

"Rite in the Rain"®

ALL-WEATHER WRITING PAPER



# HORIZONTAL LINE

All-Weather Notebook

No. 391

BIG CREEK

WOLF - COUGAR

winter 1999-2000

Book 2 of 2

4 5/8" x 7" - 48 Numbered Pages





3/28

C-5 cougar not located in head of Brown's Basin as was yesterday.

3/26 C-5 sequence disturbed by hounds & hunters, but no pursuit & carcass gone.

ON 3/26 Dusty & Doug Youren & cougar hunter split up to hunt Cabin Cr (Doug) and Cow Cr (Dusty + hunter). Evidently Dusty decided to ignore our request to avoid disturbing our sequence cat in Cow Cr. They did not think our crew was still around working. Renan was 15 min behind hunters on the trail. C-5 had upcanyon wind to her kill & was moving downstream & to Calf Cr as hunters crossed above her kill in pursuit of treed bobcat. Renan worked mule deer carcass from C-5 = exactly where we had pinpointed it. Extremely old doe with 3 missing teeth & abscesses on top & jaw! Doug treed a 165 lb tom up Cabin Cr for hunter; Renan took photos & measurements.

3/28 Rode Penny to Brown's Basin - no C-5 signal there today.



3/29

3/30

Wolves @ Cave Cr 3/29, @ Cabin Cr 3/30  
Heard elk running across Big Creek  
pursued by wolves @ Cabin Cr flat

3/29 Renan air telemetry: C-5 in Spring Cr  
west side; Wolves Upper W Fk Cave Cr  
(B-16 & B-50)

3/30 Holly air telemetry: C-5 on Spring  
& Calf Cr ridge, high. Wolves on  
upper grass slopes of Cabin Cr near  
Brown's Basin and C-5 deer kill #1  
in this sequence. C-1 returned to  
C-3 kill area again. C-2 below  
Mouth Snowslide @ Monumental.

C-4 toward helispot above Lewis Fk.

3/30 6pm - Left Taylor Ranch with 5 head  
to go to Cabin Cr to monitor wolves  
& cougar (C-5).

1 Deer TR 9 Deer Ram Canyon 1 Deer Brown's  
Signals on B-50, B-16, B-9 in Cabin  
Cr flat at 8pm. Dusk, almost dark.  
Heard many elk running (rocks &  
splashing) across Big Cr to South

They were upstream of Canyon Cr at  
E end of the flat on S side Big Cr.  
Wolf signals loud & in that direction  
Mules stopped at Spring/Bog to  
listen. No howling, but obvious  
the wolves had made a chase. No flash-  
light handy to check the receiver  
gain, but alpha pair seem across  
from mouth of Cabin Cr and B-50  
may be closer to the trail - she  
could be N of Big Cr. Strong down  
canyon wind. Mules don't smell  
wolves.

Unpacked loads. Fed & watered  
mules. Checked signals from  
Cabin every hour. At 11pm all 3  
signals still down Cabin Cr toward  
sound of the chase. I think they  
have made a kill. Will check in  
Am. No C-5 signal this evening.



3/31 Deer, elk, bighorn remains.

C-5 travelled from Spring/Calf to "East" Fork Cabin Cr (>5 miles)

Chamberlain Wolves on their elk kill 8pm-8am then W edge Cabin Cr flat, then Vinegar Hill above airstrip in PM, returned to kill (Carcass #32) at 8pm

4:30 AM B-16 & B-50 signals from Cabin Cr cabin window toward Big Cr

6:30 AM All 3 Chamberlain wolf signals toward Big Cr, from cabin. C-5 Cabin Cr Cougar signal up Cabin Cr on W, from cabin

8 AM. Same. C-5 definitely up Cabin Cr Maybe 1-1/2 mi, but not line of sight from outhouse. Did she make this move because of wolves? Did they howl or did she smell them when they were near her at Spring Cr x Grassland ridge? She moved more after wolves than after hounds moved her

9:00 AM The wolf kill is along Big Cr on N bank, across from aspen forest & between upper flat (S side) and Canyon Cr. Carcass not visible from trail area. 20 ravens & ~20 magpies at kill site. 1 imm bald eagle.

