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"Rite in the Rain"®



All-Weather  
HORIZONTAL LINE  
SPIRAL NOTEBOOK

No. 393

HOLLY AKENSON

Taylor Ranch 209 382-4336

WINTER 1998-1999

Book 1 of 2

4 5/8" x 7" with 64 Pages



11/28 - 11/30

Jim Hanley, Ed

Camp set up/supply

Signals (strong) at Garden Cr just off Mile Hi. Tracks at Coxey, Mile Hi, Garden Cr. 5 sets tracks. All 3 Chamberlain Pack signals. Tracks Coxey → Cabin several trips

Bobcat seen at Cabin Cr cabin.

11/29 Wolf tracks (4+) seen traveled from Coxey to Cabin Cr Flat. 5 scats (2 are bright yellow) - 1 big ♂ track 3+ smaller. 2 are beige, 1 regurgitated grass.

11/30 Wolf track & cougar tracks abundant at forks of Coxey Cr & toward Mile Hi. 20 elk @ Mile Hi. Very close wolf signals just E of airstrip - Mile Hi - Garden Cr. Wolves moved off to E along ridges - last signal heard was up Cabin Cr, distant.

1 old wolf track to Lobauer, Dead lamb (fell off cliff?) W of Lobauer - scavenged thru back by birds; no external wounds.

12/31 - 1/1/99

Holly, Renan, Mindy

Cougar kill at Brown's - mule deer  
No wolf sign or signals TR → Coxey

Cougar on fresh deer kill across Big Cr & upstream 200m of Brown's Basin. Ravens, magpies, g. eagle.

Elk at Cliff Cr benches, 18 elk at Cabin Cr flat, 67 elk at Vines Ranch.

No wolf signals Taylor, Cabin Cr, Vines Ranch.

Old cougar tracks W of Cabin Cr cabins, along trail/road to Cave Cr, and Coxey Hole & lower Coxey.

1/1/99 No wolf signal Coxey Camp. Fresh cougar tracks @ Coxey Camp. Fresh bobcat tracks Coxey Hole → E on Big Cr trail, and at Cave Cr. 19 Elk Cabin Cr; 6 Elk Mule Basin, 30 elk Pioneer Cr.

Bobcat @ Taylor R. Checked old Kill at Coxey - reported w wolf tracks. Big Cr Lodge report wolf sign.

by Pat  
Armstrong  
earth  
Nov



1/8

Holly &amp; Greg B

Wolf & Cougar use of same site (+ 1 day) -  
 mouths of Cougar & Goat Creeks.  
 Wolf to cougar scrapes.

To Cougar Cr & Goat to check on single  
 fresh wolf track seen by Wes G.  
 on 1/7 at Cougar Cr. and cougar  
 kill seen by Renan & Mindy on 1/5  
 at Goat Cr. (Wes also saw day old  
 cougar tracks @ Cougar Cr.)

Wolf tracks (1 animal) localized & in  
 multiple directions around W side  
 mouth of Cougar Cr along tree  
 edge of cliff base. There were 3 <sup>fresh</sup>  
 cougar scrapes under trees, no  
 scats. - Wolf tracks to scrapes.  
 (Wes thought wolf tracks were ~ 1/6 and  
 cougar tracks 1/5 - 1/6.) Wolf scat  
 collected.

Wolf tracks thru Goat Basin → Cougar Cr  
 saddle. 2 cougar scrapes under DF's  
 near saddle. No animals seen on  
 W side of Cougar Cr from saddle -  
 only a few tracks high on snowy ridge.

Cow & calf elk on Cougar-Goat bench.  
 We are following old wolf tracks  
 along upper bench & talus to Goat  
 Basin. <sup>W</sup>Track up Cougar-Goat  
 saddle in G. Basin + all over lower  
 end. Elk beds (8+) and dead  
 coyote remains (head, hair, pelvis...) in  
 hunter camp on SW side Goat Basin.  
 Wolf did not go to carcass, but  
 tracks were < 25M away. Wolf track  
 going up trail from Big Creek  
 to Goat Basin.

Renan found a cougar "kill" near  
 Soldier Bar crossing last week -  
 was it the mallard duck wing  
 at cougar tracks? I found old?  
 cougar scats in a scrape (deer  
 or elk hair) in this vicinity, but no  
 kill. (our dogs "marked" the scat site)  
 Did the wolf visit this area  
 (not indicated by tracks passing  
 by ~ 20m away)?

Weather ~ 35% 10-80% clouds 6" snow  
 Tracks snowed in



Cougar vocalizing.

Cougar killed bighorn ewe above Timb. Bench. Carcass #02.

Dogs chased tom and female with 1-2 large kittens in Cliff Cr. - no captures.

♀ Cougar track in fresh snow headed E on Big Cr trail & up Cliff Cr. Wes ran 2 hounds - up Cliff Cr, over 2B, to E knob, above 3B, above Timbered Bench til initiate chase. Elk on E knob. \*Jim heard cougar vocalization (10 min) - yawling above Timb. bench before dogs got there.

Bighorn killed this morning by ♂ cougar above T.B. Predation forms filled out after 2nd visit on 1/11. Adult ewe w/ solid white bone marrow. Killed by broken neck (twisted head). Ewe with blood in <sup>left</sup> tracks bounded around on T.B then zigzagged up talus/gravel slope to above kill site (I tracked her >150 m, and no lion tracks). Attack site not found, no sheep tracks to kill; was she

bedded there? Did cougar carry her without drag marks? Was she injured by cougar earlier (bloody track)? Necropsy on 1/11 - subcutaneous hemorrhage on rear right stifle and over rump - no claw or canine marks noted. Neck & front shoulder eaten on 1/10, broken humerus. Only ♂ cougar tracks at kill.

Dog chases: Tom to lambing cliffs. Female treed kittens at Cliff Cr Timbered Bench then lost 2nd dog high on Horse Mtn side of Cliff Cr.

The cougar was on a calf & elk it killed.

1/9 Jim, Wes, Dan collared a ♂ cougar at Cabin Cr flat 9. It was large headed/build, but thin 140 lbs with cut paws & old wounds - fighting another ♂? It fought the 3 hounds on the ground. Jim sewed the hounds up



1/11 Chamberlain Pack - aerial track - Horse Mtn / Cabin Cr.

Fresh wolf track - visited 3

(all cougar?) kills in Cliff Creek → Gorge last night. Lone, unknown wolf. Cougar ♀ radioed in Cliff Cr. #9.820 <sup>Green</sup> Bighorn ewe Carcass #04 Cliff Cr Swale probable cougar kill.

Mule Deer Carcass #03 Goat Cr Admin. site, probable cougar kill.

Mule Deer Carcass #05 E. Pioneer, coyote kill.

Cottontail rabbit kill #06 Goat Cr Admin site, coyote kill.

Cougar did not return to bighorn carcass #02; but wolf then bobcat did.

Wolf tracks: Cliff Cr crossing to 2B → Swale → E knob → 3B → TB → Bighorn kill ... 1B → Big Cr trail E. walking → Goat Cr veer off to mousing Coyote tracks → Big Cr trail → veer off at FS Admin. site kill → Big Cr trail → Gorge... <sup>Tracks</sup> Made since yesterday. Wolf crossed bleeding bighorn tracks on timbered bench made a 6' circle & followed bighorn track to kill area. The carcass skeleton still intact, but most front quarters, all organs and all

back & pelvis meat eaten (Predation form (Carcass #2) filled out + photos) Wolf also moved Bighorn (Carcass #4) skull, jaw, leg bones into the open from a probable cougar kill under a tree in the Cliff Cr. Swale. Wolf travelled downstream and moved mule deer leg bones from Carcass #03 into open at Admin site.

Bighorn ewe Carcass #04 noticed today from wolf scattering bones. Nasal area chewed off, skeleton disarticulated ~40m from kill/cache site. Large scrape next to hair pile with 1 scat on & 1 scat under. Kill < 1 week old, no decay. Probable cougar kill with wolf scavenging

Mule Deer Carcass #03 was first <sup>fresh cougar track</sup> reported by Renan as a cougar kill observed on 1/5. We still did not find a carcass or gut pile after extensive search of the dense riparian shrub area just W. of the FS Admin site near the Big Creek Gorge. The wolf tracks led to this area;



and a cougar track (<1 day old) came from this area, then on Big Cr trail to Goat Cr area. Found several hair piles and the 2 front legs. Fresh cougar & wolf tracks + less recent coyote tracks, no bird activity. Furred leg bones starting to smell. >1 week old.

