

UNITED STATES DEPARTMENT OF AGRICULTURE—FOREST SERVICE

W 209

Land district. Mag. declin.

Area _____ acres

Cow Cr. Game Enclosure Sec. 8

T. 17 N.

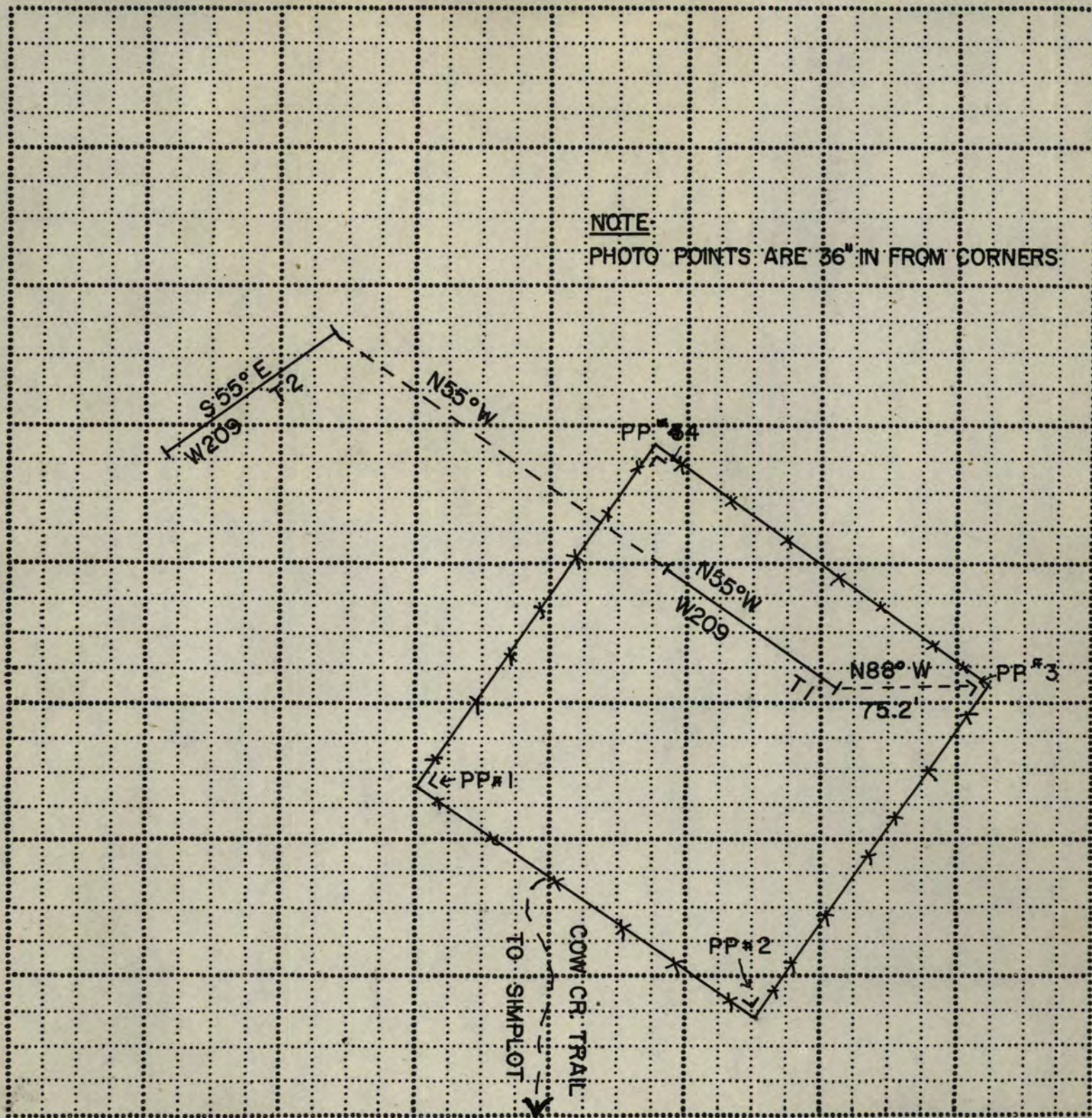
R. 14 E. Boise Mer.