Wolf signals weaker (B-50) and gone (B-16, B-9) by 10:00. B-16 ~~is~~ to move off - up Canyon Cr? B-50 near mouth of Cabin Cr or on S bank knoll - no visual. No howling heard last night. 1 wolf track down trail between airstrip & cabin. Pileated WP. Kingfisher caught 2 large insects(?) in pond below me.

11:00 Observed elk carcass from 400M away. Looks almost totally consumed in 12 hours. Magpies & ravens cleaning off ribs. Wolf signals weak to W. They may be leaving the area.

2:15 Good signal on C-5 at forks of Cabin Cr. (42 gain) - just up the E Fk & moving upstream. I climbed ridge between forks & signal. got fainter up E Fk (on middle ridge overcrop caves, decomposed granite slope). Nice cave 300 M up E Fk & 200M uphill on NW side = 4' deep, 3' high, 10' long with vegetation/soil ridge in front & flat soft bed of cave. No hair (cougar) found in/on cave; some deer bones. Good den potential.



Deer Carcass: spotted a hair pile on the snow + ribcage 1 scapula 1 lower front leg. No bones chewed - not even cartilage on scapula. No head/jaw. Then I noticed head & hind half were sawed off - oh a hunter killed buck that had front 1/2 boned out. A good comparison for our known & unknown kills/carcasses. While searching for the jaw I found an old bull elk skull with antlers rotted off underground (very worn teeth) AND a mature bighorn skull - very old & rotted. Unusual spot for a bighorn at forks of Cabin Cr (100m up E Fk in riparian).

5:00 pm Arrive back at cabin. All 3 wolf signals on Vinegar Hill slope, B-9 & B-16 above lower airstrip, B-50 above cabin.

6:30 - 8:00 pm Watched, listened, telemetry from E hillside above lower end airstrip 5 Deer (3D, 2F) and 3 Deer near alphas, 2 Elk lower Vinegar

7:00 B-50 went toward carcass, no signal by 7:30. Other 2 same as before.

7:45 B-16 & B-9 signals on lower Vinegar Ridge. Too dark for binoculars, but I see 2 wolf silhouettes on the Vinegar Hill skyline  
8:00 Back to the cabin. All 3 signals can be heard well from inside cabin - toward Big Cr. They must be returning to the carcass. ?? Anything left?  
No evening signals on C-5. No howling heard. I had hoped to see a chase scene off Vinegar Hill: wolves → deer. Wolves were ~ 1 mi from their kill.



4/1/00

Wolves left Cabin Cr after 5:30 AM and were located by Root Ranch 12: noon!  
C-5 located high in main Fk Cabin Cr (new range extension/outlier for her winter range)  
Carcass #32 Wolf Kill a midaged Cow, good condition, totally eaten in <36 hrs

5:30 AM All 3 wolf signals toward airstrip from Cabin (gain 4.0-4.5 = 400-500M away). B-9 is closest

6:45 AM No signals! Maybe B-16 up Cow Cr.

8:30 To Vinegar Hill w/ Cricket & Rocky.

10:30 No signals on Chamberlain Wolves or C-5 cougar up Cabin, Cave, Cow, Spring etc. Did get signal on C-4 toward heliport direction (general, but she must be high).

12:00 Carcass # 32 investigated. This is a mid aged cow elk in good condition. The wolves chased her (I guess across Cabin Creek) at 8 pm 3/30 with a large herd of elk. The wolves disemboweled her 15m from her carcass. They must have turned her back to the east and likely used the 3 1/2 foot streambank to facilitate the kill, 100% consumption

= wolves 8pm-8am birds 8AM-8pm Wolves 8pm-

Renan is flying telemetry to locate the C-5 and wolf pack, so we can estimate daily movements and movements relative to each other:

Wolves near den site @ Root Ranch - 20 mi  
move in ~ 6 hours

C-5 at upper N end of Cabin Cr, main fork

When I hiked down Vinegar Hill to the kill I saw wolf tracks in the saddle on ridgeline where I saw 2 wolves last night. Also wolf track down ridgeline trail + 2 scats (meat) - collected one. Leg of mule deer dead this winter - no other parts. Elk have browsed CELE, PUTR, CHNA heavily on V. Hill. Many elk droppings from winter 12 elk (10 cows, 2 calves) on Cave Cr side.