Cottontail rabbit kill #D6 was in the same riparian shrub patch as Mule Deer #03. Only a large patch of blood and hair remained under light snow covering. Coyote track thru the site (Coyote the likely predator unless avian - unlikely due to dense vegetation), then fresh wolf track across site.

Beaver activity near this riparian area and several sites upstream (wolf did not check recent but 4 day old beaver chew area along trail).

Elk tracks ~10 at Cougar (Archaeology) Flat from this AM; ~5 at mouth of Cougar Cr. this AM. Both groups X Big Cr. No signals from Taylor this AM.

Approx UTM: 664,840 E 4,999,450 N

Coyote killed mule deer (carcass #05) just over the E Pioneer Ridge from Taylor Ranch. Spotted by magpie / g. eagle activity as we rode down stream. Killed ~3 days ago.

Bighorn ewe carcass #02 above Timbered bench - checked today fresh wolf tracks and bobcat tracks from E Knob area X 3B → carcass (Across wolf tracks). No cougar returned to carcass. Bobcat covered carcass with 1 cm twigs. → Capture UTM 668,970E <sup>4,998,17</sup>N

♀ cougar chased by hounds from 200m from carcass #2 - she was treed & collared at Cliff Creek <sup>X from</sup> Timbered Bench. Freq. 219,820, Green tape. Jim has capture data. ♂, ♀, large kitten tracks cross & follow our tracks from yesterday ♀ in heat.

9 bighorns below E Knob; 5 bighorns 3B; Elk bank on Timb. bench.

Pat Dorris radiotracked by air; Chamberlain Pack beds, tracks, signals on upper 1/3 Horse Mtn on Thunder Mtn ridge. Brown's Basin-Cabin Cr ridge just below trees. Elk below them. <sup>at Middle Fork of Taylor Cr.</sup>



1/13

AERIAL TELEMETRY

Chamberlain Pack: Rush Creek  
at mouth of Two Point Creek.

Cabin Cr ♂ cougar: Lower Vinegar  
hill.

Cliff Cr ♀ cougar: Rush Cr. Ridge  
above switchbacks.

Chamberlain Pack (♂, ♀, sub) moved  
from Horse Mtn / Cabin Creek on W  
\* Rush Creek in the bottom between  
Two Point Creek and South Fork.

There is a distinct snow free  
zone below 2000 meters.

Terrain is very steep & broken.

West Fk of Rush Cr is 2 miles  
downstream - free of snow, winter  
range. Sheephorn Mtn. <sup>s</sup> snow  
covered. All signals together. This

is 1<sup>st</sup> documentation of this pack  
near the West Fk. Rush, an area

<sup>that</sup> had been used by Thunder Mtn.  
Pack. In early December the  
Chamberlain Pk were on Rush Pt

- 1<sup>st</sup> time documented S of  
Big Cr, since pack formed.

The Thunder Mtn pack were near  
Lookout Mtn at that time. Any  
interaction / territory changes?  
By 1/11 (P. Dorris) the TM Pack  
had returned to mouth of Marble Cr.  
It appears the Chamb. Pack is  
expanding / changing its territory  
this winter. It has not gone to  
the main Salmon this winter like  
last year. - UTM 659,170E 4,987,370N

Cabin Creek Tom: still on W side of  
Cabin Cr flat / lower Vinegar Hill.

In 1<sup>st</sup> draw, W of Cabins at Cabin Cr,  
No snow / little snow on lower Vinegar  
Hill → Cabin Cr. Flat.

UTM: 662,000E 5000,420N

Cliff Creek Female Lion: On  
Rush Cr side of lower Rush  
Ridge, 1/2 mi above switch  
backs. No snow. High on slope.  
UTM: 666,740E, 4,995,700N



1/15

Cabin Tom same location as 1/13  
Coyote scavenged bighorn lamb of 11/27

To Cabin Creek in PM with Penny/Bo.  
Rained last night, today some sleet.

No signals (Cliff Cr ♀, wolves, Cabin Cr ♂) from T.R. this AM or last night.  
Coyote tracks along Big Cr for most of trip.  
Coyote scavenged on hide of bighorn lamb that died (Jim thought from a fall) at the lobauer lamb cliff ~ 11/27.

No bird activity on cougar kill at Brown's Basin from 12/31.

5pt bull elk alone on flat at Gooseneck.  
Occasional elk tracks on trail from last 48 hrs.

No wolf tracks.

Cabin Creek Tom in same draw as 1/13. He's across Cabin Creek from the camp cabin. Signal not strong/direct. An elk barked from that vicinity at 6pm.

Organized the Cabin Cr cabin & put mules to bed.

UTM: ~ 662130E 5000310N

1/16

Cabin Cr Tom bedded all day at point of Vinegar Hill ridge - Cabin Cr side.  
Few elk in Cabin Cr - Cave Cr area

Snowing hard in AM. Poor visibility at Cabin Creek. 4" new snow.

C.C. Tom same signal direction, but weak in early AM.

19 elk (14 cows, 3 cf, 1 spike, 1 5pt) feed S midslope W side Cabin Cr  
8 elk + N of mouth Cow Cr <sup>mid</sup> slope

C.C. Tom sigal around tip of Vinegar Hill on Cabin Cr side around outcrops - not strong. In a cave?

No elk obs. in Cabin Cr flat, W slopes or E Slopes toward Brown's B.

1 Eagle circled over E ridge high in vicinity where wolves were reported 1/11.

Checked & photo C.C. tom's kill site 1/7  
Confirmed bull calf elk - collected skull

No elk seen in Cave Cr from Vinegar Hill.

Hiked up from kill at west side Cabin Cr flat → Vinegar Hill ridge to draw above Cabin Cr. Cabins then S down other ridge above C.C.

→ UTM: 661760E 4999410N



→ UTM 662,310E, 4,999,710N (EXACT)  
I got the Tom's signal near the lowest outcrops - weak when I walked below it, strong when above it. I circled around the entire signal area & never cut his tracks - he must have moved this AM as it started to snow. No bird activity in the draw Tom had been in, but elk tracks & 3 old beds. Returned to Cabin @ 3:30 and I get a booming signal from in the cabin - down Cabin Cr. past Bo & Penny!

Cliff Creek ♀: Got a weak signal several times when on Vinegar Hill ridge - toward Spring Creek. No fresh tracks today of any kind (except Chukar & Hunk).

Signal on Tom loud from cabin until 10 pm, less strong.

1/17

Cabin Creek Tom: documented bed site, travel route, old elk kill, scratch tree  
Travelled Cabin Cr → Rush Cr.  
Elk kill a mature cow 1-2 weeks old

Cold & overcast. Skiff of new snow. 18° FT  
No signal from cabin at 6 AM.  
Located Tom's track from yesterday crossing my tracks on Cabin Cr trail along W side of stream.

I backtracked him:

- Left foot is bleeding every step
- He came steeply downhill from vicinity I had strong signal yesterday.

see V16 for UTM of bed.

- Collected 2 scats at bed site.
- The bed was used yesterday. It is under a 24" DF & against a 4' rock. The site is along a spur ridge of lower Vinegar Hill. 120' cliff below bed. 40% canopy DF below, open grassland above slope 60°+, aspect NE. Mt mahogany on cliff.

- Visibility from the bed: Downhill 10m then 300M - (Horse Mtn ridge) 1 mt



L 100 M (open DF) R 3 M (rock)  
Uphill 40 M top of hill.

- Snow - none in bed,  $\frac{1}{2}$ " around bed  
6" on slope adjacent.
- No tracks going to or from this  
bed (other than the one Mica & I  
followed). Yesterday telemetry indicates  
the Tom left the draw at the start  
of the snowstorm to this bed and  
remained there until ~ 3:30 when  
he went down to Cabin Creek.
- S side of bed outcrop has large 3'<sup>3</sup>  
cave in cliff used by woodrats. Potential  
cougar den. Cottontail tracks abundant  
along cliff.

