2 additional wolves, euthanized both additional wolves and left collared wolf. Nazko and Bishop collars well outside management area so didn't check on them. Searched Nazko chain, Chilco River, Choequoit Lake, Eagle Lake, refuelled Puntzi. Searched One Eye, Klinikini, Knot Lake, Charlotte Lake, Return to Anahim.








DATE	PERSONNEL	WOLVES REMOVED	YEAR TOTAL	WOLVES COLLARED	PACK	REMAINING PACK SIZE ESTIMATE	UPDATED PACK REMAINING	LATS. (decimal degrees)	LONGS (decimal degrees)	COLLAR SERIAL #	COLLAR FREQUENCY	SEX	COLOUR	AGE ESTIMATE	SIZE	SAMPLES TAKEN?	WILDLIFE HEALTH ID#
s. 15, s. 19																	
10/Feb/24		2	2	0	Morrison	0							black black		avg	no	
10/Feb/24		0	2	1	Terra	?				97644	148.150	male	gray	4	small	yes	23-2423
11/Feb/24		4	6	1	Martin	collar plus 2				97640	148.130	female	gray	4 or 5	large	yes	23-2424
11/Feb/24		1	7	0	L Chilcotin River	0							gray		small		
12/Feb/24		1	8	0	Terra	broken pack							gray		larg		
12/Feb/24		5	13	1	Alexis Lk.	collar plus 4				97638	148.410	male recapture	gray	5	large	yes	23-2418
13/Feb/24		1	14	1	Dean	collar plus at minimum 4	Tweeds crew removed 5 February 18			97637	148.380	male	dark gray	3	large	yes	23-2417
14/Feb/24		2	16	0	Tezla	0							grays		large		
14/Feb/24		3	19	0	Martin	collar only?	collar only						grays				
14/Feb/24		4	23	1	Nazko Lk.	collar +3?				97639	148.560	male	gray	3	large	yes	23-2425
15/Feb/24		1	24	0	Charlotte west	1							gray				
16/Feb/24		2	26	0	Nazko Lk.	collar +1	collar +1						grays				
16/Feb/24		2	28	1	Chilcotin River	collar + 4	Collar + 1			97642	148.080	female	off white	2	med	yes	23-2420
17/Feb/24		3	31	0	Chilcotin River	collar + 1							white gray gray		large med		
17/Feb/24		1	32	0	Narcosli Collar	0				93925	150.010	male	gray		large	n/a	n/a
18/Feb/24		6	38	1	Bishop Lake	collar + 5?				97630	148.330	female	black		med	yes	23-2421
19/Feb/24		1	39	0	Alexis Lk.	collar + 3?	collar + 3						black & grays				
19/Feb/24		5	44	0	Bishop Lake	collar only	collar only										
20/Feb/24		5	49	0	Tsacha LK.	0							gray				
30/Mar/24		3	52	0	Dean	0				97637			Black black gray				
30/Mar/24		1	53	0	Terra	?				97644			gray				
30/Mar/24		1	54	0	Martin	0				97640			gray				
30/Mar/24		2	56	0	Chilcotin River	0				97642			gray gray				
30/Mar/24		2	58	0	Alexis Lk.	collar only?							gray gray				












DATE	DAILY HOURS FLOWN	TOTAL HOURS	COMMENTS FOR THE DAY
Feb 06/23	2.8	2.8	Beeped in Skeena collar 81233. Observed 2 black wolves, confirmed just 2 tracks and euthanized both wolves, removed collar. Flew Punk lake, Corkscrew, ranches east of Anahim, Aktaklin Lake, Nimpo back to Anahim
Feb 07/23	7.2	10.0	Flew North along Dean River, cut old tracks of 5+ wolves around 60km, could'nt find recent track. Flew Blackwater area and lakes, north slope of Itchas, east towards Nazko, cut tracks from 2+ wolves 5 miles north of Temapho Lake. Tracks led to moose kill and large circle. unable to find out track. Cut old tracks on Chilko River, refuelled and returned to north of Temapho area, still unable to find right out track, flew west to ranch areas east of Anahim, no fresh tracks end of day.
Feb 08/23	7.5	17.5	Flew ranches east of Anahim. Cut track of single wolf tracked out and euthanized single black. Refuelled and flew south, Aktaklin, One Eye, reports of wolves howling near Tatlayoko, flew to area but very little snow, no tracks or wolves observed, flew Eagle Lake, Tatla lake, snow very hard and tracking conditions poor, Refuelled Puntzi, received report from fixed wing of 6 near Nazko Lake. flew to area, removed 3 grays and collared gray female. Flew Puntzi Lake, Refuelled, Flew Tatla, Miner Lk, observed 2 black wolves on Miner Lake, removed both wolves, one was non-functioning collar One Eye collar from 2022, Flew Klinklini river, cut tracks from 7+ wolves followed for several km and lost track on bare south facing hills. Flew north, refuelled Anahim, received report from fixed wing of single wolf west of Nimpo, flew to position and observed single wolf, single track, euthanized wolf end of day.