< 5 am



4/4

Carcass # 36 Mule deer @ Rush - cougar kill

Carcass # 37 Mule deer @ Rush - cougar kill

A potential cougar ambush site

On 3/25 - 3/31 Rush ♀ (C-4) could have been localized @ mouth Lewis Cr. Locations there for 3/25, 3/27, 3/30

I headed up switchback trail to go to Lewis Creek, but got delayed finding other kills:

Carcass # 36: A cougar killed mule deer at 1st draw on Rush Cr<sup>on W</sup> by 1st trail switchback. < 6 days old all meat consumed. No head/jaw or scapulas, no front leg. Guts buried; hair piles & sticks buried in several places, fresh blood, no injuries. Ambush > 100M above; carcass slid > 60M down draw - hair trail Cougar hair 2 1/2' high and deer hair in broken bitterbrush branches. Cougar rode deer - did deer try to rub it off? 2 scrapes under P pine & DF - both w/meat scats.

13  
Sagebrush, AGSP, FEID, PUTR, habitat. Shrubs provided predator concealment. 15-40M visibility. Soft marrow fat Cougar hair tuft and deer hair tuft in trail @ upper switchbacks. No other sign. Was this an attempted ambush?

Carcass # 37: A cougar killed mule deer doe below trail just past Rush Cr switchbacks. 1 day old. Only ribs & back meat eaten, No flies, no birds. Did I & Mica spook the cat off the kill? Ambush > 250M above carcass. Deer was slid most/all of 250M distance from trail area down - major hair trail + drag marks. In ARTR AGSP, FEID, PUTR, PHLE habitat with talus. Shrubs conceal predators. Doe had 63 & 39 otobius ear tick adults (+ many imm ticks) in each ear. Could she hear? 6 nasal bots at jaw/esophagus. Skinned neck = massive haemorrhaging and bites to throat = cause of death. Neck may be broken at Cerv. vert 2 & 3. Bed at kill. Grass & hair & twig covered carcass under syringa bush, in talus. soft marrow fat.



We are doing a predation sequence on C-4, but she does not seem to be involved in either kill:

- ① She is at Canyon Cr today & yesterday.
- ② She has been located <sup>in last week</sup> every 2-3 days - mostly at mouth of Lewis Cr, never in this vicinity. Are these kills from the female cougar with the kitten - from Ram Canyon or an unknown male?

I returned down trail to mouth of Rush Cr - too late to explore Lewis Cr today. No signals from Sagebrush Flat or trail above Switchbacks. Ribes leafing out. Green wing teal pair on Rush Cr.

- Carcass #38 Cougar killed coyote  
 Carcass #39 Cougar killed mule deer  
 Carcass #40 Cougar killed mule deer

To Lewis Fk. No signals @ Sage Flat, Switchbacks, Rock Gate (except both bighorns). Renan flew telemetry. I went up switchback ridge, 4 ravens, 4 magpies, 1 golden eagle near Carcass #27. Doesn't look like cougar is back. Ambush site was 30 m above trail, but deer first went down & slid at trail. ~250 m from ambush to carcass. Visibility at ambush up 20 down 30, Left 10 Right 15.

Carcass #38: I cut down draw below rock gate to look for tree with cougar hair that Jim found. The PIPPO on the Side Hill (E) had 2 piles of hair plus 2 beds. It looks like coyote hair <sup>black + brown + white</sup> plucked from a carcass by a cougar. There are small pieces of hide with some hair tufts. Was this near where Jim found the fresh coyote skull?



This site is ~200M from C-4 location on 3/22 and 3/23. It is probably her kill - 2nd one for this sequence.

Carcass #39: I asked Mica to "show me cougar" and she led me 400M to this kill. It's a mule deer - right where C-4 was located on 3/22 & 3/23! Definite 160M cougar ambush/hair trail. Carcass under a shrub. Tails nearby. A predation sequence kill. Legs but no head, vertebrae, ribs.