FORWARD TRACKING Tom's route  
from last night:

- Crossed Cabin Cr  $\rightarrow$  E, crossed trail  
then over tip of ridge N of mouth  
Spring Cr, across Spring Cr & uphill  
E to 2 SCRATCHING TREES  
~ 40" DFs above wagon trail. Tom  
did not scratch the tree. Mica  
scent marked - did the Tom?  
Scratches on 2 sides of tree  
(UTMs: 662, 910E, 4,999, 800N)

claw marks + chips of bark missing  
- fresh activity.

Tom travelled in a fairly straight line  
(down & up draws rather than contour  
& went into Brown's Basin @ 5000'  
elev. I could not get signal for  
Tom, or any other animal, from  
ridge between Brown's & Cabin Cr or  
when in Cabin Cr bottom / Spring Cr,  
sidehills.

I glassed all over Cabin Cr area and  
only saw ~ 20 elk feeding at  
head of draw W of Cabin, as they  
were last night. This was draw  
where Tom had been earlier.


Elk kill found in draw immediately  
across from Tom's bed site.  
Cow elk, mature. Carcass entire with  
minimal bone chewing. Neck axis/  
atlas broken loose - no other vertebrae  
loose. No arthritis. Collected femur &  
metatarsus. Filled out prey form.  
Several sets old tracks - looks like cougar.



Rode Cabin Creek → Taylor Ranch  
4:30 - 6:30 pm. The Cabin Creek  
Tom crossed the Big Creek trail  
(tracks) at Browns Basin,  
walked along the shore ice in  
3" new snow ~ 400M then  
walked on the Big Cr. trail at  
least to TR property boundary.  
He veered off the trail 7-8  
times: 2 times to Big Creek,  
1 time to bighorn lamb carcass  
of ~ 11/27, 1 time to Mule Basin  
sheep lick, 2 times to walk  
the tow slope along shrub riparian,  
1 time to investigate tracks of 3  
elk (the only other fresh tracks in  
the trail today). No sigals from  
T. Ranch at 8pm.

1/19 - 1/24

Saw lone wolf in lower pasture @ 1st bench  
Wolf track + blood on trail above airstrip  
Cougar track w end airstrip / mouth Rush Cr.  
Possible moose kill by Chamb. pack @ Big Creek.  
Predation #11 - saw cougar leave elk kill @  
Rush Cr - old, healthy, but injured cow.

1/19 Checked for signals from  
S. of Taylor Ranch. No cougar or  
wolf signals. <sup>3:30</sup> SAW A LONE  
WOLF in lower pasture. It travelled  
to 1B, bedded 2 times <sup>on edge</sup>, then went  
to N, unknown direction/location  
(not observed again during 1/2 hrs  
of glassing). Wolf did not  
respond to our (few) howls at 7:00pm  
Wolf color: black head, neck, saddle  
with white belly, legs, hips.   
8 bighorns (4E, 2L, 1I, 1III) above 3B.

1/21 Check for signals at Taylor - none.

1/22 Check for signals to Sage Flat - none.  
1B Elk near Sage Flat, 8 mule deer.  
Wolf <sup>(2 prints)</sup> tracks + 7 spots of blood on  
trail above airstrip (w end) - day old <sup>snow</sup> in trk  
Cougar (subadult) tracks w end airstrip to  
Rush Cr washout (day old track)



1/13-17 4d (4doos) Browns

3/15 6d (5d, 1f) Swale

3/18 ~~4~~d (2d, 1f, 1b) Browns

3/25 ~~7~~ 6d (4D, 2F) Vinegar

3/31 9d (7d, 1f, 1b) Rush

4/1 6d (4D, 1F) x Girsting

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31d (22D, 6F, 2B

= 27F; 100D

= 25F; 100 Adult



1600 Predation Project  
1998-1999 Ungulate Counts  
from Holly's notes (also Jim's)

- 12/1/98 18 E Cabin Cr 6 Elk @ Vines
- 1/1/99 19 E Cabin Cr 6 Elk Mule Basin 30 E Pioneer
- 1/1/99 19 E (14 C, 3 cf 1 sp, 1-5 pt) Cabin Cr
- 1/1/99 8 Sheep (4 E 2 L II III) above 3B
- 1/22 18 E Sage Flat 8 m deer Sage Flat
- 1/23 5 E (4 C 1 cf) 1 B 6 bighorns 3 B
- 1/24 7 Bighorns (3 E, 3 L, II) Rush switchbacks  
7 E Big Cr above Rush; 8 D W Pioneer Rdg  
10 E Eaf 2 B ~ 20 sheep @ <sup>Cookhouse</sup> Lick
- 2/1 8 E + 9 deer @ Cougar - Goat Basin
- 3/12 15 E above 3B Cliff Cr + 8 Elk TB +  
9 E below 1B + 11 Deer below 2B + 6 D Cliff  
+ 3 D W Knob. + 22 Bighorns 1 B  
8 S + mouth Rush 25 Big Cr - Ram Canyon  
18 E Sagebrush Flat, 2 coyotes  
10 bighorns Lobauer 29 Elk W of Lob.  
26 deer @ 8 Elk @ Browns



# Jim's Notebook

1/16 38 elk (33 cows, 4 cf, 1 ragh)  
13-17 = 17 @ Cabin, 8 @ cabin, 13 @ Miletti

4 deer (4 does) Browns

3 moose (3 cows) @ Cabin, Coxey, Coxey



- 2/13/99 10E Spring Cr 3 Elk Cow Cr  
 10 deer lower Vmeigarth, 1 Moose Cabin Cr
- 3/14 56 elk (49C, 4 cf, 1 sp, 2 Spt) below Cave Cr  
 + 8 deer  
 24E (14C, 1 cf, 1 bpt, 8 unk) Browns  
 + 16 deer
- 49 elk (46 cows, 1 sp, 2 rag) Lobauer  
 7E (7 cows) TR airstrip + 3E (3C) @ TR
- TOTAL ELK RATIO FROM ABOVE:  
 139 ELK (119 cows, 5 calves, 2 sp,  
 2 raghorns 2 Spts, 1 lept)
- 3/15 20 bighorns (13 ewes, 5 lambs, 2I) Swale  
 6 deer (5 does, 1 fawn) Swale  
 37 elk (36 cows, 1 raghorn) 2B
- 3/18 17 elk Cabin Cr. 4 Elk (4 cows) Mule B  
 8 bigh, Mule Basin 8 Deer MB + 16 elk  
 5 deer Lobauer; 3 deer (1d, 1f, 1b) Browns  
 1 deer (doe) Browns 17 elk (15c, 2cf) Browns



Jim's

3/23 Taylor Vic: 45 elk (38 cows, 1 cf,  
4 ragnons, 2<sup>5</sup>6pts)

Rush to Cabin: 43 elk (36 cows, 2 cf,  
3 ragnorns, 2 mature bulls)

3/28-29 West Cabin Cr → Coxeey 18 deer +  
118 elk (105 cows, 7 cfs, 4 ragn, 2<sup>mature</sup> bulls)

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Sum = 206 elk (177 cow, 10 cf, 11 ragn, 6<sup>mature</sup> bulls)  
26 deer @ Cabin Cr



- 26 8E (7C, 1sp) LimeCr + 4E (3C, 1cf) + 8E
- 3/21 8E (7C, 1cf) VinesRch
- 18E Lobauer 4E (4C) MuleBasin
- 3 deer MBasin, 2 Sheep MuleB.
- 4 deer Lobauer
- 3/23 18E (17C, 1cf) downstream of TR
- 3/25 4E (4bulls) mouth Rush
- Total CabinCr elk seen from Vinegar:
- 139 elk (104 cows, 10 calves,
- 4 sp., 5 ragnorns, 2 goats, 15 unclassified)
- 6 mule deer (4D, 2F) Vinegar Hill
- 3/26 12E (11C, 1cf) W CabinCr slope
- 7 bighorns (6 ♀/L, 1 ♂) MuleBasin
- 17 elk (17 cows) Ram Canyon
- 1 deer Vinegar Hill
- 21 elk E of CabinCr
- 3/27 6 bighorns Trail Lick area



29 45 (2II, 2III) Trail lick area  
3/31 9 deer (7 does, 1 buck, 1 fawn) + 3D  
+ 2D + 18 elk (18 cows) + 12 elk  
@ Lower Rush Cr

4/1 6 deer (4D, 1F, 1B) x from airstrip  
11 bighorns (5E, 1I, 4II, 1III) Lower  
5E (5 cows) Browns  
4E (4 cows) Cabin Creek + 8 deer  
18+ elk Garden Cr  
12+12 elk Mile High  
5 deer Vines

16 elk (16 cows) Coxe

4/2 7 ELK Garden Cr 1E (1 cow) Mile High

Poor  
cond.

