

CONTINENTAL DIVIDE WILDLIFE CONSULTING

P.O. Box 5612
HELENA, MT 59604
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FAX:

RECEIVED

DEC 23 1995

FISHERIES DIV.
DEPT. FISH, WILDLIFE & PARKS

December 26, 1995

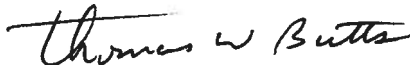
Chris Hunter
Special Projects Bureau Chief
Fisheries Division
MT Dept. of Fish, Wildlife, and Parks
P.O. Box 200701
Helena, MT 59620-0701

Dear Chris:

In accordance with the Scientific Collector's Permit issued to me October 4, 1995, I have enclosed a copy the summary report of fish collected, including species, number, and location. All sampled reaches were within Lewis and Clark County upstream from Lincoln, Montana. All collecting was completed in October, 1995. All fish were released except those kept for metals analysis (six brook trout from Hardscrabble Creek) and incidental mortalities (one cutthroat trout from the Blackfoot River).

I have also included a copy of the raw data, as you requested in your letter of September 19, 1995. If you have further questions, please contact me. Thanks.

Sincerely,



Thomas W. Butts

Cc: Tom Tangen
Pat Farmer

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

SCIENTIFIC COLLECTOR'S PERMIT

Permit No. 1408

Date Issued October 4, 1995

Fee \$50.00

Date Expires December 31, 1995

Permit issued to: Thomas Butts

Address: Continental Divide Wildlife Consulting, Helena MT 59604

Associated with: Seven-Up Pete Joint Venture

Permission is given to Thomas Butts to take, kill, capture, or possess, in accordance with the provisions of Section 87-2-806, MCA, the following:

collect game and nongame fish in numbers needed from the upper Blackfoot and its tributaries for habitat surveys, fish populations, species distribution and metal analysis. Collections will be made using electrofishing equipment.

DFWP personnel must be kept apprised of collections.

This permit is not transferable. Migratory birds may be taken only under authority of a federal permit in conjunction herewith.

Report: Upon expiration of this permit, a report shall be submitted to the Department of Fish, Wildlife and Parks director giving the total number and kind of specimens collected.

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS

BY: Robert R. Martinka
Robert R. Martinka
Chief of Staff Operations

c: D. Workman

**Montana Department
of
Fish, Wildlife & Parks**



1420 E 6th Ave
PO Box 200701
Helena MT 59620-0701
September 19, 1995

Mr. Tom Butts
Continental Divide Wildlife Consulting
P.O. Box 5612
Helena, MT 59604

Dear Tom:

We have received your application for a Scientific Collectors permit to conduct fisheries studies, including electrofishing, on several reaches of the Upper Blackfoot River and its tributaries. We have approved the application and forwarded it to the Enforcement Division to issue the permit.

You indicated in your application that you are aware of the Department's electrofishing guidelines. We urge you to follow these guidelines, particularly since several species of special concern are found in the waters you will be sampling.

I have enclosed a reporting form for you to fill out and return to the Department when your sampling is completed. We would also appreciate receiving copies of the raw data from your collection efforts. Good luck.

Sincerely,

Chris Hunter
Special Project Bureau Chief
Fisheries Division

cc: Dennis Workman

REPORT OF FISH TAKEN UNDER A SCIENTIFIC COLLECTOR'S PERMIT -- 1995
Year

[illegible]

site:

Upper Blackfoot

cool cloudy \approx air temp = 17°C

water temp 10°C

conductivity $251\text{ }\mu\text{S}$

electrode settings

CPS, 350 V, 1.4 A.

3 fish washed
after 3rd
pass

Pass #1 Start 12:45 Stop 1:17 shocking time 2064

fish # species length mm weight gr

1 CT 105 21g

2 CT 142 30g

3 CT 145 30g

4 LL 97 5g

5 LL 129 20g

6 CT 95 4g

7 CT 60 2g

Smooth
Scale sucker 1

Dace 1

Sculpins 70+

site :-

Sawm!!! Gulch
 arrived 15:50
 air temp 8°C
 water temp -8°C
 conductivity 1155 μ S
 CPS 450 V \leq 1A
 width averages about 1-2' in width
 gravel deeper within 20-30' of middle
 primarily gravel. Dubs & ~~large rocks~~ on
 both banks. Gravel ^{now} is full of
 cobbles (8" +). Sediment under up the
 remainder of sides quite very little gravel
 note conductivity is subed. over 10' and
 at Blackfoot station.

stud time	3:50	sketch
pract	7:14 4:05	263

1st Pass

⑦ no fish caught, no further
proceeds from.