Carcass #40: An accidental find Mica marked when I stopped for food & water. A mule deer fawn buck (1/2" pedicels). Femurs & humerus broken, marrow soft white, but old. Carcass ~45 days? 1 scat, old & moldy at a scrape. No ambush trail evident. No ribs & vertebrae. Large bedding around hair pile. Site 300 m above Lewis Fk on W side.

Collected jaw on a cow elk carcass from last year - 1/4 mi below Lewis Fk on river "trail".

Cave at base of cliff along game trail @ Rush downstream of Lewis Cr

Potential cougar den - nice overhang 6' depth & 15' width, some grass on edge. 30M above Rush Cr & trail. There is a cougar kitten jaw & skeleton in the cave. Collected jaw & several other bones. No it may be a river otter jaw.

Collected jaw (1 side) from a 1999 cow elk carcass at Rush Cr riparian (near cave, above)

Collected incisors (broken from weathering) from a 2nd younger aged cow elk carcass at lower Rush Cr from 1999.

NOTE: Not a cougar kitten jaw. Teeth 3I, 1C, 2Pm 3M. Likely a young river otter. Canine is hollow (deciduous?) Incisors look deciduous too - actually looks like ~~2~~ 2 rows 1 canine each side.



4/20

w/ Cheryl Bartram 19

## HARLEQUIN DUCK SURVEY

Big Creek @ Smith Cr → Beaver Cr

No Harlequins Seen Today

Elk on flight: 150 @ Vines Ranch 60 @  
Miletti 8 @ Acorn 20 @ Lime 30+ elsewhere

4:30 Left Big Cr airstrip with backpacks.  
Could not get good view of Big Cr.  
til Smith Cr.

6:00 1 pair mergansers in shallows  
T 21N R 10E S 18 NE 1/4 SE 1/4  
along N bank.

## CARCASS #44:

6:30 Elk carcass - possible wolf  
kill. At start of talus open  
T 21N R 10E S 17 SW 1/4 NE 1/4

Scapula, pelvis, hair, fractured bones.  
Looks calf sized. 4 wolf scats,  
1 wolf track + sm wolf track in  
trail 1/2 mi downstream. Kill ~ 2 mo  
old. In riparian - to Big Cr.

Moose tracks: Big Cr airstrip to Monumental.

7:15 End survey. Camp across  
from Little Marble Cr, near Beaver Cr.

8:30 Merganser pair flew down-  
stream.



4/21

w/CB

## HARLEQUIN DUCK SURVEY

Beaver Creek → Monumental on Big Cr.

No Harlequins

- Ground squirrels call @ Copper Camp
- Old wolf tracks near Copper Camp (2 animals).
- Abundant old wolf tracks in mud on trail 1 mi upstream of Big Ramey Cr
- Yearling moose 1/2 mi above Big Ramey.
- Cow moose 1/2 mi above Big Ramey.
- Water shrew on trail 1/2 mile above Crooked Cr.
- Marmots calling in talus ~ 3/4 mi above Big Ramey.
- Possible wolf killed calf elk on trail 1/4 mi above Crooked Cr. (previously documented by Jim in March)
- I collected 6 of ~10 winter wolf scats on trail between Smith Cr & Crooked Cr.
- Merganser ♂ (+ ♀?) floating out of Monumental Cr into Big Creek.
- Stream flow is pre peak flow, but some color in Monumental & Crooked Cr. Increasing color & flow by evening.

4/21 cont

6:00-9:00 pm

Monumental Cr to Coxeys on Big Cr.