Scale 1/2" = 100'

100' = 1 mile

(Case designation)

(Subdivision and section)



NOTE

PHOTO POINTS ARE 36" IN FROM CORNERS

Field work by Howard Koskella

Date 6/6/61

Platted by Sam Warren

Remarks _____

Approved _____, 19____

KEY AREA ANALYSIS

- Name and location of key area Cow Creek : Forest Challis District D-2
Sec. 8 T17N R14E Boise Mer. : Allotment Cow Creek (MF)
: Examiner Howard Koskell Date 6/6/61
- Reasons why this is a key area: Winter Game Area
- Range condition Fidr ; Trend (vegetation) Unknown
Trend (soil) Up ~~Normal use~~ ~~Conditional use~~
(Cross out one)
- What are the key species: Agsp, Putr, Feid, Chna, Chvi
- List principal forage species (by weight) in order of their comparative abundance:
- What were probable climax species on this area: Feid, Agsp, Brte
(Putr, Arta)
- What is present ground cover (vegetation plus litter) percentage: _____ %
What percentage is necessary to protect the soil: 70 %
- Is soil stable: No Percent soil disturbance _____ %. What is causing soil movement:

PROPER USE CRITERIA

- Is present use proper: No
- Underline the factor or factors to be used as proper use criteria on this key area: (utilization of key plants) (bare soil) (trampling). Other Browse use by game.
- List below recommended limits of use:

Key Plants		
		Percent
<u>Poaz</u>	<u>40</u>	"
<u>Feid</u>	<u>35</u>	"
<u>Putr</u>	<u>40</u>	"
Bare soil _____ %	Trampling _____ %	

Other factors: _____

- Reasons for above decisions (Continue on reverse of sheet if necessary):
Steep slopes, granite soils, and relatively low rainfall
- Method of Study: 3-Step Transect and Photo Points

Note: This form to be prepared after completion of "Range Utilization Form".

Preliminary Score Card
TREND IN SOIL STABILITY CONDITION GUIDE

Vegetation Type Sagebrush-Grass Soil Type Granitic Cluster No. W209

Check only indicators which apply*

Posi- tive	Nega- tive
---------------	---------------

Good and Excellent Condition

- 1a. A well dispersed accumulation of litter from past year's growth. Cover of litter being replaced each year ()
- 1b. Scarcity of litter of palatable plants. Cover of litter is not being replaced each year (X)
- 2a. No visible accelerated erosion (X)
- 2b. Erosion occurring ()
- 3a. No trampling displacement ()
- 3b. Trampling displacement occurring (X)

Fair, Poor, and Very Poor Condition

- 1a. A well dispersed accumulation of litter from past year's growth. Cover of litter being replaced each year ()
- 1b. Scarcity of litter of palatable plant. Cover of litter is not being replaced each year (X)
- 2a. Gullies, if present healed. Gullies which originate on the area are stabilized by the growth of perennial vegetation on both sides and bottom. The sidewalls will be rounded in appearance. The presence of vegetation in gully bottoms is not by itself a reliable indicator of improved range condition. It may be highly misleading if used without a careful appraisal of conditions on the area drained ()
- 2b. Gullies, if present, active. Established gullies that are raw and actively cutting. This type of gully may vary from a few inches to several feet in depth. ()
- 3a. Rill marks stabilized with perennial vegetation ()
- 3b. Rill marks present. They often appear during storms but may be obliterated later depending on depth of cutting (X)

*Point rating to be assigned.

(over)

3-STEP METHOD FOR MEASURING TREND IN RANGE CONDITION
Step III - Photo Record

Forest Challis Ranger District Challis Date 6/6/61

Allotment Cow Creek Type Sagebrush-Grass

Transect No. W 209 Camera Height 51" Photo By H. Koskella



Cow Creek Game
Enclosure-Photo
Point #1



Cow Creek Game
Enclosure-Photo
Point #2

*The burnt patch & wire
was a red square 3-23-59
enclosure put in 1930 or
thereabouts. A fire burnt
it & the area in 1957.
JK 6-22-62*

3-STEP METHOD FOR MEASURING TREND IN RANGE CONDITION
 Step III - Photo Record

Forest Challis Ranger District Challis Date 6/6/61

Allotment Cow Creek Type Sagebrush-Grass

Transect No. W 209 Camera Height 51" Photo By H. Koskella



Cow Creek Game
 Enclosure-Photo
 Point #3



Cow Creek Game
 Enclosure-Photo
 Point #4

3-STEP METHOD FOR MEASURING TREND IN RANGE CONDITION
Step III - Photo Record

Forest Challis Ranger District Challis Date 6/6/61

Allotment Cow Creek Type Sagebrush-Grass

Transect No. W 209 T1 Camera Height 51" Photo By H. Koskella



Cow Creek Game
Enclosure-Line
View of Transect,
50.5' mark.