34 elk (34 cows) Mile High + 6E (6 cows)

17 elk (13 cows, 3cf, 1unk) Mile High

5+ elk w Coxe

Little Greenup. Elk in poor condition

4/6 Cabin Cr Totals: 71 ELK (51 cow, 3cf, 2 rags, 15 unch) +  
45 deer Cabin Cr 12-14/17cf Browns 18 elk (16 cows, 2cf)



1/23 To Cougar Cr check for signals  
(including bighorn): None.  
No tracks since last night's 4" snow.  
5 Elk (4C, 1 of) on 1B; 6 Bighorns 3B.

On 1/22 Ray Arnold flew in to track,  
but had to leave due to deteriorating  
weather. He reported Rob & Jackie  
at Big Cr. Lodge found a freshly  
killed moose - killed by a wolf  
pack.

1/24 To Rush Ridge for Signals  
Tom cougar was spooked off of  
a kill near the switchbacks.  
<sup>We saw him @ 120 m away.</sup>  
Unmarked cougar. The kill was  
an old cow elk with a healed injury  
(major swelling / joint stiffness) on  
right rear pastern, had omentum  
& heart fat, well worn & irregular  
toothwear. Cougar killed the elk  
~2 days & 4" of snow ago. Carcass  
was buried under 6+ " packed  
snow (meat not frozen). Cat had  
bit throat, jaw, neck, shoulder,  
& 2 3" holes in back. Carcass

under a 7' sagebrush in draw 100  
m. below cougar killed elk from last yr  
UTMs: 667,850 E 4,996,080 N  
elev 4480' slope 40%. Aspect E.  
This is carcass # 11.

Cougar had eaten rt. shoulder,  
rt hind leg, kidneys, spleen, 1/2 lungs  
& liver, not heart or stomach; ribs  
chewed off right side. ~ 40%  
meat eaten. Collected r. femur, r.  
metatarsus, r. injured pastern,  
uterus part (no fetus left, but  
3 placental scars). Jim took photos.  
Collected 2 scats (1 meat scat) from a  
scrape under large, lone DF ~ 300M  
N & sidehill from kill site. Used part  
of soft meat scat for fecal parasite  
analysis + put in 2 preservatives.

7 bighorns (3E, 3L, 1II) travelled S  
up Rush Cr sidehill - < 100M  
below cougar killed elk - not  
good "escape terrain" - snow is  
deep & few outcrops. 7 elk on Big Cr  
upstream of Rush Cr; 8 deer high on  
W. Pioneer Ridge; ~ 10 elk E of 2B  
in tight (anti-predator?) group then travelled  
to Swale, ~ 20 bighorns on Cookhouse licks.



1/24

Pat Dorris flew aerial telemetry  
on wolves & cougars

Wolf pack visuals: 8 animals in  
Chamberlain Pack; 6 animals in  
Thunder Mtn Pack.

Cougars moved from capture sites

Chamberlain Pack (8 wolves) in Lime Cr  
in opening. → visual

UTMs:

Thunder Mtn Pack (6 wolves) at mouth  
of Marble Cr.

Cabin Cr. Tom on W side Goat Basin  
UTMs

Cliff Cr. Female Cougar on N side of  
Spring Cr., in near lower cliffs

Cave Cr. Tom. 1 mile below W FK  
Rush Cr. on Rush Cr. - in the bottom

UTMs

The cougars have moved far from their  
capture sites.

1/27

## Aerial Telemetry

Chamberlain Pack at forks Cabin Creek  
Cougars in similar locations as 1/24  
(Spring Creek, Goat Basin, W FK Rush)

Jim & Holly flew 1 hr with John in 206.

Chamberlain Pack: at forks of Cabin Cr.

UTMs: 663,370E 5,004,760N

♀ & sub ♀ at the forks, ♂ more downstream

UTMs: 662,370E 5,003,160N

3 bedded elk near wolf signals. <sup>High-</sup>Med-  
high track #s in this treed area

~60% forested and 40% canopy  
cover in forest. In the bottom.

Cabin Creek Tom: Goat Cr west side  
above (NW) Goat Basin.

UTMs: 672,700E 4,998,500N

Saw golden eagle near signal, midslope.

Maybe a kill? Medium amount of

tracks - less here than many other  
areas. Cougar Cr - med hi tracks in rough  
mid-low area; elk beds on Cougar-Goat  
ridge

We have 13" of snow at TR, ~8" fell in past week



Cliff Creek ♀ Cougar: lower Spring Cr.,  
at outcrop on N side

UTMs: 663, 840 E 5,000, 450 N

Spring Creek - tracks all lower, less  
tracks (M) than Cabin Cr. basin.

Cabin Creek - med-hi amount of  
tracks in basin bottom & lowlands,  
less up high.

Cave Creek Tom: bottom of Rush Creek  
1 mile below W. Fork Rush Cr.

UTMs: 659, 910 E 4,992, 100 N

Tracks high → med high on SE aspect  
open slopes - low-mid elevation

especially. Very high track #s in  
lower Rush Cr. East of Rush Pt., <sup>mid-</sup>low elev.

Cliff Creek - MH track #s on benches,  
less up high in deep/open snow.

Horse Mtn / Big Creek - tracks medium  
E of Brown's Basin along outcrops,  
m-low elev.; Lobauer m-low tracks  
some across from Lobauer.

Cave Creek - tracks abundant at Meyers  
homestead & cliffs to E. Maybe kill at  
homestead? - much packed snow.

1/28

Predation #12 Cow Elk at Cabin Cr.  
died of "natural causes"

Jim, Holly, Kathy, Wes, Dan + 5 <sup>stock</sup> mules &  
4 dogs went to Coxeys Camp

Signals: Cliff Cr ♀ in Spring Cr;  
Subadult wolf up Cabin Cr; no  
other signals

Dead elk cow 250m below Cabin  
Cr Cabins in Cabin Creek. Bald  
eagle & 2 magpies on carcass.

The elk tracks were before last  
snow ~48 hrs. No evidence of  
a predator or predator scavenging  
other than birds in last 24 hr.

All of elk intact, but right eye and  
~2 lbs meat at tail/rump.

Small amt. hair plucked on back  
- by eagle likely. Elk lying

facing downstream with hind  
legs under elk like a frog -  
collapsed? Elk ribs easy to  
feel; carcass not frozen.

Elk tracks on Big Cr trail TR - Cabin Cr  
Many toward Coxeys too. Bobcat track @ Coxeys



1/29

Treed 2 tom cougars in 1 tree.  
Immobilized & blood sampled tom,  
no collar put on. Coxeey Cr.

Wes, Jim, Holly, Kathy Q, Dan went  
up Coxeey following dogs on cougar  
tracks on forks of Coxeey. There  
was a female w/ kitten track,  
tom track 1 day old & wolf track  
2 days old (went up E FK on E side).  
No wolf signals.

The cougars treed in lg DF  
on outcrops on ridge between  
forks. One cougar jumped from  
the tree and was retreed  
along the E FK Coxeey. He was  
immobilized, since we thought it  
was a female. We took a blood  
sample. Jim has immobilization  
records.

We rode up W FK Coxeey & Wes  
worked middle ridge - no fresh  
cougar tracks; elk tracks abundant,  
saw 5 mule deer.

