

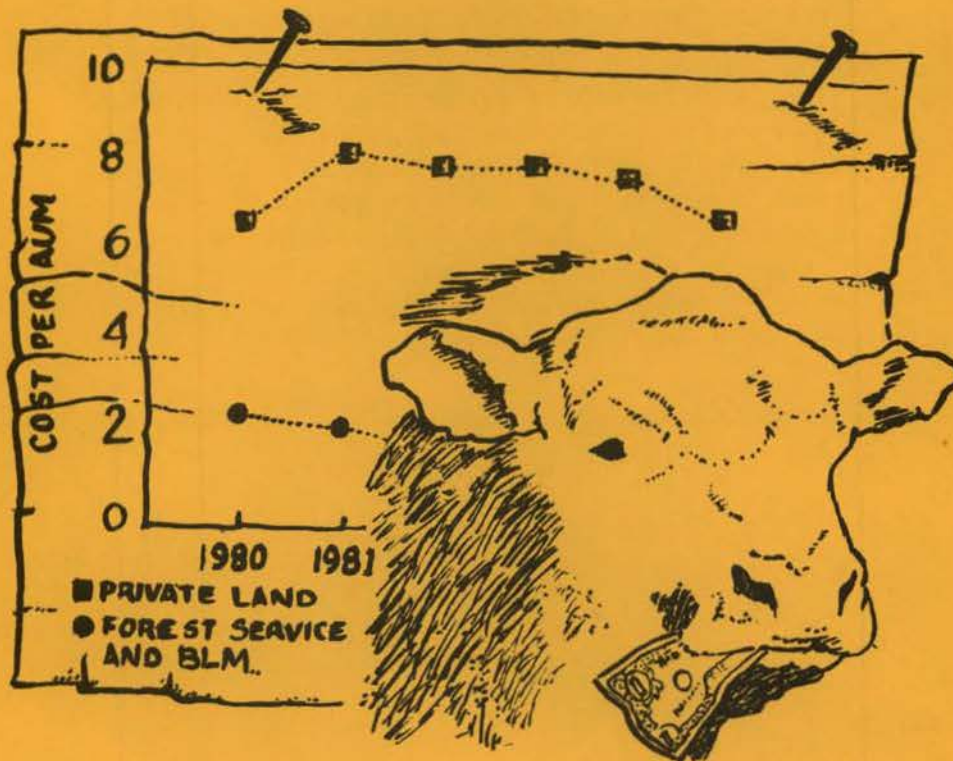
Federal Grazing Fees: The Never-Ending Story

Neil R. Rimbey
Extension Range Economist

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Summary

This publication explores some of the issues behind the ongoing federal grazing fee controversy. Major sources of the controversy appear to be related to perceptions that public land grazing is subsidized, that permit value accumulates as a result of lower federal grazing fees and that lower fees lead to overgrazing of the public lands. Public and private land grazing costs are used to derive a value that a prudent rancher would pay for a federal grazing permit.

Grazing costs of selected Idaho ranchers indicate that the total cost of using public and private resources are fairly comparable. That is, the difference between private and public grazing costs is small. If you consider only cash operating expenses, it is cheaper to graze BLM land by \$2.59 per AUM. Given this cost savings, a prudent rancher could pay up to \$29 per AUM to purchase a federal grazing permit. There is no indication that lower public land grazing fees lead to overgrazing.

The Author

Neil R. Rimbey is Extension range economist in the University of Idaho Department of Agricultural Economics and Rural Sociology stationed at the Southwest Idaho Research and Extension Center, Caldwell.

Federal Grazing Fees: The Never-Ending Story

Neil R. Rimbey, Extension Range Economist

The grazing fee formula mandated under the Public Rangeland Improvement Act (PRIA, Public Law 95-514) expired with the 1985 grazing year. Since Congress was unable to address and resolve this issue, President Reagan issued Executive Order 12548 on Feb. 14, 1986. Under this order, the fee is calculated using the PRIA formula with a \$1.35 per animal unit month (AUM) minimum. Calculated under the executive order, the fee for grazing domestic livestock on federal lands during 1988 was \$1.54 per AUM. The fee in 1989 is scheduled to be \$1.86 per AUM.

Indexes of beef prices, private land rental rates and costs of production and grazing cost differences between public and private lands are used to calculate the annual fee. A detailed explanation of the components of the PRIA formula and calculations of the fee can be found in Rimbey (1985) (see Appendix, page 7). Several proposals currently in Congress would replace the Executive Order. Two of the proposals call for significant increases in fee levels to make them more comparable with private land grazing rates, and one calls for continuance of the PRIA formula.

