FORAGE SOURCES FOR EASTERN OREGON CATTLE RANCHES WITH FEDERAL GRAZING PERMITS

Thomas E. Bedell and Tamzen Stringham

Publicly owned rangelands provide many products and values. One primary product in all of the western rangeland states is forage for livestock grazing. In most Oregon counties east of the Cascades, the majority of rangelands are managed either by the Bureau of Land Management (BLM) or the U.S. Forest Service. In these areas, the ranching industry developed around the interrelationships of using rangeland in spring, summer and early fall, grazing hay aftermath before the winter, and then feeding hay made from private lands back to the livestock.

The term "dependency" came about because livestock were grazed/fed on private land during the fall, winter and early spring, but spent varying amounts of time during the spring, summer, and early fall on rangelands, much of which were public. Without access to public lands, the numbers of livestock would be significantly less; ranching units depend on public range to maintain economic viability.

During the 1980-1983 period, the Departments of Rangeland Resources and Agricultural and Resource Economics of Oregon State University cooperated in a study in 11 counties to characterize the beef cattle industry which depended on federal grazing. A number of physical and economic characteristics were assessed. This report summarizes the sources of forage that dependent ranchers used.

PROCEDURES

The work initially covered Baker, Grant, and Harney counties under funds from the Oregon Cattlemen's Association, U.S. Forest Service and Bureau of Land Management (1980 and 1981). In this part, face-to-face interviews were conducted. Subsequently, because of time and funding constraints, a shorter survey was made of permittees in Crook, Jefferson, Wheeler, Deschutes, Klamath, Lake, Malheur, Umatilla, Union, and Wallowa counties by letter and telephone. This work was funded through grants from the USDA Federal Extension Service and BLM. Populations of ranchers were stratified by county and herd sizes (0-199, 200-499, 450-699, 700-999, and more than 1,000) and samples drawn from these populations. Each operator remained anonymous. Operators were asked to estimate where their cattle were at all times of the year. Categories were: deeded range (seeded, open native, timbered), private rented range, BLM, Forest Service, state/other public sources, deeded or rented meadow, deeded or rented hay/crop aftermath, and hay fed. For this report, these categories were condensed into private range, BLM, U.S. Forest Service, other range, irrigated pasture/meadow, aftermath, and hay. Since virtually all data were estimates of one type or another (numbers or time), all cattle were considered equivalent to one animal unit.

RESULTS

For all the 11 counties, a total of 295 usable surveys occurred. Summary figures mask a great deal of variation. Overall, BLM provided 12 percent, the U.S. Forest Service 8 percent, and private and other range 27 percent of the total year-round forage or slightly less than 50 percent (Table 1). But this varies among seasons and counties (regions) quite importantly. As an example, BLM was not important (from the total perspective -- not an individual ranch) in the northeast counties. But for Malheur, Lake, and Harney counties, BLM provided 35, 26, and 23 percent of the total, respectively, which is a larger percentage than from the private range sources. Conversely, the Forest Service provided as much as 23 percent of the forage in Wallowa County to as little as 3 percent in Baker County and none in Malheur County. Overall, hay fed was the largest category, averaging 32 percent. This may well be the major contributing factor to high cost of operation, since an AUM of hay costs more than an AUM of range forage, regardless of the source. Hay fed ranged from 39 percent in Klamath County to as low as 20 percent in Umatilla County, almost a two-fold difference.

Rangeland in Umatilla County provided 61 percent of the year's forage (Table 1), and in counties like Crook, Harney, Malheur, and Wallowa, more than 50 percent is from range. Irrigated lands were especially important in Klamath (20 percent), Jefferson-Deschutes-Wheeler (17 percent), and Union (14 percent) counties.

In the southeastern region (Klamath, Lake, Harney, and Malheur), the BLM provides more forage than any other range source, both seasonally and on a year-round basis (Table 2). During May, the amounts were Malheur (69 percent), Lake (66 percent), Harney (57 percent), and Klamath (27 percent) (data not shown). For the April through August period, the averages by county were Malheur (65 percent), Harney (45 percent), Lake (51 percent), and Klamath (12 percent). National forests in the southeast region contributed less than the other areas (contrast Tables 2, 3, and 4). However, in Klamath County the national forests provided more than 35 percent of the forage for the July through September period so the average of five percent masks that. This was because Malheur County has no national forests and Lake and Harney counties are similar with 11 to 20 percent of June through August forage coming from national forests.

The tier of central Oregon counties had less BLM forage than the southeast region but more than 20 percent of the AUM's occurred in May and June from that source (Table 3). On a county basis for May and June, BLM provided from 33 and 25 percent in Baker County, 26 and 27 percent in Crook, 22 and 24 percent in Jefferson-Deschutes-Wheeler, to 6 and 4 percent in Grant which has scattered parcels known as "Section 15" (Taylor Grazing Act) land. The national forests provided another 15 to 20 percent of the June through September forage for central Oregon dependent ranches (Table 3).