RECORD OF PERMANENT LINE TRANSECT

W 209 T1
Cluster Name and Transect No. Howard Koshella
6/5/61 Mel Shepard
Date By Don Fuller

Challis		Challis, D-2			Cow Creek				
Forest		Ranger District			Allotment				
1	2	3	4	5	6	7	8	9	10
-	L	-	-	L	L	-	Feid	L	-
11	12	13	14	15	16	17	18	19	20
						Chui			
L	-	L	-	Feid	-	L	-	L	L
21	22	23	24	25	26	27	28	29	30
L	L	-	-	L	-	L	L	L	L
31	32	33	34	35	36	37	38	39	40
-	L	L	-	L	L	L	-	-	L
41	42	43	44	45	46	47	48	49	50
Feid	L	L	L	L	L	L	L	L	L
51	52	53	54	55	56	57	58	59	60
-	Feid	Feid	L	L	L	L	L	L	L
61	62	63	64	65	66	67	68	69	70
L	Eriz	L	L	L	L	L	L	L	L
71	72	73	74	75	76	77	78	79	80
L	Agsp	Agsp	L	L	L	Feid	L	L	-
81	82	83	84	85	86	87	88	89	90
Feid	L	L	-	L	Feid	-	L	-	-
91	92	93	94	95	96	97	98	99	100
L	Pofe	L	L	-	-	-	-	-	-

KEY INDICATOR SPECIES
NOT RECORDED (Include
undesirable invaders
and annuals)

VIGOR MEASUREMENTS

Species _____

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____

Total _____

Av. Max. _____

Tape Height at Stakes:

BARE SOIL	-	28	SPECIES (List by symbol, name and number of hits)	PELLET GROUP COUNT
EROSION PAVEMENT	P			Plot Size _____
ROCK	R		Deer _____	
LITTER	L	59	Elk _____	
MOSS	M		Other _____	
PLANT DENSITY INDEX		13		
Total		100		
FORAGE DENSITY INDEX		12.1		ANNUALS (List by Species)
DESIRABLE PLANT INDEX		12		Indicators _____
GROUND COVER INDEX				Others _____
(Form R4-2200-19 Overstory		1		
Jan. 1961) Understory		-		

General Instructions

List overstory species at the top of each block and circle symbol when it is a dead portion of a living shrub.

<u>Age Classes of Browse Plants</u> ^{1/}	Class	<u>Form Classes of Browse Plants</u> ^{1/}
S - seedling	1	All available, little or no hedging
Y - young plant	2	" " moderately hedged
M - mature	3	" " closely hedged
D - decadent	4	Largely available, little or no hedging
	5	" " moderately hedged
	6	" " closely hedged
	7	Mostly unavailable
	8	Unavailable

On game ranges classify all browse hits up to 5 feet as M3, D6, S1, Y2, etc. Tally in block directly behind browse species as "ArtrM2", etc.

Pellet Group Counts

Plot size should be 1/100 acre, or a multiple of same, using the tape as the plot center line. Alternative dimensions that may be used are:

Width: 6.6 feet or 79.2 inches or 6 feet or 72 inches
(3.3 ft. each side of tape) (3 ft. each side of tape)
and and

Length: 0 to 66 ft. gives 1/100 acre 0 to 72.6 ft. gives 1/100 acre
0 to 99 ft. gives 1.5/100 acre 0 to 108.9 ft. gives 1.5/100 acre

Example: A cluster with two transects and plots 6.6 feet wide and 0-99 feet in length samples 3/100 acre.

Converting factors:

- 13 pellet groups per day for deer
- 13 " " " " " elk (tentative estimate)
- 12 droppings per day for cattle

Notes

^{1/}Dasmann, Wm. P. Some deer range survey methods. Calif. Fish and Game, Vol. 37, No. 1, Jan. 1951.