Over the years, the grazing fee has been a controversial subject. Several issues at the core of this controversy are identified and explored in this article. These central issues are concerns that taxpayers are subsidizing livestock grazing on public lands, that this subsidy has led to a "windfall" accumulation of wealth in the private sector in the form of grazing permit values and that lower federal grazing fees lead to overgrazing and exploitation of the resources.

Issue 1: Subsidized Grazing

Figures such as those in Table 1 are often used to show that the federal government is collecting grazing fees that are lower than those collected in the private sector. The conclusion of many people viewing these figures is that the difference between private and public land fees is in fact a subsidy to the public land graziers. In other words, federal land grazing permittees paid \$1.35 per AUM for forage in 1987 while private land users paid an average of \$6.60 per AUM. Therefore, a subsidy of \$5.25 per AUM exists on public lands.

Table 1. Grazing fees on public and private rangelands, Idaho, 1980-87.

	Private land ¹	FS and BLM
	(\$ per AUM)	
1980	\$6.61	\$2.41/2.36 ²
1981	8.20	2.31
1982	7.98	1.86
1983	8.02	1.40
1984	7.83	1.37
1985	6.97	1.35
1986	7.51	1.35 ³
1987	6.60	1.54 ³

¹Idaho Agricultural Statistics Service, 1988.

²BLM and FS areas had different base values in PRIA formula. 1981 (1982 grazing year) was first year with uniform fee.

³Fee set using the PRIA formula by Executive Order with \$1.35 per AUM minimum.

Issue 2: Value of Public Land Grazing Permits

Because of this difference in lease rates and the resulting impression that a windfall is accruing to public land permittees, the federal grazing permit may acquire value. This may be capitalized into the value of an existing ranch, or it may appear directly as a separate asset if the permit can be exchanged on the open market.

Workman (1988) makes an analogy between an apartment rental and the federal grazing fee issue to illustrate this point. An apartment was rented at less than market value with a long term lease because the landlord wanted someone to care for his property. Another renter offered to buy the lease from the existing renter because he valued the opportunity to pay lower rent. Thus, the low-rent lease acquires value in the eyes of potential renters.

A similar situation exists for federal grazing leases. Lower grazing fees and a limited number of permits adjudicated under the Forest Reserves and the Taylor Grazing Act have resulted in a demand for these permits. Hence, a value has become assigned to them.

Federal agencies administering the leases do not recognize that permits are rights and stand by a contention that they are privileges which are periodically renewed. Interestingly, another arm of the federal government, the Internal Revenue Service, does recognize these permits as assets and taxes them as part of estate settlements and other related tax cases. In addition, lending institutions often use permits as collateral for securing loans.

As is the case with many resource markets, permits have been given a wide range of values. The market value for these permits fluctuates periodically, given the prevailing economic climate, federal policies and other factors. Torell (1985) re-

ported that New Mexico grazing permit values ranged from \$1,300 to over \$1,400 per animal unit (AU). Assuming that most of the permits in New Mexico are for year-long grazing, this calculates to a range of \$108 to \$117 per AUM. Torell also noted that permit value had declined 10 to 14 percent from 1981 to 1984. Workman cited a graduate thesis that derived an estimate of \$30 per AUM as the value of permits in Utah in 1981. Reported value of grazing permits changing hands over the last few years in Idaho have ranged from nothing to \$150 per AUM.

Issue 3: Lower Grazing Fees Lead to Overgrazing

A related issue centers on the perception by many that lower federal grazing fees lead to a tendency to overstock and overgraze public lands. In other words, excess demand for grazing has been created by setting the annual price of public land grazing too low.

Another Side to the Coin Grazing Costs

In addition to the direct lease costs, grazing on public and private lands has several other costs often ignored in the discussion. For example, expenses incurred while animals are on a specific range area include operation and maintenance of range improvements, labor and equipment use associated with turnout, management while on the area and gathering and moving the livestock to another area. Added to these are costs resulting from death loss or disappearance of livestock, purchases of salt or feeds and veterinary bills.

Obermiller and Lambert (1984) reported on these costs for several western states, including

Table 2. Grazing costs per AUM in selected Idaho counties, 1982-83.¹

Activity	Land ownership					
	BLM		USFS		Private	
	Cost	% of total	Cost	% of total	Cost	% of total
Turn-out	\$ 0.99	5.8	\$ 1.07	6.1	\$ 0.69	4.5
Gather/move off	3.26	19.1	3.64	20.8	0.97	6.3
Management	4.08	23.9	4.75	27.1	3.73	24.4
Maintenance	2.23	13.1	0.84	4.8	1.55	10.1
Salt/veterinary	0.16	0.9	0.22	1.3	0.22	1.4
Meetings	0.80	4.7	0.27	1.5	0.01	0.1
Death loss	3.13	18.3	3.44	19.6	0.37	2.4
Fees/rents	2.24	13.1	3.18	18.1	7.77	50.8
Other	0.17	1.0	0.13	0.7	0.00	0.0
Total	\$17.06	100.0	\$17.54	100.0	\$15.31	100.0

¹From Obermiller and Lambert, 1984.