2

start	1:40	showering
stop	2:11	time 1392

Fish #	Species	length	weight
1	CT	65	2.9

350/115

Pass # 3	start 222	working
	stop 3:29*	time 2008

Fish #	Species	Length	Weight
1	CT (nov)	143	30g
2	CT	62	3g
3	LL	163	40g
4	LL	94	10g

Water level slightly lower than last time	shallowing of bed, ⁶ behind a patch of	may or could be a new one	leaves
in wet	Notice more morphological	on cobbles, boulders more sediment	building in lower $\frac{1}{3}$ of reach

Site #

Hardscrabble Creek, arrived on site; 15:40

water temp 7°C

conductivity

air temp 8°C

shocker settings 250

1.7 A

CPS

cool, slight overcast, slight wind.

shocking time 8:40

start 3:50

stop 4:10

40 sculpins

1st Pass

Fish # species length weight

1	EB	126	20
2	EB	125	18
3	EB	150	25
4	EB	80	2
5	EB	145	23
6	EB	76	2
7	EB	79	2
8	EB	112	10
9	EB	79	4
10	EB	85	8
11	EB	93	8

10/26/95

shocking time 8:35 start 4:25 stop 4:45 10

2nd Pass

Fish #	Species	Length	wt
1	EB	173	55
2	EB	98	10
3	EB	136	25
4	EB	87	5
5	EB	134	25
6	EB	80	2
7	EB	95	6
8	EB	79	2
9	EB	81	3

Arrive on site: 7:45 - snow/ice
 water temp 6.1°C - 1500 ft
 air temp 40°C
 conductivity 230 mS

1st Pass

start time 10:00
 stop time 10:50
 station 2282

Copper Creek

3rd Pass

shocking time 4:50 start 5:00 stop 5:10

1st Pass

Fish #	Species	Length	wt	gr
1	CT	99	99	3
2	CT	112	152	15
3	BT	167	40	
4	CT	100	10	
5	BT	158	35	
6	CT	91	5	
7	CT	145	20	
8	CT	113	10	
9	BT	168	3	
11	CT	142	33	

Fish #	Species	Length	wt
1	EB	124	22
2	EB	99	12
3	EB	164	40
4	EB	168	39
5	EB	125	18

sacred in Brook trout

1st Pass (Contd.)

0

3946 .2282
1822
1124

9

<u>Fish #</u>	<u>Species</u>	<u>length</u>	<u>weight</u>
12	BT	153	35
13	BT	64	2
14	BT	64	2
15	BT	111	10
16	CT	135	132
17	BT	105	10
18	BT	115	11
19	CT	91	5
20	BT	72	2
21	BT	62	2
22	BT	72	3
23	CT	45	1
24	BT	60	2
25	BT	59	2
26	BT	59	2

Copper

2nd Pass

shooting time 1124
start time 1125
Stop time 12:00

<u>Fish #</u>	<u>Species</u>	<u>length</u>	<u>wt</u>
1	BT	110	12
2	CT	90	4
3	BT	150	30
4	BT	150	21
5	BT	72	3

3rd Pass	shock time	1441	10
	start time	12:20	
	stop time	12:45	
Fish #	specimen	length	wt
1	CT	100	14
2	BT	62	2
3	BT	109	17
4	BT	157	33
Shock settings.			
CPS	300-350	V	1.8 A
for all 3 passes			

11 Reach #

McDonald Creek

air temp 4.5°C
 water temp 5.5°C
 conductivity 2.23 mS

made one pass, caught no fish
 no more passes attempted

Pass # 1

start time 2:30stop time 2:40shock time 2:00

shock settings CPS

volts 3.50A 1.8

Landers Fork

arrived 1:55 PM.

air temp 8.5°Cwater temp 6.7°Cconductivity 281 μ S

Shocker settings CPS

Volts 300Amps 1.6

- windy, cool, intermittent clouds & sunny
- noted some fly cases in weeds on cobbles
- hard to see due to turbulence

start time 2:15stop time 2:40

Pass #1

shock time 1157

Fish # species length wt

1 CT 48 1

start time 2:45shock time 826

Pass #2

stop time 3:05

no fish caught

no further passes run due to low catch.

10/27/95

15

Reach #

Blackfoot River at Appew Grove

- cool, partly cloudy
- slight breeze from west

air temp 4.5°C

water temp 4.3°C

conductivity 2.47 mS

shoekes settings 300 V

1.7 a

GPS

1st Pass.

start time 9:20

stop time 9:50

Fish #	species	length	wt
1	LL	133	25
2	CT	55	1
3	CT	53	1
4	LL	81	3
5	CT	62	2
6	CT	65	3
7	CT	70	3
8	EB	173	65

1st Pass (cont'd.)		reach #	10/27/95
		(Lower Blackfoot / below confluence with Indian)	
Fish #	species length wt		
9	LT EB 170 52		
10	LT EB 104 10		
1	longnose sucker		
750	salpino.		
		cloudy, windy	
		air temp 4.8°C	
		water temp 5.2°C	
		conductivity 257 mS	
Pass #2			
shocking		shock settings	300 ✓
			1.7 A
			CPS
Fish #	Species length weight		
1	CT 66 2		
2	EB 155 35		
3	EB 105 14		
4	EB 77 4		
5	CT 49 1		
		1st Pass	start 12:20
		shock time	stop 12:50
Pass #3			
shocking		Fish #	species length weight
		1	CT 47 1.5 g
		2	CT 47 1.5
		3	CT 122 20
		4	BT 189 60
Fish #	spec. length wt		
1	CT 105 16		

2nd Pass start 1:00
 stop 1:25
 shodding time 1309

Fish #	species	length	weight
1	CT	94	1
2	CT	48	1
3	CT	54	2
4	CT	112	20

<u>shock time</u>			
3rd Pass	1550	stand stop	
		<u>135</u>	<u>2:00</u>
<u>Fish #</u>	<u>species</u>	<u>length</u>	<u>wt</u>
1	CT	56	2
2	CT	46	1
3	CT	48	1

numerous sculpins on all
 3 runs.