1/30

Treed tom cougar off kill in Garden Cr  
- not immobilized or radioed  
Kill #13 cow elk at Garden Cr.  
killed by cougar.

5° in AM, clear, no snow for 4 days  
We packed up camp to head to Taylor  
but got delayed along the way.  
Wes worked E below Milette &  
released hounds on a female  
like cougar track. Lost the dogs.  
Jim & Dan rode up Garden Cr.  
to check for dog signals, but found  
a cougar on a kill, 1/2 mile up  
Garden Creek.

I took a quick look at the  
carcass (#13). It's a cow elk  
mostly eaten, several days old.  
Old & fresh cougar tracks around.

Wes gathered the dogs & put  
them on the fresh track. Treed.  
After extensive looking & talking, it  
was determined this was another tom.  
We travelled to Cabin Cr. All dogs  
recovered. No cougar or wolf signals.

Wolf tracks W end Cabin Cr. flat.



1/31

Necropsy carcass #11 at Cabin Cr.  
Bloody elk bed.  
Wolf tracks fresh, no signals.

Cabin Creek - Checked for wolf & cougar signals - none.

Jim & Dan saw cow elk in a bloody bed, in poor condition near the cabin. They heard wolf howls up Cow Cr.

Wes saw 4 sets of fresh wolf tracks in Spring Creek.

Despite no wolf signals we decided not to try to pursue a cougar in the Cabin / Care Creek area - too dangerous for the dogs.

Rathy & I necropsied the dead elk (#11) in Cabin Cr. It had been visited by a wolf & a bobcat. Meat on ribs, right shoulder, and liver + kidneys eaten since 1/28. No sub Q bleeding on rt hip & neck. Probably non predation death. Femur collected - solid pink. Heart fat.

2/1

Search for fresh cougar tracks around Taylor Ranch - none found.

We all went up different drainages looking for cougar tracks: Pioneer, Rush, Cliff, Cougar - Goat benches, Goat Cr / Basin. No fresh cougar tracks. Lots of bobcat tracks at Cougar-Goat + 8 elk, 9 deer, old cougar tracks (2 day old). Cliff Cr had old cougar, fresh bobcat, old wolf tracks. Rush Cr - a dead coyote on ridgeline - hide shredded & parts scattered; Dan thought it was cougar tracks (old) nearby. He collected skull. Pioneer - old cougar tracks.



2/2

Rush Cr ♀ radio instrumented  
= Cougar C-4, altho samples  
say C-5.

Snowing in AM.

Wes & dogs ran the cougar from  
Sagebrush Flat. 7 minutes chase.  
24-26 month old, 70lbs, thin.  
Freq 219.564 blue.

2/3

Aerial telemetry:

Wolves in Monumental Creek  
Cougars similar to last week  
Jim/Wes/Dan radioed Cabin Cr ♀

Aerial telemetry 12:10-1:10 w/John #206

Wolves (all 3 signals) in Diamond Creek  
Burn, 3 miles up Monumental Cr.  
Signals low <sup>slope</sup> in Monumental; E aspect;  
Snow with dead trees. No visual,  
but very strong signals.

UTM 643,690 E 4,999,110 N

(Wild Horse Creek). Elev. 5400.

#2 Cliff Cr ♀: mouth of Cow Creek  
— Cow x Spring Cr ridge. NW aspect  
in forested snow. Elev 5250

UTM 663,720 E 5,000,930 N

#1 Cabin Creek ♂: Big Creek Gorge  
(to Cougar - Goat Benches - signal  
not solid). S aspect cliff-outcrop  
Elev 4660.

UTM 673,160 E 4,997,540 N

#4 Rush Creek ♀: Moved 1/4 mi upstream  
of yesterday's capture site. On N  
side of Rush Cr.; S aspect; just  
below Lewis Cr. Elev. 4600 ft.

UTM 666,540 E 4,994,900 N



#3 steep grass / outcrop.  
Cave Creek ♂: moved 3 miles  
downstream from last week. He  
is in lower 1/3 slope of Rush Cr  
2/3 mi upstream of Lewis Cr.  
SE aspect; open slope w/ cliffs  
Elev. 4720,  
UTM 664,920 E 4,993,910 N

Jim, Wes, Dan saw subadult ♀  
cougar on carcass #11 cow elk  
in Cabin Cr. The dogs treed her  
immediately. She jumped out of the  
tree from the dart & was immobilized  
on the ground. ~70 lb cougar -  
possible offspring of Cliff Cr ♀  
who has been < 1 mi from this site.  
This is cougar #6 (#4 was ♂  
released at Coxy Cr), radio # 219,778

Cougar #5

2/27 (2/26 & 2/24)

Ground location on Rush ♀. no visual  
#4

2:00-4:30 Janet Pope & I hiked to  
Rush Cr, E side to triangulate  
on Rush Cr ♀. Strong signal  
from Sagebrush Flat up Rush  
Cr bottom, 5 Elk N of Sagebrush  
Flat and 9 S of Sagebrush Flat,  
and 3 to SE. Rush Cr free  
of ice; snow on E side 400'  
above stream is ~24" deep  
on steep slopes. Elk use tracks  
abundant on both sides of  
lower Rush Cr. No other wolf  
or Cougar signals heard on  
Rush Cr or from the cabin.  
UTM on Rush ♀: 4,995,660 N  
667,930 E.

Jim checked on Rush Cr ♀ on  
2/26. She was in a similar  
location, but more E toward  
her capture site.



2/28

Rush Cr ♀ on an elk kill (#15)  
Set up Remote camera at kill

Jim + Jim Pope + Jeff Rohlman  
flew elk sightability in Rush Cr.  
The checked Rush Cr ♀ signal  
& saw her lying on an elk kill.  
It was at same location she  
has been since 2/24 telemetry.

Jim, Jeff, & I set up the  
remote camera at the kill  
(#15). This is an older cow that  
had an old injury to the left  
hind hoof. The cougar had  
ambushed the elk 300 yards uphill  
above a bluff & slid it down  
into the Rush Cr shrub filled  
riparian. Elk was ~1/4 eaten  
(rt front shoulder). Prey carcass  
form filled out.

3/5

11:00-2:00

Put up remote camera on kill #15 again.  
Rush Cr ♀ nearby, still using carcass.

On 3/3 Jim checked remote camera  
on kill #15 on Rush Cr. The  
camera battery had died. Cougar  
was near carcass. Most of front  
half eaten. Removed camera.

3/5 I charged battery & talked to the  
camera co. in mcall again, MicroLab  
Services. Set up the camera again.  
Cougar (signal) in vicinity - winded my  
approach. Coyote tracks from  
airstrip to carcass vicinity.

Carcass covered with fresh snow  
and small twigs. Front half & neck  
eaten. Hind quarters intact - no fat  
over hindquarters. I cut off  
injured right rear hoof for Dr.  
Jerry Zaug, Caine Vet Ctr to examine.  
Marrow of metatarsus pink-white to  
pink-clear. Collected jaw, humerus,  
and cotyledons in uterus (3).

Melted out cougar bed alongside  
head of elk.



3/7

Rush Cr ♀ still on elk kill #15  
(At least 12<sup>th</sup> day on kill). Remote Camera,  
Carcass #16 @ Taylor Ranch - old  
cow elk, unknown cause of death.

12:00 Checked signal on cougar -  
she's at carcass, so we decided  
not to change the film in remote  
camera.

PM We rode upstream to cross cut  
saw a few trees out of the trail.

CARCASS #16 An old cow elk  
just below West Taylor Ranch gate  
along Big Creek. Carcass is over  
9 days old, probably ~ 14 days -  
I saw raven activity here from  
the helicopter on 2/27. Looked for  
cougar beds & scrapes within 50m  
of carcass - none found & no scats.  
Found light colored hair & white &  
gray undercoat under a DF - maybe  
wolf. Carcass only bones, hair,  
and gut pile. Leg bones & vertebrae  
mostly articulated. Ends of bones chewed,  
all present. Teeth very worn; several  
molars broken apart, jutting out. Stifle end  
of femurs (medial) worn to bone - arthritic.