Idaho. They concluded that:

1. Public land grazing fees accounted for a fairly small percentage of the total costs of using federal forage while private lease grazing fees made up a much greater proportion of total costs.
2. Total federal and private land grazing costs vary widely from state to state and within individual states.

Figures for Idaho support these observations. Table 2 lists average grazing costs per AUM by activity and land ownership in selected Idaho counties. Average total cost for the 37 BLM allotments covered in the survey was \$17.06 per AUM. Grazing fees amounted to just 13 percent of the total cost of using BLM forage. The 35 Forest Service allotments in the survey had average total cost of \$17.54 per AUM with 18 percent of the costs being for grazing fees. Costs for the 11 private leases was \$15.31 per AUM, with the lease accounting for over half of the total cost.

Grazing Permit Values

Information from Table 2 can also be used to derive an estimate of the amount a rancher could afford to pay for a federal grazing permit, given the lower cash costs on public lands. Assuming that cash operating expenses associated with the operation of a rangeland enterprise occur in the areas of turnout, gather and move off, management while on the allotment and fees and rents, cash costs would be \$10.57 per AUM for BLM permits, \$12.64 for Forest Service and \$13.16 for private leases. In terms of cash costs, it is therefore cheaper to run livestock on public lands (with the cash advantage being \$2.59 per AUM for BLM and \$0.52 for FS).

Assuming the annual cash cost savings remain constant over a period of years, we can derive an estimate of the amount a prudent investor would pay to take advantage of these cost savings. The investor should be willing to invest up to the net present value (NPV) of the stream of benefits (or cost savings) or,

$$NPV = \sum_{j=1}^n \frac{(PVT^n - BLM^n)}{(1+i)^n}$$

where:

j = years, from 1 to n

i = interest rate

PVT^n = private costs year n

BLM^n = BLM costs year n

Using these BLM and private grazing cash costs as an example, we can derive a capitalized value for the BLM grazing permit. With a 30-year in-

vestment period and 8 percent discount rate, the net present value of the \$2.59 cost savings would be about \$29 per AUM. A rancher could thus afford to pay up to \$29 per AUM for the BLM grazing permit used in this example. Another rancher may have different costs and savings potential and thus, a different permit value.

Each of the management functions listed earlier include labor, vehicle and horse use, and reflect cash operating expenses. The justification for not including maintenance, death loss, salt and veterinary expenses can be divided into two observations. (1) Death loss and, to some extent, maintenance expenses involve capital costs (loss of breeding animals or foregone income from calf or lamb losses) and capital expenditures for materials to maintain fences and other range improvements. The Obermiller and Lambert (1984) survey gives no indication that these are annual average expenses nor are they cash expenses. (2) Cost items associated with salt/veterinary and other expenses were minimal and were fairly constant across land ownerships. Given these factors, these items were removed from consideration as cash expenses.

If death loss is considered an annual cash expense, the prudent rancher would reduce the bid for a public land grazing permit. This action would add \$2.76 per AUM to the cash costs on BLM and \$3.07 to cash costs on Forest Service. In fact, including these as annual cash costs would remove any cost savings on the public lands and would essentially mean that the grazing permit has a value of zero to this particular rancher.

Total Grazing Costs

Few federal grazing permits have remained with one operation since the adjudication processes (Workman 1988), and permits have been purchased by new operators. In this light, interest on permit investment should be considered as part of the grazing costs. Costs from the permittee's perspective should include the federal grazing fee, the cost difference between federal and private lands and interest on the investment in the permit. If no money was borrowed to purchase the permit, opportunity cost associated with the use of equity capital would be an appropriate cost item.