In the northeastern region, the national forests provided 14 percent of the year-round forage, considerably less than the private range (Table 4). However, in Wallowa County the average was 23 percent with from 31 to 46 percent of the total AUM's in June through October coming from national forests.

In Union and Umatilla counties, comparable figures were 14 to 32 percent for June through September with only 6 to 15 percent of October's forage coming from the national forests. The northeastern region was defined more from a geographical than an ecological standpoint. For example, more aftermath is available in Umatilla County (14 percent) than Union (10 percent) and Wallowa (7 percent). Further, much less hay is normally fed in Umatilla County (20 percent) compared to Union (28 percent) or Wallowa (31 percent). A higher percent of the total AUM's comes from rangeland in Umatilla County (61 percent) compared to Wallowa (53 percent) and Union (48 percent).

SUMMARY

BLM and U.S. Forest Service lands supplied 20 percent of the year-round forage for ranches with federal grazing permits. This occurred in all months but was concentrated mainly from April (22 percent) through October (20 percent) (Table 5). In some counties the overall contribution of BLM and Forest Service was greater than the private range sources (Table 1). It is obvious that federal lands are very significant to the operations of many dependent eastern Oregon beef operations. Equally obvious is the fact that large adjustments in both production and regional economies would result if the federal lands were withdrawn from the forage base.

Table 1. Forage sources for all eastern Oregon ranches with federal grazing permits

	Central				Southeast				Northeast			
	Crook	Wheeler Jefferson Deschutes	Grant	Baker	Klamath	Lake	Harney	Malheur	Umatilla	Union	Wallowa	Avg.
	Percent											
BLM	11	10	3	12	6	26	23	35	>1	>1	>1	12
USFS	5	6	13	3	12	5	4	--	10	9	23	8
Private range	37	31	30	27	14	8	19	18	50	38	30	26
Other range	1	--	1	--	--	3	5	2	>1	1	--	1
Irrigated pasture	9	17	7	10	20	11	6	7	6	14	8	10
Hay/crop aftermath	7	2	10	13	9	11	14	8	14	10	7	10
Hay	29	33	36	35	39	36	29	31	20	28	31	32

Table 2. Seasonal forage sources (percent) for southeast Oregon ranches with federal grazing permits

Forage source	J	F	M	A	M	J	J	A	S	O	N	D	Total
BLM	4	2	2	40	55	44	40	35	30	22	2	4	22
USFS					2	12	16	17	16	3			5
Private range	4	4	7	15	22	30	22	24	22	19	10	7	15
Other range	2	2	2	3	1	2	2	2	4	5	4	3	2
Meadow and Irrigated pasture	1	1	2	6	18	18	20	21	20	13	8	4	11
Crop/hay aftermath	1	1	1	1	1	--	--	2	9	34	56	26	10
Hay fed	88	90	86	34	1	--	--	--	--	5	21	57	34

Table 3. Seasonal forage sources (percent) for central Oregon ranches with federal grazing permits

Forage source	J	F	M	A	M	J	J	A	S	O	N	D	Total
BLM	--	--	.5	6	22	20	14	9	7	6	22	5	9
USFS					2	15	19	20	18	6	--		7
Private range	6	2	2	46	64	49	44	44	39	34	30	14	31
Other range						.5	.5	.5	.5	.5	.5	.5	.2
Meadow and Irrigated pasture	2	--	--	2	9	15	21	24	22	26	13	8	11
Crop/hay aftermath	2	1	1	1			1	2	12	30	36	14	8
Hay fed	89	96	94	35	2					4	12	58	33

Table 4. Seasonal forage sources (percent) for northeastern Oregon ranches with federal grazing permits

Forage source	J	F	M	A	M	J	J	A	S	O	N	D	Total
BLM					1	1	1	1	1	1			.5
USFS	2	2	2	6	12	24	30	29	31	22	7	4	14
Private range	2	2	15	37	65	59	54	54	54	55	44	27	39
Other range												4	.3
Meadow and Irrigated pasture			1	8	21	17	15	15	15	11	7	.5	9
Crop/hay aftermath	12	9	9	10	1					11	11	38	10
Hay fed	84	87	72	39	.5						9	29	26

Table 5. Seasonal forage sources (percent) for all eastern Oregon ranches with federal grazing permits

Forage source	J	F	M	A	M	J	J	A	S	O	N	D	Total
BLM	1	1	1	20	28	24	20	16	14	10	8	2	12
USFS	.5	.5	.5	2	5	16	21	21	21	9	2	1	8
Private range	4	3	8	32	49	45	39	39	37	34	26	15	28
Other range	1	1	1	1	.5	1	1	1	2	2	2	2	1
Meadow and Irrigated pasture	1	.5	1	5	15	17	19	21	20	17	9	4	10
Crop/hay aftermath	4	3	3	3	.5	--	.5	1	8	26	42	25	9
Hay fed	87	91	85	36	1					3	14	50	32