UTM 668,340 E 4,996,650 N

On 3/6 Travis Bullock flew in to  
Taylor Ranch. He saw 4 gray colored  
wolves high on the ridge between  
Canyon & Conyer Creeks. He saw a  
kill (prob. wolf) above Zettle's  
Canyon Cr camp. (200 m); another  
possible kill (magpies) just uphill  
from where trail goes into Cabin Cr  
meadow.

On 3/2 Pat Dorris flew telemetry  
for wolves. The Chamberlain Pack  
was on the Main Salmon River:  
lower Disappointment Creek.

Bush Cr ♀: we have checked her  
signal every day (from Sagebrush  
Flat) since we found her kill for  
daily predation sequence info. She  
has always been near the kill  
(slips upstream when we visit the site).

3/8 Removed remote camera -  
battery dead, some photos, box tilted  
down & camera disconnected. Rear 1/2 ♂ fetus

3/9 Sigal. Rush Cr ♀ still near kill.



3/10

GB#HA

8hr

Aerial Telemetry: 7 wolves seen on Lime Cr (E) ridge. Cougars similar to last signals.

Tracked Cabin Cr ♀ Carcass # 17 near cougar signal @ Mule Basin

Full curl ram skull in talus with carcass 17,

Air Telemetry w R. Arnold, C185, 11:53-12:43

Chamberlain Wolf Pack: <sup>(All 3 signals)</sup> visual on 7

gray colored wolves on ridge E of Lime Cr in snow. Walk, bed, not bothered by airplane. Many (elk?) tracks in snow on Lime Cr side. 5,001,100N 653,530E

Thunder Mtn Pack - no signal.

Cliff Cr ♀ # 2: Similar to previous locations.

Lower cliffs of Spring Cr. 5,000,340N 663,350E

Cabin Cr ♂ # 1; Similar to previous locations,

Just W of mouth of Goat Cr on benches,

4,997,100N 672,260E

Rush Cr ♀ # 4: On her kill in lower Rush Cr, or vicinity. 4,995,820N 668,120E

Cabin Cr ♀ # 5: Mule Basin, midslope (on near kill)

4,997,400N 667,190E

Cave Cr ♂ # 3: Similar to previous: Bottom of Rush

Cr., 2 draws above Lewis Fk. 4,993,120N 663,050E

Mt Goat on Dunces Cr wall. Few elk observed.

Carcass # 17 Cow Elk

S aspect in talus of Mule Basin, 4950' elev.; midslope. Habitat: talus slide 150 m wide with outcrops on both sides; CELE, ARTR, Ribes (spiny), AGSP, <1% PSME. 38 degrees slope = 76%?

Signal from Cabin Cr ♀ cougar # 6 in vicinity. Visibility in talus:

Ambush site: 120 m+ above carcass

- mostly slid down talus. Ambush site was in mahogany bluffs.

Ambush site visibility estimates: up 15m, Rt < 5m, L 20 m down > 200m.

Snow: none.

Carcass in open. No cover on carcass; not moved. Struggle - only drag/slide marks w/ hair & blood. No scavengers. Kill plucked. Head completely shattered - nose, mid dorsal skull cheeks, brain cavity, 1 jaw, front teeth. Claw/tooth mark around both eyes & midjaw.

Kill categories: 1a, 3, 16, 18, 20, 22, 11, 14, 6 Positive cougar kill.

Head hemorrhage from breaks mainly. Point of 1st feeding: lower neck & front



shoulder ② Left back line. ③ L HQ slight  
Kill method - massive head trauma  
(neck broken low on neck) & maybe  
neck

Utilization 0-25%. Carcass not abandoned.

No organs eaten. Muscle eaten:

cervical 30%, thorax 40% lumbar 10%

L Frt Qtr: 20%, LRQ 15% RRQ 0

All bones present

Teeth collected Rt I3 & I4 (more slanted  
& has black hole in center)

Tooth wear very irregular molars  
heavy wear. Upper molars w/  
tooth spurs.

Some dehydrated ticks on mostly plucked  
carcass

Fetus: bull calf w/ hind foot length  
1/4" less than open compass length.

Omentum fat light amount.

3/12

HA #GB

2:30-7pm

Carcass #18 Cow elk (old age) ~ 4  
days old; cougar killed.

Cougar (uncollared) near Carcass #18  
Remote camera set up at kill.

Greg check Rush Cr ♀ - still near  
kill (Day 17+).

Rode to Cabin Creek:

Cliff Cr: ~15 Elk above 3B, ~8 Elk Timber  
Bench, 9 Elk below 1B, 11 Deer below

2B, 6 Deer in Cliff Cr, w aspect,

3 Deer w knob; 22 Bighorns below B

8 Sheep x mouth of Rush + 2 Sheep upstream

18 Elk below Sagebrush Flat, 2 Coyotes  
on Rush Ridge side above kill.

10 Bighorns Lobauer in talus,

~29 Elk w of Lobauer

26+ Deer & 8 Elk (1 ♂) at Brown's  
Basin grassland, mixed group,

Mule deer carcass along trail E of  
Brown's Basin. We did not investigate.

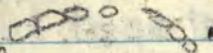
Many elk tracks on trail Cabin Cr → TR.

No predator tracks except cougar

@ Cabin Cr and Coyote @ Cabin Cr,

Bird activity in vicinity of Carcass 17  
at Mule Basin.



Carcass #18 at Cabin Cr near Slough: An old cow elk with incisors almost completely worn & divided . Cougar had plucked carcass. Ambush site 225M above kill near top of ridge. Elk killed by bite to throat / suffocation. Vulva swollen & distended, no fetus found in cursory "feel". Did elk abort fetus? Carcass <10% consumed (mainly L shoulder); lungs, kidneys etc still inside body. Mica barked & stood up on a tree. We saw the cougar in the tree. It climbed down to 8' and jumped over Mica & ran N to draw. No radio signals. Set up Remote Camera.

3/13

8:30 - 5:00 GB/HA

Track Cliff Cr ♀ - she moved from Spring Cr. Check carcass #18. - jaw necrosis. No other wolf or cougar signals or fresh tracks at Cabin Creek.

Weather: mild overnight, ~45° day, wet snow

At Cabin Cr:

Checked carcass #18. No new use, 1 <sup>remote</sup> photo taken. Collected jaw. There was an abscess hole under chin and jaw necrosis on lingual side of right jaw - bone deformation at root of small (extra?) (lingual) tooth. Photo of bite to throat & jaw necrosis. Confirm no uterus present. Remove remote camera <sup>battery dead</sup> ↑

We snowshoed up Spring Cr ridge (to S) to get a close triangulation on Cliff Cr ♀ #2 - suspected a den or kills since she has been on Spring Cr cliffs since (Jan 16) Jan 24. Well, since 3/10 she moved from the cliffs in Spring Cr. We had a weak signal from several locations as we slogged thru wet snow (up to 2' deep) up to 6000' elev. No signal in Spring Creek. We travelled S to



the elk carcass (#18). Still only a weak signal towards Brown's Basin from the carcass.

We did see bobcat tracks & snowshoe hare tracks & grouse tracks @ 5000-5600' S of Spring Cr along steep deep snow ridgeline. Saw cougar tracks - 1 adult, travelling to Carcass #18 from 3/4 mi away (knob to NE). We saw very few elk - 1 group of ~10 on W side of Spring Creek outcrops; 3 on Cow Cr. <sup>lower</sup> all 54-5600'. 10 mule deer on Vinegar Hill bare slope, midslope. 1 moose feeding on Prunus? 150M W of Cabin Cr. across from Spring Cr. Heard Canyon Wren in Spring Cr. outcrops.

Collected jaws from Carcass #18 and Carcass #12 (in Cabin Cr). Elk Carcass #12 is another very old cow, with well worn teeth.

Checked signals on all wolves & most cougars often - no signals - not even Chamberlain Pack from Mile Hi or Acorn Butte.

