

Jan 5 [1979] 1:45 PM.

Duane Whitmer FTS 8-585-6474

Send copies of slides used in
Dillon lecture on RR grazing
Phoned reference

Diamond Fork

Agualic and Range

Habitat Improvement

USDA FS R-4

Unita NF

Authors

Jim Kimbal & Frank Savage

① ok Complete vv Tape

Jan 9/79

Selective Grazing - The Problem ^{Herring}

- ✓ 1. 11,005 Oregon Concentrated use around water; deep trails
- ✓ 2. 10,974 Oregon Star Mt. Allot. Heavy use and deterioration. Meadow
- ✓ 3. 19357 California Massacre Eroded meadow
- ✓ 4. 18843 California (Hav) Davis Allot. Heavily use spring area.
- ✓ 5. 17084 Idaho, West Bellevue. Cattle grazing in deteriorated drainage way. Slopes reseeded to Crested wheatgrass.
- ✓ 6. 17082 " " " " "

check

② OK

Completed

Tape 1

Range Condition

- ✓ 1. 16,699 Idaho Near Hard Creek Allot.
7 (1974) Heavy trailing of hillsides. Sagebrush invasion. Striations
- ✓ 2. 16,835 Idaho Hard Creek Allot. Hillside
8 (1974) grass stand in good condition
- ✓ 3. 16,633 Idaho Hard Creek Allot. Broad
9 (1974) view Aspen stand on hillside. Good condition
- ✓ 4. 10,180 Idaho Marsing Deteriorated
10 (1968) Aspen type. Sheep troughs in bottom
- ✓ 5. 16,600 A Idaho Hard Creek Allot. Eroding
11 (1974) heavily trailed hillside. Aspen type
- ✓ 6. 8782 Deteriorated Aspen stand Pleasant
12 (1967) View Allot Idaho
- ✓ 7. 10,641 Colo. Vail Aspen stand in good
13 (1968) condition
- ✓ 8. 4369 Shiestring meadow; good condition;
14 (1983) cattle grazing.
- ✓ 9. 17,303 Jerusalem. Deteriorated dried
15 (1969) meadow site in timber type

② Could Completed ✓✓

Tape 1

Range Condition

- ✓ 10. 13,056 Mt Meadows near Westwood
16 (1971) Junction. Excellent condition.
- ✓ 11 7305 Pulls Camp meadow. Determinate
17 (1949) condition
- ✓ 12 20,998 Mt Haggin Unit 1 Elk swale
18 (1978) California Creek
- ✓ 13 18378 Tuleadad Bare Creek below
19 Dwinell Reservoir
- ✓ 14 20,158 Mt Haggin Stream bottom
20 Excellent Condition
- ✓ 15 7398 Marsh Valley Allot. Idaho
21 (1966) Ravine bottom poor condition
- ~~18,378 Tuleadad. Determinate stream
(1975) poor~~
- ✓ 16 16,777 Hard Creek Allot. Stream
22 (1974) channel cutting.
- ✓ 17 15,135 Flooding Yellowstone River
23 (1974) Montana

③ OK

Complete

Tape 2

Theory RR

- ✓ 1 4613 Little Harvey Valley. Cattle grazing
24 (1963) on Pn(16, ARE) site
- ✓ 2. 5303 Repeat of 4613. Ungrazed at
25 (1964) seed-ripe time
- ✓ 3. 3041 Trampling in plant-soil interspaces
26 (1960)
- ✓ 4. 2982 Seedlings establishing in trampled
27 (1959) plant-soil interspaces
- ✓ 5 6991 Looking into The Grass Valley
28 (1966) enclosure
- ✓ 6 (1966 Looking outside " " "
29
- ✓ 7 4633 Seedlings germinating in hoof
30 prints
- ✓ 8 17,752 Heavy trampling Pn site on
31 margin of meadow HV Unit 1
- ✓ 9 17751 Heavy stand of Pn establishing
32 on ^{trampled} margin of meadow in 17,752