Feb 09/23	7.7	25.2	Flew east to Upper Chilcotin River, observed several small groups of caribou but no openings for capture, found small group on pond, captured one and deployed collar. Received call from fixed wing that there was 3 wolves on Martin Lake. Refuelled and flew to site, observed 2 wolves still on Martin Lake. Attempted capture but wolves quickly got off of the lake into dense spruce forest, lost sight of them, picked up track from one and followed for over 3 miles but unable to catch up to it. Snow very thin and crusted. Refuelled and flew Tatla Lk area, Kliniklini, cut tracks from 3-4 pack east of Charlotte Lk, tracked and observed 3 grays, refuelled and returned, attempted capture of one but unable to get it to an opening, Euthanized it and tracked out and euthanized one additional before end of day.
Feb 10/23	7.9	33.1	Flew Dean River, East edge of Rainbows, observed approximately 25 caribou, flew moose lake, Blackwater, North slope of Itcha, fixed wing spotted 2 gray on Kuskoil Lakes, flew to point and euthanized 2 grays, cut tracks from single North of Nazko, tracked for many miles and crossed tracks of 4 pack near Pelican lake, refuelled, observed single blue gray on west Kluskus Lake, euthanized single, returned to Pelican Lk area tracked 4 pack for several miles but didnt catch up to them, refuelled search ranches east of Anahim until end of day.
Feb 11/23	6.0	39.1	Collared 10 caribou, euthanized pair of wolves on West end of Chilcotin Lake
Feb 12/23	6.9	46.0	Collared 1 bull caribou, searched Seymour Meadows, got onto tracks from 5 pack on Temapho Lake, follow and observed 5 grays, euthanized 2 and collared one. Refuelled beeped in Nazko lake collar, observed collar plus 3 grays. Euthanized 3 additional wolves. Flew North of Temapho, Chilcotin River Corkscrew to Anahim.
Feb 13/23	8.0	54.0	Flew ranches to the SE of Anahim, Aktaklin, Martin Lk., Tatla, upper Homathko, Listened for offline cougar collar, Hook Creek, Cochín Creek, Puntzi, Nazko Lk. Beeped in Loomis collar, hasn't met up with remaining 2 grays from its pack yet, Searched Chezacut, Seymour Meadows, refuelled Puntzi, Flew Martin Lake, One Eye, Klinklini, Charlotte, Kappan, Hotnarko, Lots of old tracks down in Hotnarko burn, refuelled Anahim, Flew Lessard, Dean, cut single track west of Anahim Peak, followed up Anahim Peak, observed very large gray, euthanized. Flew lower Dean, Blackwater, Tsasha Lk., south of Blackwater, West of Anahim till end of day.
Feb 14/23	7.9	61.9	Beautiful calm day so covered most all alpine areas of Itcha-Illgatchuz. No wolf tracks observed, checked denning area east of Itcha Lake, flew Coglistako, Blackwater, refuelled, picked up tracks of 5-6 pack east of Dean River, observed one gray and deployed collar, picked up tracks of 2 other grays and euthanized, flew Lessard Lake, refuelled Anahim, flew Hotnarko, picked up tracks of 2 wolves, followed for many miles and observed 2 grays, euthanized both. Pick up tracks of 2 wolves on Kappan Lake, followed and must have been right on them but tracking slowed for a bit through dense timber and ran out of daylight.
Feb 15/23	8.0	69.9	Picked up on Kappan 2 pack tracks where we left off last night, followed for a few hours, flew ranches to the east of Anahim, refuelled, beeped in Dean collar, only observed collared wolf, flew Anahim Peak, back to Kappan tracks, refuelled, back to Kappan tracks, followed and eventually caught up to and observed one gray with non-functioning collar, captured and deployed new collar. Flew Charlotte Lake, Kliniklini, One Eye, Tatla, Martin, Chantslar, Aktaklin, Ranches, picked up tracks of several wolves near s. 19, s. 22 ranch followed s. 19 and 20 day.



Feb 16/23	2.8	72.7	Searched ranches to SE of Anahim, wolves walking on top for the most part, slow tracking. Searched Charlotte Lake to Klinklini. Departed Anahim. Return later when snow conditions improve.
Feb 24/23	3.1	75.8	Temps -22 to -20. Snowing and half mile vis. Searched to Dean River and beeped in 93930. Euthanized two gray wolves with it. Area quite tracked out so we will check again to be sure it is now solo. Searched to Hotnarko River and beeped in 93935. Tracked out and euthanized the gray female wolf with it. That collar is now solo. Searched to Kappan Lake, Mill Site to Holtry Creek and to Anahim for the end of day.