3/14

All day w/ Greg

Carcass #19 Mule deer at Cave Cr.  
Carcass #20 Wolf killed elk at Doe Cr.  
Elk abundant along Big Cr at Cave Cr & Browns → Taylor Rch; not on open slopes of Cabin Creek

No signals @ Cabin Cr. (<sup>very</sup> faint to SE on Cliff Cr ♀). No elk seen up Cabin Cr. Rode & snowshoed up Canyon Cr. in search of possible kill reported by Travis on 3/6 - one wolf track (old) from mouth of Canyon Cr. to above Zettel camp. No carcass or bird activity up to 600M upstream from Zettel camp. A moose is wintering in this area.

Rode up Big Cr. to Doe Creek: No predator tracks.

Mule deer <sup>doe</sup> carcass (#19) on the ice along Big Creek 50M upstream of Cave Creek. Skeleton intact, although looks like ~3 weeks dead. Primarily bird feeding? Nasal & orbital area chewed; no other bones (not even ribs). Rumen contents 4m. away. Non predation?



Cow elk carcass across Big Creek trail below Doe Creek. (#20):

At least 10-15 days dead, but very little consumed - most organs remain except uterus/bladder. Bites to eye, ear, and throat at jawline with sub Q blood indicates a kill. Travis saw wolf tracks here 8 days ago. Why didn't wolves eat this elk? Body fat  $\approx 0\%$  - no kidney, omentum, sub Q or femur fat. 1<sup>st</sup> carcass we have seen with jelly like bone marrow. Arthritis in femur - stifle and shoulder - humerus joints - soft, mushy cartilage, some wear spots. Ribs all intact,  $\sim 10\%$  consumed, probably mostly bird scavenging. Is this carcass an example of wolves leaving a carcass, because body fat was too low - as Val Geist<sup>his</sup> suggested?

Carcass #18 had been fed on last night - ribs eaten off, some meat consumed.

56 elk (49 cows, 4 cf, 1 spike, 2 Spts)  
1<sup>st</sup> open slope downstream of Cave Cr. mouth.

8<sup>7</sup> deer with 56 elk.  
24 elk (14 cows, 1 cf, 1 6pt, 8 unk)  
at Browns Basin.

16 mule deer w/ elk in Browns B.,  
grassland / lower slope.

49 elk (46 cows, 1 spike, 2 raghorns)  
Lobauer Basin & along Big Creek  
downstream.

7 elk (7 cows) Taylor Ranch airstrip  
3 elk (3 cows) on Big Creek @ Rush Cr  
Kingfisher, dippers, R.S. towhee, chickadees

Cliff Creek ♀ cougar signal - high on  
Brown's Basin side of Brown's x  
Cabin Cr. ridge.

Cabin Creek ♀ cougar signal - near/at  
<sup>rox</sup> Mule Basin kill.

Rush Creek ♀ cougar signal - near  
her Rush Cr. kill.

No other cougar or wolf signals  
heard in last 3 days.

Elk ratio from above: 139 elk (119 cows, 5 calves,  
2 spikes, 2 ragh, 25pt, 16)



3/15

Rush Cr ♀ #5 is still at her carcass of  $\leq 2/24$ .

Elk & sheep on benches.

Snow melting fast,  $56^\circ$  at T.R.

Tried to capture/dart bighorns on benches - no shot but did get composition on elk & sheep.  $56^\circ$  F.

20 bighorns (13 ewes, 5 lambs  $\langle 2 \sigma 3 \text{♀} \rangle$ , 2 I) in suale-paw for dicots 1" growth. 6 deer (5 does, 1 fawn) in 3 groups - 2 with sheep on W aspect DF. 37 elk

(36 cows, 1 raghorn) on 2 bench - feed & tongue hanging panting. 1 cow is very malnourished - femur & backbone prominent.

Checked Rush Cr ♀ signal from across Rush Creek. This cougar is still at her kill of  $\leq 2/24$ . No other signals.

3/16

w/R.A. Cessna 185 3:23-4:24

### Aerial Telemetry:

2 wolves seen + pack signals at Coxey Cr, w. Fork

Cave Cr ♂ #3 moved from Rush Cr to Cabin Cr near carcass #18 and cougar #2.

Cliff ♀ #2 in upper Browns B. (w ridge)

Cabin Cr ♀ #5 near her kill #17 mule

Rush Cr ♀ #4 is near Basin her kill #15 on Rush Cr

Cabin Cr ♂ #1 is on E side of Cougar Cr midslope near mouth.

### Chamberlain Wolf Pack (3 signals):

visual on 2 light gray wolves - went over ridge out of their beds. 3 signals. They are in W Fk Coxey Cr on small ridge. Snow 80%, few elk seen.

655,510 E 5,003,670 N elev. 5400'

Cliff Cr ♀ #2: Near cliff-outcrop on W edge of Brown's Basin above #18 kill. 664,120 E 4,998,900 N elev 5500'

Cabin Cr ♀ #5: In Aule Basin midslope near her kill in talus.

667,200 E 4,997,330 N elev. 5200



Cabin Cr ♂ #1: On E slope of Cougar  
Creek above rims near mouth

671,890 E 4,997,880 N elev. 5100'

Rush Cr ♀ #4: Close to her kill in Rush Cr.

667,960 E 4,995,860 N elev. 4200'

Cave Cr ♂ #3: He moved out of Rush Cr  
to Cabin Creek area - weak signal.

Is near cougar kill #18, but on S side  
of Big Creek. He was not there on 3/14.

662,840 E 4,998,180 N elev. 4350'

Few elk seen on flight - 1 group of  
~15 in Browns Basin below cougar #2.

3/17 Aerial Telemetry - Pat Dorris.

The Chamberlain Pack moved since  
yesterday. He said they were in  
Cow Creek this morning, headed  
up the trail.

3/18

Cliff Cr ♀ #2 moved to Mule Basin kill #17

Rush Cr ♀ not heard. Cave Cr ♂ not heard.

No wolf signals (maybe faint up Cow Cr.)

Wolf tracks (metted) at all 3 cabin Cr  
carcasses checked (#7, 12, 18) <sup>#18 Fed</sup> on

Taylor Rch → Cabin Cr. Signals:

Rush Cr ♀: no signal; usually its  
weak from Rush Cr gate on trail.

Has she moved? <sup>(3/18)</sup> <sub>(3/10)</sub> Yes, confirmed by Greg.

Cabin Cr ♀: no direct signal from  
her mule basin kill today, but  
bounce signal indicates she's  
in the area.

\* Cliff Cr ♀: loud signal from  
the Mule Basin kill area. Has  
she taken over kill? Is the Cabin  
Cr ♀ her offspring? Did she leave  
Cabin Cr. because the wolves  
passed thru on 3/16 pm - 3/17 am?

Cave Cr ♂: No signal. He is not  
near Browns B. or Cabin Cr as  
on 3/16.

Cabin Cr ♂: No signal.

Chamberlain wolves: No signals, but



wolf tracks at Cabin Cr. (4 sets?)  
melted out but on the surface  
on the road/trail toward buildings.

\* Checked carcass #18. Its mostly  
consumed. Scapula & leg disarticulated.  
White hairs & soft guard hairs rubbed  
off on a rock at carcass - wolf.  
Ribs & spines chewed, but not leg bones.  
Collected femur. I cut humerus -  
marrow soft pinkish white. Some cartilage  
wear on  
humerus.  
Set up remote camera. 17 elk  
nearby. Wolf tracks below carcass.

\* Carcass #7 revisited. Collected  
Ivory for tooth aging (jaw not found).  
Melted out wolf tracks < 48 hr old,  
- same vintage as carcass #18.  
Found a cougar scrape deep in  
Juniper branches, 8' from  
carcass. This carcass is now  
designated "probable" cougar kill.

✓ Carcass #12: wolf tracks in vicinity.

Spent night @ Cabin Cr.

3/18 Wildlife Sightings Taylor R → Cabin Cr.  
4 elk (4 cows) E side Mule Basin  
8 bighorns Mule Basin  
8 mule deer W. side Mule Basin with  
16 elk  
5 mule deer W. of Lobauer, bed in snow  
to keep cool  
3 mule deer (1 doe, 1 fawn, 1 buck) @ Brown's  
1 mule deer (1 doe) @ Brown's Basin  
17 elk (15 cows, 2 calves) at Brown's  
outcrops then to Cabin Cr side next to  
Carcass #18. 3 of these elk are in  
poor condition (2 ribs show, 1 backbone/  
withers prominent). Calves look ok.  
  