③ cont'd

Complete

Tape 2

Theory RR Cont'd

- ✓ 10. 6339 Litter accumulation under
33 (1965) treatment @ (3-treatment groups)
Sagebrush type HV Unit 1
- ✓ 11. 2805 Mass establishment SIh HV Unit 3
34 (1954)
- ✓ 12. 5044 (1964) " " ARE (SIh) " " "
- ✓ 13. 13,836 " " ponderosa pine BMT
35 (1972)
- ✓ 14. 9631 " " lodgepole pine Hwy 50
37 (1968)
- ✓ 15. 2933 HV. Ex 3 (Bi) Inside & out
38 (1955) Vigorous grass both in and out
- ✓ 16. 5379 { " " " " " " "
39 (1964) " " " " " "
- ✓ 17. 20731 " " " " " "
40 (1977) ARE Thickening outside
- ✓ 18. 20736 Vigorous grass. "No" sagebrush
41 (1977) inside enclosure

(4)

Complete

Tape 3

Ecology

- ✓ 1. 10,991 Oregon Black Butte Soil profile
42 (1968)
- ✓ 2. 10,991 Idaho Firth Sagebrush, juniper
43 (1968) pioneering on basalt
- ✓ 3. 11,971 Calif. Yosemite Tree growing on
44 (1969) granite
- ✓ 4. 17,130 Idaho Crater Moon ART, CHRY and
45 (1974) other shrubs on basalt.
- ✓ 5. 17,135 " " " shrubs and grass
46 (1974) on lava ash, pumice, cinders
- ✓ 6. 6398 Harney Valley Unit 1 Scooped
47 (1965) out swath in Cox type - shrubs
trees in swath.
- ✓ 7. 4649 Pine Creek Cox stand Good cond.
48 (1963)
- ✓ 8. 4651 Pine Creek ART seeding into
49 (1963) deteriorating Cox stand.
- ✓ 9. 6674 " " Moderate stand ART on
50 (1965) Cox site
- ✓ 10. 17,758 B Report of 6674 10 years
51 (1975) later

Ecology Cont'd ①

- ✓ 11. 4647 Pine Creek Small amount of
52 (1963) Cox left
- ✓ 12. 8779 Pine Creek No Cox left
53 (1967)
- ✓ 13. 4716 Pine Creek Roots of Cox.
54 (1963)
- ✓ 14. 6402 H. V Unit 1 Pt invading
55 (1965) Cox site
- ✓ 15. 8773 Pine Creek CHRY6 Thickening
56 (1967) on deteriorated Cox site
- ✓ 16. 18,033 Gray Valley CHRY6 and Pp
57 (1975) encroaching on deteriorated Cox site
- ✓ 17. 8471 Pine Creek ARC and *Eriogonum*
58 (1967) *umbellatum* Thickening on Cox
- ✓ 18. 15,438 Lupine on Cox site HV Unit 1
59 (1974)
- ✓ 19. 17,758 I Pine Creek Aster on Cox site
60 (1975)
- ✓ 20. 17,732 HV Unit 3 *Antennaria* Nurse plant
61 (1975)

Ecology Cont'd (2)

- ✓ 21. 4655 Pine Creek Fi invading Cex
62 (1963)
- ✓ 22. 4656 " " Cex almost gone Fi
63 (1963) remaining
- ✓ 23. 8919 Champs Flat Fi showing in Cex stand
64 (1967) Ungrazed area
~~Insert 23A~~
~~Fi stands near~~
~~Laguna Spring~~
- ✓ 24. 15439 HV Unit I Sitawon an invader
65 (1974) in deteriorated Cex stand
- ✓ 25. 8764 Gray Valley So dominant on deter
66 (1967) iorated Cex site
- ✓ 26. 20,522 HV Unit 3 Grass-sagebrush bench
67 (1977) above H.V. Guard Station
- ✓ 27. 20525 Close-up showing remaining Cex
68 (1977) in veg stand shown in 20,522
- ✓ 28. 18,037 Gray Valley CHRY and Pp
69 (1977) encroaching on deteriorated Cex site
- ✓ 29. 10,183 Idaho Marsing Ag spic stand
70 (1968) "excellent" condition
- ✓ 30. 8866 Oregon Deteriorated Ag spic cover
71 (1967) new ART, CHRY, Bt

Ecology Cont'd (3)