Feb 25/23	6.5	82.3	Temps -5 to -1. Snow to overcast periods. Searched Anahim ranches, Holtry, Holte, Aktaklin, Long, Sucker, Clearwater, One Eye, Kleena Kleene, Patterson, Horn, Upper Homathko headwater. Located tracks of one or two wolves. Tracked them out and deployed collar 93926 on a young gray female. Unable to track out the other one prior to needing fuel at Puntzi. Refueled and searched back towards Tatla. Located tracks of at least 3 wolves on the north side of the swale just off the east end of Tatla Lake. Tracked them south across the swale towards the highway. Finally caught up to them and tracked out one gray male for quite a while, back down across the swale and managed to deploy a collar 93934 onto him near where we first cut tracks. Left him to regroup and searched to Tatla, One Eye, Klinklini, Big Stick, McClinchey (found old tracks between there and Charlotte Lake), Towdystan, the Fire Guard all the way to Kappan Lake and beyond, to Anahim for fuel and the day.
Feb 26/23	8.0	90.3	Temps -10 to zero. Partly cloudy / overcast. Searched direct to Loomis 93925 collar. Beeped it in and tracked out three gray wolves with the collar, which were all euthanized. The collar remains. Searched direct to Nazko 80913 collar near Temapho Lake at a ranch, beeped her in and euthanized her. (Note: Both the Loomis and Nazko collars had been at this location in the previous days and had killed 6 sheep belonging to rancher, s. 19, s. 22 He was also in possession of a snared black wolf with non-functioning collar #45304 - 150.160 Mhz. We removed the collar and brought it back to Anahim.) Searched to fuel at Puntzi. Searched to Tatla collar 93934. Beeped it in and tracked one of his packmates about 9 miles over 2 hours. Slow tracking in regen and just couldn't catch up to it. Back to refuel at Puntzi (5 of original 6 full Wildlife fuel drums now left. We have used one). Searched to Chantslar, east Aktaklin, to Nimpo, to Holtry. Located two wolves (a gray and a black) and euthanized the gray wolf. Tracked the black until we needed to go to Anahim for fuel. Returned and continued tracking. Had to give up the track with darkness approaching and in amongst many older wolf tracks.
Feb 27/23	6.6	96.9	Temp -10 to zero. Partly cloudy, cloudy, snow squalls and windy. Searched Anahim ranches, Corkscrew, Ilgatchu, Lessard, Dean. Beeped Dean collar 93930 and briefly got eyes on another wolf with the collar, but unable to track it out of the moose killsite vicinity, due to the amount of tracking they've left over the past week there. Searched to Eliguk, Blackwater. Tracked two (?) wolves east from the east end of Eliguk for a while but were unable to continue following them once they got into the thick mature timber to the south. Searched through Tsilbekuz, Tsetzi to Tsacha. Beeped in R6 collar 84104. Unable to locate any others with it. (My s. 15, s. 19 records show that there were two others with it as of apx 3 weeks ago.) Searched through Gatcho to Dean River. Beeped in 93930 again and located her about 7 miles west of the moose killsite, but the other wolf had not regrouped yet. Searched direct to Anahim for fuel and dayend.
Feb 28/23	6.5	103.4	Temp -12 to -2. Overcast, ice crystals, snow, partly cloudy. Searched through Kleene Kleene, West Branch, Tatlayko valley to beep 93926. She appears to be alone. Searched direct to Martin Lake and beeped the Tatla collar 93934. Tracked out and euthanized a gray wolf. Tracked out and euthanized a black wolf, with non-functioning collar #45292. Collar retrieved. Searched to Eagle, Pyper to Puntzi. Refueled at Puntzi. There are 3 2/3 Wildlife fuel drums left in the seacan cache. s. 15, s. 19 used 2 1/3 drums total, of the "Wildlife" fuel. Searched to Seymour Meadows, Chilcotin Lake, Jorgenson Ck. Beeped in Loomis #93925 at the s. 19, s. 22 It appears to be alone. Searched Clusko, Mt. Dent, Clisbako, Upper Baezaeko, Narcosil Lake. Located an old kil and tracks of +8-10(?) wolves at this location. Searched for an outtrack and finally picked one up headed southwest. Tracked them for about 4 miles but needed to leave them for fuel at s. 15, s. 19. Searched direct to Anahim for fuel and for the day.
Mar 01/23	1.6	105.0	Temp -9 and snowing, to overcast. Searched direct to Dean collar 93930. Beeped her in and found a new killsite (deer?). Network of trails in the vicinity but we ended up getting eyes on two other wolves with her (we had thought there was only one remaining). We managed to euthanize one gray wolf but were unable to relocate the other wolf. As it is an overlapping zone wolf, if the collar data shows them moved to a good tracking area over the next five days while we are working in Tweedsmuir, we may be able to return and try to remove that one outstanding wolf with the collared wolf. Will advise if that occurs. Searched direct to Anahim for fuel and packing up. Program hours for 2023 are complete.



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