12 robins at Cabin Cr - 1st of year  
hundreds of juncos at Cabin Cr -  
recent arrival < 2 weeks ago.

CONTINUED IN BOOK #2



## Blood Samples from Capture

Collect  $\geq 15$  ml of blood

Add 1.5 ml blood to each of 4 storage tubes containing 13.5 ml buffer

Label & store at room temp.

Use rest of blood in red top tubes

Let sample sit at room temp 15-20 min

Centrifuge. Draw off 2ccs serum / cryotube. Label, freeze upright.

## Skin biopsies:

Shave 2" square inside thigh. Cleanse 3X each w/ Betadine & alcohol. Obtain 1x2 cm

piece of skin (only) w/ scalpel or scissors. <sup>sterile</sup>

Put skin in <sup>sterile</sup> tube w/ 13.5 ml lysing buffer. Macerate & process @ Taylor Rch.

Fecal Samples (< 24 hrs old): from rectum or ground. Small samples in 2 containers. Mix feces w/ media.

A 100 lb cougar @ 200 mg Ketamine = 1-2 ml dose  
+ @ 100 mg Rompun = .2-.4 ml dose

BEOC = water birch

PHLE = syringa

BERE = oregon grape

ELGI = giant wild rye

## Immobilization of Cougars

Norms: Heart 70-90 bpm, 8-15 breath/min Temp 100-104

Rompun .2-.4 mg/lb IM + Ketamine 2.0-4.0 mg/lb IV

(50-100 lbs: 10-40 mg R + 100-400 mg K)

100-200 lbs: 20-80 mg R + 200-800 mg K)

supplement anaesthesia w Ketamine 100 IV .25 mg/lb

Seizures: Valium @ 5 mg/ml = 1 ml / 100 lbs IV

(1/2 dose if respiration < 10/min)

Terminate anaesthesia (Rompun) w/ Yohimbine @ 2 mg/ml

= 0.02-0.04 mg/lb IV (usually 1/10 Rompun)

Respiratory Arrest  $\leq 5$  breaths/min use

Dopram @ 20 mg/ml : 0.25 mg/lb IV (+ Yohim)

can repeat dose after artificial respiration

Cardiac Arrest (poor recovery) use Epinephrine

1-5 ml IM. Dose can be repeated.

Shock (pale gums, weak pulse, shallow respir.

cold extremities) or dehydration (sunken eyes, skin)

administer fluids IV if possible or sub Q:

40 ml/lb for shock, 20 ml/lb for slow wake up.

For shock follow w/ Dexamethasone 4 mg/ml: .25-1.0 mg/lb IV



PREY CARCASSES 1999

#	firm date	Species	Age/Sex	Predator	Scav.	Location
01	1/11	Elk	calf	cougar		Cabin Cr.
02	1/11	Bighorn	ewe	cougar	wolf	Cliff Cr.
03	1/11	M. Deer	unknown	(cougar)	wolf	Goat Creek
04	1/11	Bighorn	ewe	cougar	wolf	Cliff Cr.
05	1/11	M. Deer	yearling?	coyote		Pioneer Cr.
06	1/11	cottontail	unk.	coyote	wolf?	Goat Cr.
07	1/17	Elk	cow	cougar	bobcat	Cabin Cr.
08	1/15	M. Deer	doe	wolf	wolf visit	Acorn Cr.
09	1/15	Coyote	pup	wolf		Garden Cr.
10	1/18 started	M. Deer		cougar		Browns Basin
11	1/24	Elk	cow	cougar	coyote	Rush Cr.
12	1/31	Elk	cow	none	wolf	Cabin Creek
13	1/30	Elk	cow	cougar	bobcat	Garden Cr.
14	2/2	Coyote	yearling	cougar?		Rush Cr.
15	2/28	Elk	cow	cougar	coyote (bobcat)	Rusher
16	3/7	Elk	cow	cougar		Taylor R.
17	3/10	Elk	cow	cougar	cougar #2	Mule B.
18	3/12	Elk	cow	cougar	wolf	Cabin Cr.
19	3/14	M. Deer	doe	unk		Cave Cr.
20	3/14 (3/16)	Elk	cow	wolf	other cougar	Doe Cr.
21	3/19	Elk	cow	wolf		Garden Cr.
22	3/19	M. Deer	fawn	wolf		Coxey Cr.
23	3/20	Elk	cow	wolf		Coxey Cr.
24	3/12	M. Deer	doe	unk/pos. cougar		Browns B.
25	3/23	M. Deer	doe	cougar #1	cougar #3	lobauer B.

Femurs / humerus collected: #2

#7, #8, #11, #12, #13, #10?, #15, #18

#13, #16, #19, #20, #21, 22, #23, 25, 32, 33, 34

Jaws / teeth collected: #4, #8, #7, #12

#12, #13, #15, #16, #17, #18, #19, #20, #11

#21, #22, #23, #24, #25, #26, #27,

#30, #31, #33, #34, #7, #11, #16

Metatarsus: #1?, #7, #16, injured #11 & #30

Marrow examined: #1 pink, #2 white, #3 white,

#5 pink, #8 pink, #12 pink, #13 pink? #15 soft pink

#16 pink #18 soft pink, #20 red, #21 red, #22

soft pink, #23 soft pink, #24 yellow white #25 pink

Arthritis: #16, #18, #20, #23, #25

#26 yellow white

#11 #7 17 12 etc

Saw thru humerus #19 #21

Femurs to Collect:

Jaws to Collect:

#4? #5? (10?)

#2, #5

#17 Mule Basin, #21

#10? Browns B.

Metatarsus to Collect:

#32 cant find

#12, #13, #17 #15

#17



# Project Ideas / Questions

Wolf GPS collars - downloadable + motion sensor - To locate sites where wolves spend time (kills or scavenging) between travelling so sites can be visited & assessed (see 1/11 where wolf visited / fed at 3 cougar kills, but would not have been detected via predation sequence). Can monitor night behavior / movements. Further:

Is prey selection & % scavenging different among packs and lone subadults? Loners scavenge more? Use GPS collars to check sites.

Remote cameras for utilization of kills - daily, hourly? Set up on fresh kill for 3 days? Learn how quickly consumed & by what.

Test affect of human disturbance on return to kill sites this year - is remote camera utilization possible?

B9	8.105	♂
B16	8.045	♀
Mica	8.860	Sub♀

	8.710	
B22	<del>8.485</del>	♀

#1	9.867	Cabin Cr ♂	Yellow Brown
#2	9.254	Cave Cr ♂	Green Yellow
#3	9.820	Cliff Cr ♀	Green
#5 = new #4	9.564	Rush Cr ♀	Dk Blue
#6 = new #5	9.778	Cabin Cr ♀	Brn/Purple

Blood sample from Coxe Tom labeled #4, blood on Rush ♀ & Cabin ♀ labelled #5, #6 altho we call them 4 & 5

B57	8.864	grey ♂	1998	} T.M.H.
B58	8.810	grey ♂	1998	
B59	9.652	grey ♂	1998	
B71	8.995	black ♂	1999	
B72	8.975	black ♀	1998	
B38	8.770	grey ♀	1997 (98?)	Stanley

UTM Cabin Creek Cabin 662,800 E  
5,000,340 N



Photos (Canon)

1:1-6 1/11 Cliff Cr bighorn ewe cougar kill #02

1:7-8 1/11 Cliff Cr ♀ collared.

Video of Carcass #02.

1:11 1/16 Log at Cabin Cr cougar killed elk

1:12-14 1/17 Bed of Cabin Tom

1:15-16 1/17 Tree scratching 40" DF

Jim 2 rolls 1/24 Cougar killed injured

<sup>18</sup> photos cow elk on Rush Cr - site, kill,  
pastern joint, teeth, subQ hemorage

Roll 3: 2-5 <sup>3/5</sup> Rush Cr ♀ killed elk at

Rush Cr, injured hoof. Day 8+ on kill.