No Harlequins

- Merganser pair 1/4 mi above Acorns, swim downstream.
- Merganser pair 1/2 mi below Acorn. Same pair as previous?
- Merganser pair at Hard Boil? Bar.
- Rubber boa @ Acorn? above?
- Garter snake above Lime Cr.
- 26t elk at Acorn airstrip:  
22 ELK (20 cows, 2 calves)
- 4 elk (4 cows) Lime Cr.
- AGSP has 1 foot grass length!  
Elk have plenty to eat down low.
- Blooming plants: AMAL, RICE, Lithophragma
- Ruffed grouse drumming Monumental, Coxeys etc.
- 2 pairs dippers: Beaver to Monumental  
1 pair below Monum.; Cliff habitat
- Elk hide on trail 1/2 mi above Mile Flat



22/10

# HARLEQUIN DUCK SURVEY Coxey to Taylor Ranch on Big Cr.

No Harlequins

- Merganser ♂ above Vines Ranch <sup>float</sup> <sub>downstr.</sub>
- Merganser ♂ at Vines Ranch (same as last observation)
- 5 Wigeon @ Cabin Creek
- 2 pr Mallards @ Cabin Creek
- 9 green wing teal @ Rush Creek
- Canyon wren at w side Mule Basin @ Cliff

## Jim & Dale's Survey on 4/21 Taylor → Coxey

- Merganser pair @ TR
- Merganser pair @ Lobauer Basin
- Green wing teal pair @ Rush Creek
- Mallard pair @ Lobauer
- Merganser trio (2♂, 1♀) @ Cabin Creek
- Canada goose pair at Cabin Creek
- Green wing teal pair above Cave Cr.
- 2 Mallard pairs @ Cabin Cr.

Green wing teal pair above Cave Cr  
 Merg pair @ TR, Lobauer, 2♂ 1♀ Cabin Cr  
 Mallard pair Lobauer, 2 pr @ Cabin Cr  
 Green wing pair mouth Rush  
 Can goose pair @ Cabin Cr

- 5 widgeon @ Cabin
- 2 pr mallard @ Cabin
- 9 green wing mouth rush



4/25, 4/28

Elk comp 1st bench: Jim  
 Elk comp Taylor airstrip: 40E (33C, 6cf, 1sp)  
 Air telemetry 4/28

4/28 Telemetry  
 C-1 Vinegar Hill, draw above cliffs of Cave Cr  
 C-2 Diamond Peak, Big Cr side, high-top  
 1st drainage W snow + forest  
 C-4 Eagan Cr midslope above Soldier Bar  
 C-5 Cliff Cr burn above lamb cliff

## Chamb Wolves:

B-16 & B-50 Below lower Root Knob to S  
 B-9 on knob WSW side  
 B-80 N of Grass mtn

## Bighorns

#53 (150, 110) heard while flying high  
 over Big Cr airstrip - toward Thunder  
 mtn / Big Cottonwood and WFK Monumental  
 #50, 51, 52, 54 all at Cliff Cr.

4/26

Coxey Camp Packing

w/ Cheryl & Dale  
Borum 25

Elk comp @ Vines: 52E (47C, 2cf, 3spike)  
 Cougar seen @ Garden Cr  
 Elk comp @ Mile High 126E (112C, 12cf, 2bull)  
 Elk comp @ Cabin Cr 28E (25C, 1cf, 2sp)

## Cabin Creek:

8E (8C) + 1 coyote flats on E side  
 20E (17C, 1cf, 2sp) + 1 coyote flats on  
 W side. Both groups spooked uphill  
 from us, but tongues hanging. Feed on  
 slopes afterward.

Wolf tracks both directions Cabin Cr →  
 Mile Basin. 2 day old.

Steelhead @ Cave Cr hole

Golden eagle pair @ cliff W of Cabin Cr,  
 @ stick nest (on E side this year)

Swifts at Cave Cr cliffs & twd Cabin Cr.

Doe Cr: Spotted? frog at spring.

Vines: E of & above trail

51E (46C, 2cf, 3spikes)

1E (1C) Doe Cr spring



Garden Cr kills 1999:

1 older cow, 1 calf

Pre 1999: 1 older cow, 1 m. deer

Mile High

Wolf track by Travis' camp.

Cougar seen in lower Garden Cr

(near site of cougar on elk kill in 1999)

126 Elk (112C, 12 cfs, 1 sp?, 1 shed bull)

Wolf tracks W of Cabins on trail

Check/match w/elk  
info I gave Jim

Coxey Cr kill - fawn? - hair & bone  
fragments at trail, 1/4 mi below forks

2 cougars @ Gooseneck / Lobauer  
Elk camp for Vines, Cabin Cr, down-  
stream.