- ✓ 31 18,997 Tulead CHRYN Muck on Ag spic site
12 (1976) bench above Barber Creek. Eradium
- ✓ 32 10,967 Oregon Pt invading Ag spic stand
73 (1968) Star Mt Allot.
- ✓ 33 9610 Oregon Horsefly Juniper invasion
74 (1968) formerly grassland basin.
- ✓ 34 12801 } Utah Radd Beginning of
75 (1970) juniper invasion.
- ✓ 35 12798 }
76
- ✓ 36 19463 Horse Camp Early stage in
77 (1976) development of Juniper stand
- ✓ 37 18 { 647 (B&W) (1942) Increase in density of
78 (19,077 (1976) juniper stand in 34 years
79 Near Likely, Modoc Co.
- ✓ 39 20,735 Mt Haggin Forbs (taprooted plants)
80 (1978) on Ag spic Rough Fescue site
- ✓ 41 15817 Pryor Mt. Zygadenus (dense clumps)
82 (1974) on deteriorated grassland site
- 40 20,722 Mt Haggin SW cor. Deteriorated
81 (1978) grassland site Antennaria composites

Ecology Cont'd (4)

- ✓ 42 20,724 Bistort Thickening on deteriorating
83 (1978) meadow site Mt Haggin
- ✓ 43 20,721 Blue Comass (C. quinas) " "
84 (1978) " " " "
- ✓ 44 20,704 Agoseris (dandelions) " " "
85 (1978) " " " "
- ✓ 45 11,691 Nevada Granite Peak Iris on
86 (1969) deteriorated meadow site
- ✓ 46 20,655 Lomatium and Ranunculus on
87 (1978) deteriorated wet grassland site
H. V. Unit 3

Tape 3

(5)

Matador - Description
(all slides)

- | | | |
|----|----------------------|---|
| 1 | 16,094 ₈₈ | Montana Matador General landscape |
| 2 | 16,089 ₈₉ | Invasion Lupine, rabbitbrush |
| 3 | 19,744 ₉₀ | Heavy ART around homestead - E lane |
| 4 | 16,763 ₉₁ | Close up Poa site Unit 3 |
| 5 | 19,802 ₉₂ | Poa site Location transect # <u> </u> ? |
| 6 | 16,746 ₉₃ | Heavy ART in meadow below sheep
shearing shed Unit 3 |
| 7 | 16,251 ₉₄ | CHRY Plot 11 |
| 8 | 16,194 ₉₅ | Bush cinquefoil Unit 3A meadow |
| 9 | 16,774 ₉₆ | Trails on hillside " " " |
| 10 | 17,532 ₉₇ | Iris Chris Cabin |

- 11 16,165
98 Quad. #6 Chris Cabin
- 12 19,810
99 Aspen plot 46 - beaver work
site
- 13 16,154
100 Elymus CHR mid lane
- 14 17,544
101 Bush cinquefoil in meadow
west of homestead (lane)
- 15 16,274
102 Transect 12
- 16 16,770
103 Quad 12
- 17 16,145
104 Grazed heavy west side
homestead
- 18 16,119
105 Quadrat No 2 Unit 1A
- 19 16,789
106 Old sheep badground Little Sage
Creek
- 20 16,294
107 CHR Unit 1 Sage Creek

Hormay
Berkeley
July 18, 1978

Malade duplicate slides Cont'd

Pasture	ALH No	Date	Subject
2	16,270	7/31/74	Plot 12 Quadrat
2	16,274	" "	Plot 12 General view
1	16,287	" "	Plot 13 Quadrat
1	16,289	" "	Old sheep bed ground
1	16,294	" "	Plot? site
2A	17,539	Sept 25/74	Meadow in lane
2A	17,544	" "	Meadow S of housestead
1A	17,550	" "	Upper Taddy Creek
1A	19,770	Sept 23/76	1976 Plot 2 Upper Taddy Crk
1A	19,771	" "	1976 Plot 6 Hillside trails
1A	19,778	" "	1976 Plot 9-2 Willow plant
1A	19,782	" "	1976 Plot 12 Erosion in band lower Taddy Crk.
3	19,790	Nov. 3/76	1976 Plot 18-1 Quadrat
3	19,802	" "	1976 Plot 18 General view
3A	19,810	" "	1976 Plot 46 Aspen stand
3A	19,812	" "	1976 Plot 42 Aspen sprouts
3A	19,814	" "	1976 Plot 45 Willow, Basin Crk
3A	19,821	" "	1976 Plot 41-1 Encroachment
3A	19,825	" "	1976 Plot 41 - General view
T19		Grand total	37 slides