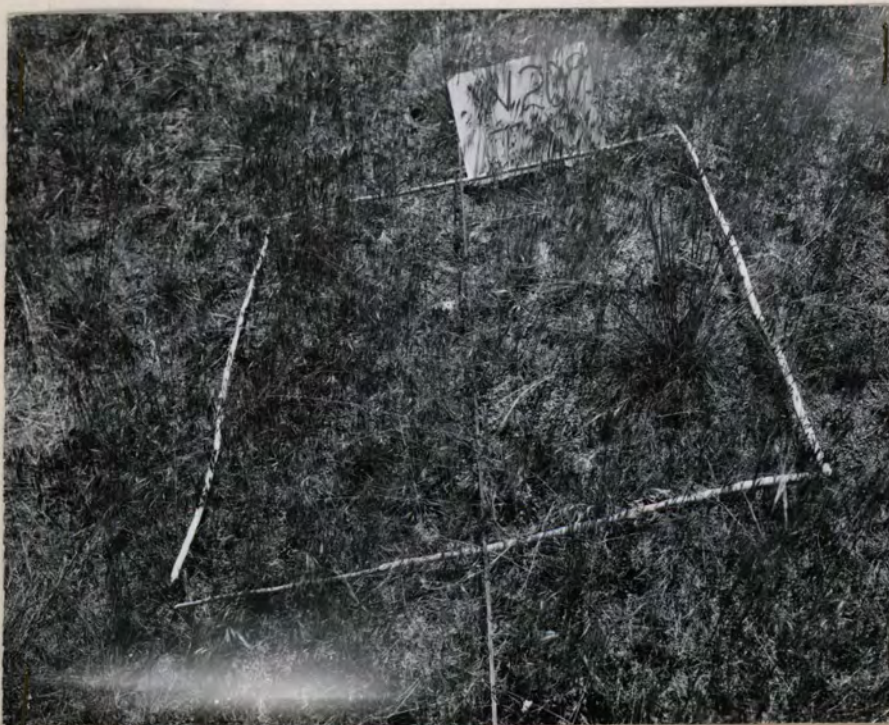
RECORD OF PERMANENT LINE TRANSECT

Challis					D-2					Cow Creek					Cow Creek W209 T1				
Forest					Ranger District					Allotment					Cluster Name and Transect No.				
										6/6/61					Howard Koskella Sam Warren				
										Date					By Mel Shepard				
No.:	Spec.:	Dist.:	Diam.:	Other.:	No.:	Spec.:	Dist.:	Diam.:	Other.:	No.:	Spec.:	Dist.:	Diam.:	Other.:	No.:	Spec.:	Dist.:	Diam.:	Other.:
1	-	1.00	.25	Feid	26	-	9.00	2.50	Stco	51	-	3.00	1.00	Feid	76	L	6.00	1.00	Feid
2	L	2.00	.25	Feid	27	L	18.00	4.00	Stco	52	Feid	-	1.00		77	Feid	-	1.00	
3	-	3.00	1.50	Feid	28	L	15.00	2.00	Feid	53	Feid	-	1.00		78	L	1.00	3.00	Poaz
4	-	4.00	.25	Feid	29	L	28.00	2.00	Stco	54	L	1.00	.25	Poaz	79	L	3.00	2.00	Poaz
5	L	4.00	3.00	Feid	30	L	15.00	1.00	Feid	55	L	5.00	4.00	Feid	80	-	4.00	3.00	Feid
6	L	2.00	1.00	Feid	31	-	.25	5.00	Feid	56	L	5.00	2.00	Poaz	81	Feid	-	3.00	
7	-	4.00	1.00	Feid	32	L	4.00	5.00	Poaz	57	L	4.00	1.25	Feid	82	L	3.00	2.00	Stco
8	Feid	-	1.00		33	L	4.00	1.00	Poaz	58	L	2.00	2.00	Poaz	83	L	3.00	3.00	Feid
9	L	4.00	9.00	Agsp	34	-	14.00	1.00	Poaz	59	L	6.00	1.00	Poaz	84	-	3.00	1.00	Poaz
10	-	8.00	3.00	Stca	35	L	4.00	1.50	Feid	60	L	4.00	1.00	Poaz	85	L	1.00	1.00	Poaz
11	L	3.00	3.00	Stca	36	L	.25	1.00	Feid	61	L	17.00	1.25	Acla	86	Feid	-	1.00	
12	-	6.00	6.00	Stca	37	L	4.00	.25	Feid	62	Eriz	-	.25		87	-	4.00	1.00	Feid
13	L	6.00	5.00	Feid	38	-	6.00	.25	Feid	63	L	6.00	4.00	Acla	88	L	3.00	1.00	Feid
14	-	5.00	5.00	Feid	39	-	5.00	4.00	Agsp	64	L	12.00	.25	Acla	89	-	3.00	2.00	Poaz
15	Feid	-	.25		40	L	6.00	1.00	Feid	65	L	6.00	.25	Poaz	90	-	2.00	2.00	Poaz
16	-	-	6.00	Chna	41	Feid	-	7.00		66	L	28.00	1.00	Feid	91	L	4.00	1.00	Stco
17	Chna	-	6.00		42	L	-	7.00	Chna	67	L	20.00	3.00	Stco	92	Poaz	3.00	2.00	
18	=	7.00	3.00	Feid	43	L	3.00	1.00	Feid	68	L	13.00	1.00	Poaz	93	L	8.00	1.00	Poaz
19	L	4.00	3.00	Feid	44	L	3.00	1.00	Feid	69	L	14.00	3.00	Stco	94	L	3.00	2.00	Stco
20	L	3.50	1.00	Feid	45	L	5.00	2.00	Feid	70	L	9.00	5.00	Chvi	95	-	4.00	2.00	Stco
21	L	4.00	1.00	Stca	46	L	3.00	.25	Feid	71	L	6.00	2.00	Poaz	96	-	1.00	3.00	Poaz
22	L	5.00	2.00	Stca	47	L	3.00	.25	Feid	72	Agsp	-	2.00		97	-	3.00	1.00	Feid
23	-	14.00	2.00	Agsp	48	L	7.00	3.00	Stco	73	Agsp	-	.25		98	-	7.00	3.00	Stco
24	-	7.00	3.00	Stca	49	L	4.00	.25	Feid	74	L	9.00	1.00	Feid	99	-	2.00	1.00	Feid
25	L	6.00	4.00	Feid	50	L	4.00	1.00	Feid	75	L	1.00	1.00	Feid	100	-	3.00	3.00	Stco
Tot:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:

3-STEP METHOD FOR MEASURING TREND IN RANGE CONDITION
Step III - Photo Record

Forest Challis Ranger District Challis Date 6/6/61
Allotment Cow Creek Type Sagebrush-Grass
Transect No. W 209 T2 Camera Height 51" Photo By H. Koskella

Cow Creek Game
Enclosure-General
View of Area.



Closeup Plot Photo
of Transect. Taken
at 3.5' mark.

Cow Creek Rod-Square Exclosure. Constructed 1931, Challis National Forest.

These pictures by Dwight Smith, July 25, 1952. Area burnt over in fire of 1957.



This is the rod-square ³⁻²³⁻²⁹ exclosure constructed in ~~1931~~. An acre exclosure is built around it, constructed in 1961.

Compare this with photo Point #2, Cow Creek Exclosure Parker 3-Step Study of 6-6-61 by Koshella.



This is a general view of T-1 Parker 3-Step transect established by Dwight Smith in 1952. Written record of the transect has been lost, however.

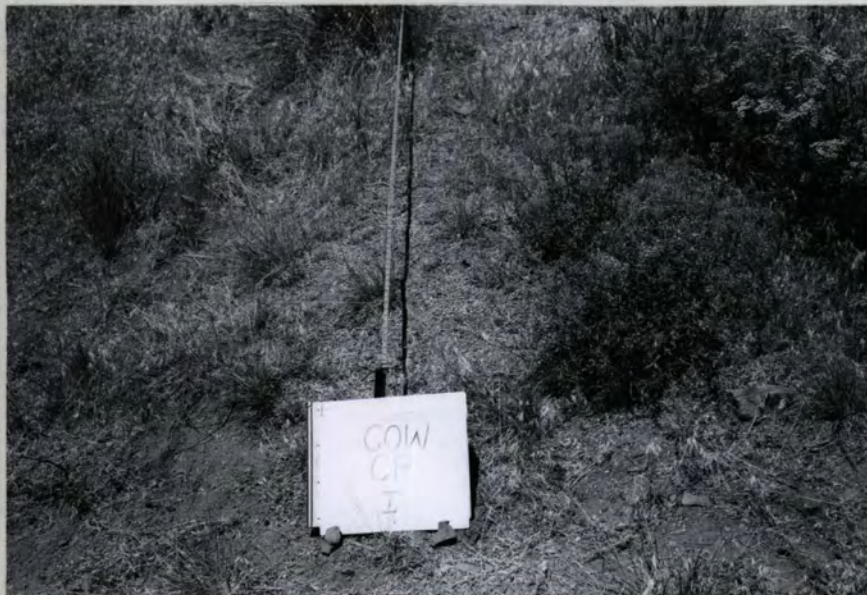
T-1 and T-3 are quite close to the rod-square exclosure.



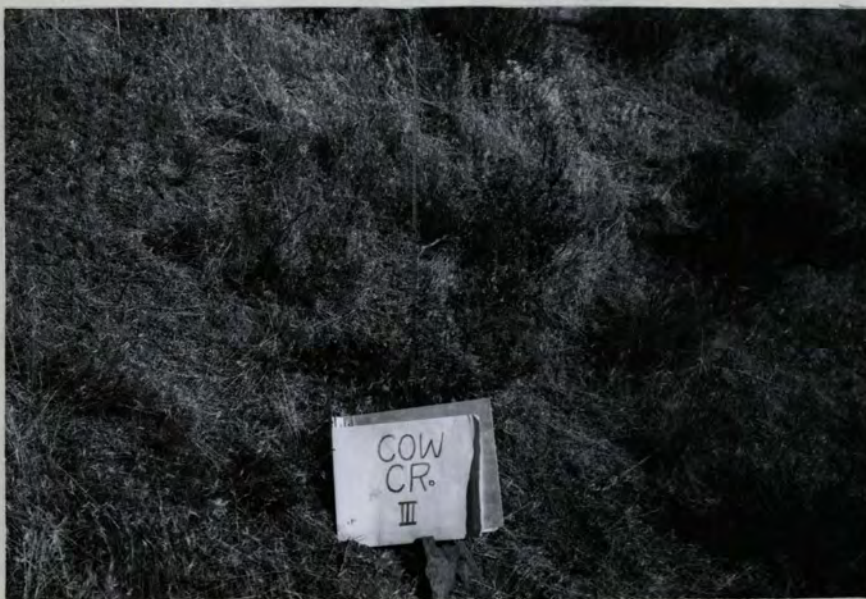
This is T-3.