Return from Coxey Camp Packing

17E (17C) W of Vines Ranch. I collected  
6 pellet groups for fecal pregnancy  
testing

7E (6C, 1cf) Cabin Cr flat

4 Snipe @ Cabin Cr flooded "pond"

51+E (39C, 9cf, 2 sp., 1 Spt+) at  
mouth Spring Cr.

Picked/dug hops at Spring Cr  
cabin site

22E (19C, 3cf) E Cabin Cr flat - <sup>above E of</sup> moved uphill

5E (5C) E cabin Cr Flat. - stayed in  
place

6D (5D, 1F) + 3D Cabin Cr.

2E (2C) Cabin Cr.

Dippers @ Cliff between Browns B &  
Gooseneck.

Fat, short, yellow rattlesnake at  
Spring Cr, near bottom - no movement  
no site warm temps.



4 E (4C) @ Gooseneck, S side.

2 Cougar kittens (60 lbs) E of Gooseneck. Adult track in (downstream) the trail. We watched each kitten move uphill through rocks & talus.  $\curvearrowright$  slow walk.

5/7

### Air Telemetry

- C-1 Coxeys Forks, above
- C-2 Diamond Peak, E side
- C-4 Across Big Cr from Cougar Cr, above grassy slopes in a draw.
- C-5 Cougar Cr, near Cougar Cliff Ridge, above lamb cliffs
- B-16 Whimstick basin at den
- B-9 & 50 no signals  
(Troy encountered 7 wolves (grey + 1 white) at Brown's Basin on 5/6)
- Selway B-80 Grass Mtn area

Bighorns = 150,110

- # 50 & 53 No signals from WFK Monumental down to TR (includes Snowslide)
- # 51, 52, 54 at Cliff Cr.



B-80 Returned to lower Big Cr.  
C-4 signals by B-80  
Bear & elk nearby too

5/10 Jim got signal of C-4 downstream  
from Taylor toward location of 5/7.

5/11 Jim got signal of C-4 above  
x<sup>d</sup> grass benches across Big Cr from  
Cougar Cr. Near 5/10, 5/7 locations.

UTM 671,780E 4,995,800N 4860' NW asp.

We triangulated location of B-80  
at Spring across & W of Cougar  
Creek. She is below C-4

cougar and close <sup>~250m</sup> to us on the  
trail (gain down to 3.5-3.8,  
pocketknife antenna too). Did  
she bump C-4 or is she tracking

C-4? UTM 670,700E 4,996,100N 4000' N asp

5 Elk (5C) came down from draw  
with wolf and walked UP Big Creek  
for further than we could see

(50m+), belly deep

1 Blond black bear feeding 350m W of wolf → Travel toward wolf location.

5/13

B-80 Same Location as 5/11

C-4 Same Location as 5/11

Jim hiked downstream to check signals:  
B-80 wolf signal loud & close to Big Cr  
Signal indicated she was below site  
of bear on 5/11 and she moved E  
to rocky ridgeline just W of her  
location on 5/11.

C-4 signal similar to 5/11: Higher &  
E of wolf.

3 collared bighorns at Cliff Cr  
#52 (150.836), #53 (150.040), #54 (150.380)

Elk at trail salt lick & across Big Cr.



**"Outdoor writing products for outdoor writing people"**



RECYCLABLE

"Rite in the Rain" - A unique All-Weather Writing paper created to shed water and enhance the written image. It is widely used throughout the world for recording critical field data in all kinds of weather.

Available in a variety of standard and custom printed case-bound field books, loose leaf, spiral and stapled notebooks, multi-copy sets and copier paper.

"Rite in the Rain" - All-Weather writing papers are also available in a wide selection of rolls and sheets for printing and photocopying.

*a product of*

**J. L. DARLING CORPORATION**

Tacoma, WA 98424-1017 USA  
(253) 922-5000 FAX (253) 922-5300  
[www.riteintherain.com](http://www.riteintherain.com)



6 32281 39111 1