Hormay
Berkeley

July 18, 1978

Duplicate slides of Matador Allotment
for Dillon Resource Area

Two copies of each of the following

Pasture	A.L.H. No	Date	Subject
1A	16,118	7/31/74	Plot 1 Limited trails
1A	16,119	" "	Plot 2 Quadrat
1A	16,125	" "	Plot 3 Sagebrush etc invasion
2	16,132	" "	Plot 4 Iris in meadow
2	16,137	" "	Salt ground
3A	16,140	" "	Plot 5 Quadrat
3A	16,142	" "	Plot 5 General view
2	16,145	" "	Close use site. Chrysothamnous
3A	16,165	" "	Plot 6 Quadrat
3A	16,168	" "	Plot 6 General view
3A	16,169	" "	Plot 7 Quadrat
3A	16,178	" "	Plot 8 Quadrat
3A	16,175	" "	Plot 8 General view
3A	16,179	" "	Plot 9 Meadow Basin valley
3A	16,187	" "	Plot 10 (Chryso, bunchgrass. 6ft
3A	16,190	" "	Plot 10 (hillside. 26ft shot
3	16,250	" "	Plot 11 Quadrat
3	16,251	" "	Plot 11 General view

ALH Kodachrome Slides, Dillon R.R. Lecture July 12, 1978

Jan 9 1979
Hornway

Video Tape No	Lecture Subject	Dillon Lecture No	ALH	No	Date	State	Agency	District (or F.S. National Forest also)	Area or Allotment	Subject
1	Selective grazing - The problem									
	These numbers appear in red ink in the upper left hand corner of the slides									
		1	11 205	Oct 24	1968	Oregon	BLM	Baker Vale	Star Mt Allot	Heavy grazing around water
		2	10 974	Oct 14	1968	"	"	"	"	" in meadow
		3	19 857	July 1	1976	California	"	Jessamville	"	Fooded meadow
		4	18 843	Apr 6	1976	"	"	"	"	Disturbed spring site
		5	17 884	Aug 16	1974	Idaho	"	Shoshone	West Bellevue (near)	Heavy grazing reduce bottom
		6	17 882	"	"	"	"	"	"	"
1	Range condition									
		7	16 699	Aug 13	1974	Idaho	BLM	Salmon	Hard Ck Allot (near)	Heavy livestock trails
		8	16 835	Aug 14	1974	"	"	"	"	50 cent range condition
		9	16 633	Aug 12	1974	"	"	"	"	Moderate range deterioration
		10	10 180	Aug 6	1968	"	"	Boise	Star Marsing	Heavy deterioration deer winter
		11	16 600 A	Aug 12	1974	"	"	Salmon	Hard Ck Allot	Livestock trails, heavy use, erosion
		12	8 782	Sept 14	1967	"	"	Burley	Reasent View Allot	Heavy use, poor condition, Aspen
		13	10 641	Aug 25	1968	Colorado	"	"	Star Vail	Fire/stock condition, Aspen
		14	4 369	Aug 7	1963	California	F.S.	Engle Lake N.F.	Star condition meadow	Good condition meadow
		15	13 303	Sept 17	1969	Idaho	BLM	Boise	Star Valley Allot	Good condition meadow
		16	13 456	Sept 2	1971	Idaho	"	"	"	Star condition meadow
		17	23 057	Oct 10	1949	California	F.S.	Almanor, N.F.	"	50 cent condition meadow
		18	20 998	July 26	1978	Montana	"	Engle Lake	Star Camp	Star condition meadow
		19	18 378	Oct 8	1975	California	Star Dept	"	Star condition meadow	Good condition meadow
		20	20 158	Aug 18	1977	Montana	BLM	Jessamville	Star condition meadow	Disturbed riparian type
		21	23 998	Nov 4	1966	Idaho	BLM	Burley	Star condition meadow	Star condition meadow
		22	16 727	Aug 14	1974	"	"	Salmon	Star Valley Allot	Star condition meadow
		23	15 135	June 19	1974	Montana	"	Billings	Star Valley Allot	Star condition meadow
2	Theory Rest-rotation Grazing									
		24	4 613	Oct 9	1963	California	F.S.	Engle Lake	Star Valley (Lumber)	Selective grazing (A tract)
		25	5 303	Sept 13	1964	"	"	"	"	" (A tract)
		26	30 411	Oct 24	1960	"	"	"	"	" (A tract)
		27	29 882	July 10	1969	"	"	"	"	" (A tract)
		28	59 951	Sept 1	1966	"	"	"	"	" (A tract)
		29	20 457	"	"	"	"	"	"	" (A tract)
		30	46 333	Oct 9	1963	"	"	"	"	" (A tract)
		31	17 152	July 16	1975	"	"	"	"	" (A tract)
		32	17 751	"	"	"	"	"	"	" (A tract)
		33	6 339	Aug 16	1965	"	"	"	"	" (A tract)