(Fred Kindel, 6-29-62)

Parker 3-Step photos of 7-25-52, Cow Creek, continued.



Close-up view of T-1.



Close-up view of T-3.

*negatives for these five pictures are in
the black picture albums in the range file.*

Written record of transect
lost.
(Fred Kindel, 6-29-62)

Box 503, Salmon
June 29, 1962

C
Howard Koskella
Challis District Ranger
Challis, Idaho

Dear Howard,

Thanks for the very fine write-up of the exclosure condition and trend studies at Cow Creek and Cabin Creek, and the browse studies.

P
Enclosed are some pictures that will interest you. They were taken by Dwight Smith on July 25, 1952, at the Cow Creek exclosure. He apparently established a Parker 3-Step study there and at Cabin Creek, but I have been unable to locate any written record, and I am afraid it is lost. Also, I have been unable to locate the Cabin Creek pictures.

As your records probably show, the Cow Creek area was burnt over in 1957, I believe. The change between the pictures of 1952 and your pictures of 1961 is quite spectacular. It looks like fire encourages grass to begin with, but as your pictures show, sagebrush and rabbitbrush are coming back. I didn't see any young bitterbrush in the pictures; I wonder if there were any young bitterbrush plants in the area?

Y
I made copies of these pictures for you last year, and then filed them away and forgot to give them to you. So, belatedly, here they are.

Yours sincerely,

Fred Kindel
Game Biologist

Plot - Cow Creek

Sec. 18 T. 17N R. 14E Exposure SW Elev. 4500

Type - ~~Browse~~ ^(changed) Grass

This plot is located 1 mile N.E. from the bridge across Moon Creek at Lovell ranch. Check plot is approximately 400 ft. S.W. from enclosure. Four rock mounds mark this plot.

Object - To determine growth + utilization of browse species

Date Const: March 23, 1929 Size: 16' x 16' - Fence - Woven Wire

Soil conditions: Gravelly loam

Condition of plot when fenced: overgrazed

Rabbit Brush 75%, Bitterbrush 10%, Artemisia 5%

Grass 10%

Density when plot fenced: .3

The browse on this section as a whole has been hard hit and at the present time is not thrifty.

March 23, 1929 (The whole section

surrounding the enclosure has at some time past been badly

overgrazed by domestic stock.)

No weeds were present but Mormon
oats is to be found over entire
enclosure.

1931 - Mormon oats is disappearing
& bunches of fescue are present in
abundance. Initialed (A. B.)

UNITED STATES DEPARTMENT OF AGRICULTURE—FOREST SERVICE

Sec. 17

Land district. Mag. declin.