ALH Kodachrome Slides, Dillon RE Lecture July 12 1978

Video Tape No	Lecture subject	Dillon Lecture No	ALH	Date		State	Agency	District (ISO F.S. - National Forest also)	Alignment or area	Subject
2	Thorny Rest-rostratus Grazing (Cont'd)		No	Mo	Day	Year				
		33	6339	June	16	1965	F.S.	Edge Lake Lassen NF	Harvey Valley Allot	Litter Net type Unit 1
		34	2805	Sept 18		1954	"	"	"	576 roped
		35	5044	July 31		1964	"	"	"	ARE ARE 376 roped
		36	13836	May 11		1972	"	"	"	Endorse price roped
		37	9631	May 8		1968	"	"	"	Endorse price roped
		38	2933	Oct 12		1955	"	Edge Lake Lassen NF	Harvey Valley Allot	Litter Net type Unit 3
		39	5329	Sept 13		1964	"	"	"	Endorse price roped
		40	20731	Sept 3		1977	"	"	"	"
		41	20736	"		"	"	"	"	"
3	Ecology									
		42	1991	Oct 15		1968	BLM	Kale	Black Butte Allot	
		43	19791	Sept 24		1968	"	Tahoe Falls	Near Fire	
		44	11971	Aug 12		1969	"	Butterfield	To Semite	
		45	17130	Aug 16		1974	"	Shoshone	Forster Moon	
		46	17135	"		"	"	"	"	
		47	6398	Sept 2		1965	F.S.	Edge Lake Lassen NF	Harvey Valley Unit 1	Scaped out spot Cex type
		48	4649	Oct 15		1963	"	"	"	Scaped out spot Cex type
		49	4651	"		"	"	"	"	"
		50	6674	Oct 29		1965	"	"	"	"
		51	17588	July 17		1975	"	"	"	"
		52	4647	Oct 15		1963	"	"	"	"
		53	8779	Aug 21		1967	"	"	"	"
		54	4716	Oct 16		1963	"	"	"	"
		55	4622	Sept 2		1965	"	"	"	"
		56	8773	Aug 21		1967	"	"	"	"
		57	18033	Aug 28		1975	"	"	"	"
		58	8471	July 26		1967	"	"	"	"
		59	15438	July 10		1974	"	"	"	"
		60	177582	July 17		1975	"	"	"	"
		61	17732	July 16		1975	"	"	"	"
		62	4655	Oct 15		1963	"	"	"	"
		63	4656	"		"	"	"	"	"
		64	8919	Oct 11		1967	"	"	"	"
		65	15439	July 10		1974	"	"	"	"
		66	8764	Aug 20		1967	"	"	"	"
		67	20522	Sept 23		1977	"	"	"	"
		68	20525	"		"	"	"	"	"

January 10, 1978

Bruce Sundquist
210 College Park Drive
Monroeville, PA 15146

Dear Mr. Sundquist,

I believe you can find an answer to your land area problem in Senate Document 199. A reference to this publication is in Training Text 4 (2200). The figure of 728 million acres for the area of the western range as defined in SD 199 (page 3) covers several broad vegetation types including desert and forest. Above timberline areas are included in some of the types. See Table 1, page 6.

The condition of the western range has not changed appreciably since 1936 when SD 199 was published. A portion of the range has improved but a large portion has continued to deteriorate. Continuous grazing, the prime cause of range deterioration, is still the most wide-spread method of grazing on both public and private ranges. Please read, The Problem, on pages 15 and 16 in TT Text 4 (2200).

Even where stocking has been reduced to a moderate or light level, areas such as meadows, riparian stringers, swales, and gentle slopes within easy reach of water-potentially the most productive areas on the range-continue to be deteriorated with continuous grazing.

116 The idea of periodic resting of the range from grazing (rest-rotation grazing) is catching on but all too slowly. I do not have any idea of the portion of the western range that is under rest-rotation grazing at the present time but it is small. 1