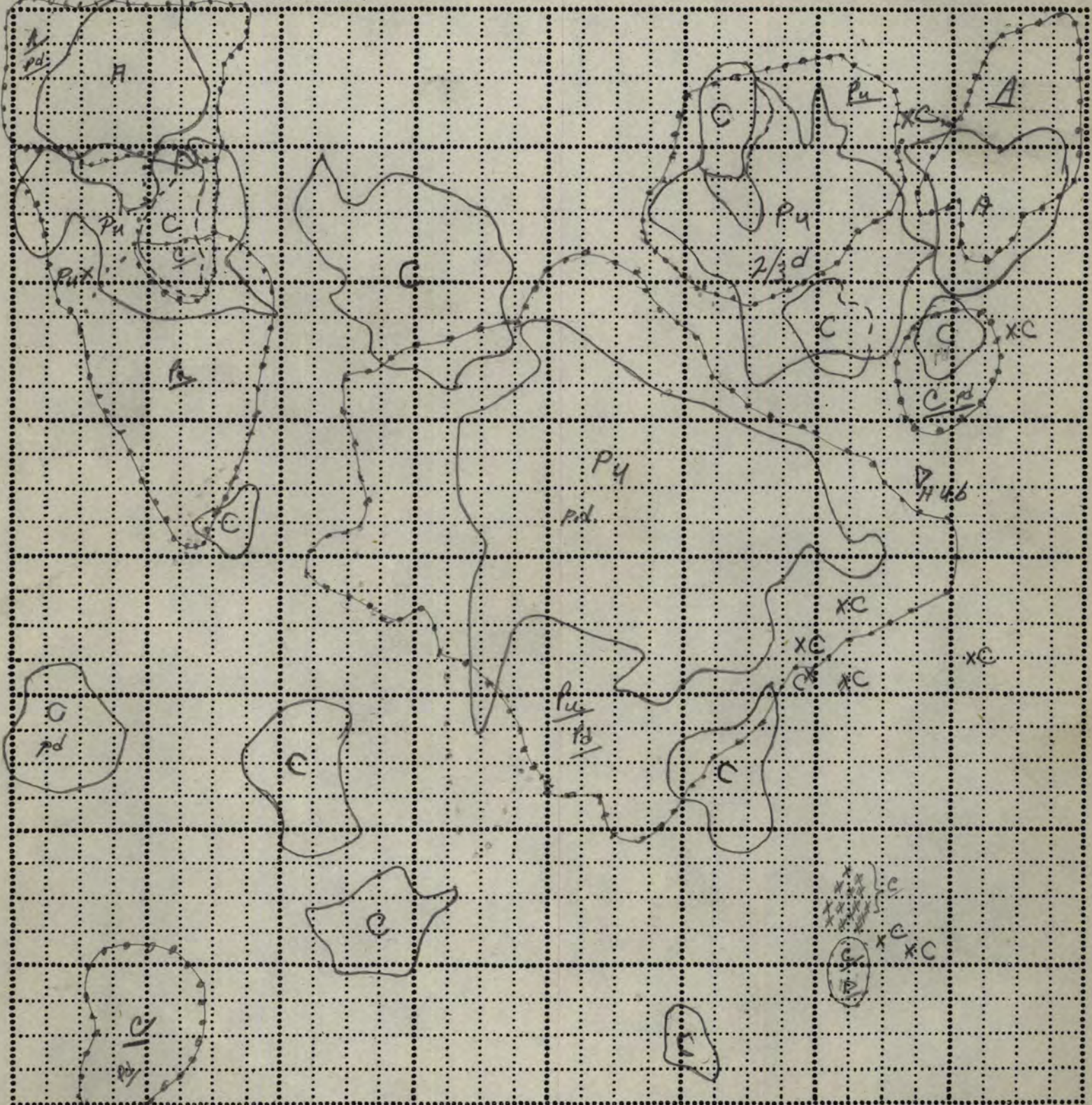
Area $\frac{1}{160}$ acres

Cow Creek Fenced Plot T. 17N

R. 14E

Mer. Scale $\frac{1}{2}$ " $\frac{1 \text{ foot}}{\text{inch}} = 1 \text{ mile}$

(Case designation) (Subdivision and section)



Field work by Gutzman & Buckingham Date Feb. 9, 1931 Platted by Buckingham

Remarks Pu - Bitterbrush
A - Sage Brush

Approved C - Rabbit Brush 19

pd - partly dead

UNITED STATES DEPARTMENT OF AGRICULTURE—FOREST SERVICE

Land district _____ Mag. declin. _____

Area _____ acres

^{Sec. 18}
Cow Creek

T. 17 N

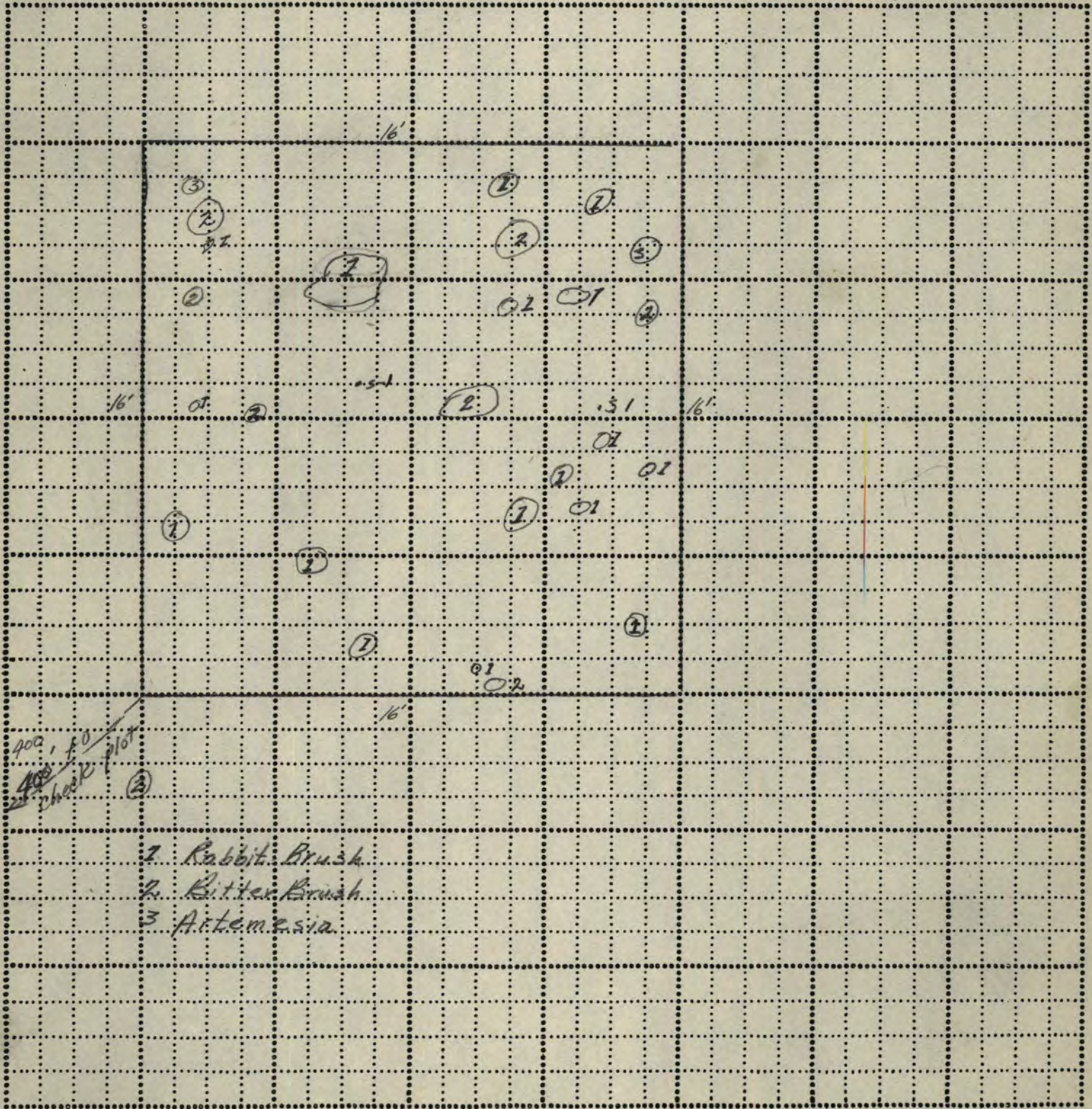
R. 14 E

Mer.

Scale $\frac{1}{4}$ inches = 1 mile

(Case designation)

(Subdivision and section)



- 1. Rabbit Brush
- 2. Bitter Brush
- 3. Artemisia

Field work by _____ Date March 22, 1929 Platted by John S. Malm

Remarks _____

Approved _____, 19____

UNITED STATES DEPARTMENT OF AGRICULTURE—FOREST SERVICE

Land district. Mag. declin. Area _____ acres

(Case designation) (Subdivision and section) T. _____ R. _____ Mer. Scale _____ inches=1 mile



Check plot reduced to one figure & charted as such.

Field work by _____ Date _____ Platted by _____

Remarks _____

Approved _____, 19____

(Smith - 1952 - ?) JK 1-28-62

D.R. Smith

Paw Creek Camp

2-24-52

Observation

Obs. No.	Hr. No.	Tot. Ad.	Yr.	Tag. Uncl.	Location	Description of Area	Weather	Observation
						See original notes by Buckingham of location of location	Elrs. 4900'	EXPOSURE SSW
						Rabbit brush (100%) Grey (1) - 10%		
						Sagebrush - 4% - 20%		
						Battlement - - 40%		
						Stems + pods - - 30%		
						BTe is bettered quite thickly throughout the enclosure		
						Aspen - 1, apparently not abundant (1959 report) - only 3 plants remaining		
						Ala - several clumps		
						Opelis - 5 or 6 plants (very few outside post)		
						Daisy - several, scattered		
						Thymus - one		
						ASP - several large, well-retained clumps		
						Hydrophyllum - few plants		
						Battlement - so quite thickly and produced much seed as compared with post on table enclosure where seed production is very limited		
						Large shrubs - so large, mature and thickly		
						Battlement - so small, much leaning dead since 1959. Those remaining		
						the same young are are surviving		
						Does and elk sign are very abundant		

D.R.S.

Obs. No.	Hr. No.	Tot. No.	Ad.	Yr.	Yng. Uncl.	Location	Description of Area	Weather	Observation
			1942			Closed cave	1942		Cattle
			1942			4/16 - 11/15		23	7/1 - 9/30 - 7
			41			5/1 - 11/15		22	
			40			"	"	22	
			39			"	"	22	
			38			"	"	13	
			37			"	"	18	
			36			"	"	60	5/1 - 11/15 - 23 (Temp.)
			35			"	"	64	" " - 20 (Temp.)
			34			"	"	64	
			33			"	10/31	34	
			32			"	"	34	
			31			"	"	34	
			30			5/1 - 11/15	"	34	

Direction

1/2 mi. below mouth of Steyer cr. - across low creek - across low creek
 extended Cache creek - went up M. & to Red Bluff end + up
 slope 1 mile.