Using comparable 1982 and 1983 data from Tables 1 and 2, the average federal grazing fee for 1982 and 1983 was \$1.63 per AUM (\$1.86 in 1982 and \$1.40 in 1983). Non-fee cash costs on the BLM permits was \$8.94 per AUM (\$10.57 total cash costs minus \$2.24 reported fees and rents). Non-fee private costs were \$5.39 per AUM (\$13.16 total cash costs minus \$7.77 fees and

rents). The difference between these would be \$3.55 per AUM. Interest on investment (or, an opportunity cost associated with using equity capital) would be the \$29 permit value at 8 percent interest, or \$2.32 per AUM. Given the figures used in developing the examples thus far, a permittee's grazing costs per AUM would be:

Federal grazing fee	\$1.63 ¹
Added grazing costs	\$3.55
Interest on permit investment	<u>\$2.32</u>
Total	\$7.50

¹Average of 1982 (\$1.86 per AUM) and 1983 (\$1.40 per AUM) grazing fees since grazing costs were calculated for these 2 years.

Using this method, the costs of grazing on public and private lands are very comparable. The private lease cost reported by the permittees in Table 2 was \$7.77 per AUM, while the public land costs are \$7.50 per AUM. Average lease cost at the state level was around \$8 per AUM (Table 1).

Overgrazing

What many people unfamiliar with public land grazing tend to forget or ignore when they make the tie between lower grazing fees and overgrazing are two policy issues. (1) The supply of federal forage is limited to holders of grazing permits. Not just anyone can turn livestock onto the public domain. Although a demand for additional public land grazing may exist, access is limited to permit holders. (2) Permits specify that a certain number and kind of livestock can be grazed for a certain period of time. These limits are set by the managing agency based upon its estimates of carrying capacity of the specific range area. Federal agencies therefore control the number of AUMs of livestock use.

In addition, the long term trend of livestock use on public lands is down. Sharp and Sanders (1978) indicated that AUM's of livestock use on federal lands in Idaho declined about 16 percent between

1947 and 1975. The nation's cattle herd is currently lower than at any time since the early 1960's, and sheep numbers are at their lowest levels since before World War II. Fewer livestock, vacant allotments and reductions imposed through land planning efforts since 1975 would make it likely that federal AUM's have declined further since 1975.

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Appendix

Table A. Public Rangeland Improvement Act, federal grazing fee levels and indexes and actual fee levels, 1969-87.

Data year	Base	PGLLR	FVI	BCP	BCPI	PPI	Calculated next years fee*	FS fee**	BLM fee**
Base period	\$1.23	\$3.65	100	\$22.04	100	100	\$1.23	—	—
1969	\$1.23	\$3.82	105	\$27.00	123	113	\$1.40	\$0.60	\$0.44
1970	\$1.23	\$4.05	111	\$29.50	134	118	\$1.56	\$0.60	\$0.44
1971	\$1.23	\$4.06	111	\$29.50	134	124	\$1.49	\$0.78	\$0.64
1972	\$1.23	\$4.17	114	\$36.80	167	130	\$1.86	\$0.80	\$0.66
1973	\$1.23	\$4.57	125	\$43.00	195	140	\$2.22	\$0.91	\$0.78
1974	\$1.23	\$5.82	159	\$39.20	178	168	\$2.08	\$1.11	\$1.00
1975	\$1.23	\$5.75	158	\$35.20	160	198	\$1.47	\$1.11	\$1.00
1976	\$1.23	\$6.37	175	\$36.10	164	215	\$1.52	\$1.60	\$1.51
1977	\$1.23	\$7.06	193	\$36.00	163	230	\$1.56	\$1.60	\$1.51
1978	\$1.23	\$7.11	195	\$47.60	216	246	\$2.03	\$1.60	\$1.51
PRIA passed									
1979	\$1.23	\$7.53	206	\$64.90	294	275	\$2.78	\$1.93	\$1.89
1980	\$1.23	\$7.88	216	\$64.20	291	319	\$2.31	\$2.41	\$2.36
1981	\$1.23	\$8.83	242	\$59.10	268	359	\$1.86	\$2.31	\$2.31
1982	\$1.23	\$8.36	229	\$57.70	262	378	\$1.39	\$1.86	\$1.86
1983	\$1.23	\$8.85	242	\$56.40	256	387	\$1.37	\$1.40	\$1.40
1984	\$1.23	\$8.86	243	\$57.79	262	395	\$1.35	\$1.37	\$1.37
1985	\$1.23	\$8.40	230	\$53.65	243	397	\$0.94	\$1.35	\$1.35
1986	\$1.23	\$8.10	222	\$51.78	235	388	\$0.85	\$1.35	\$1.35
1987	\$1.23	\$8.54	234	\$59.95	272	381	\$1.54	\$1.54	\$1.54

Information for 1987 calculations from Federal Register, Feb. 2, 1988, Vol. 53, No. 21, p. 2992.

Values from 1969-78 were calculated using the PRIA formula which did not go into effect until the 1979 grazing year.

*Fee calculated based upon PRIA grazing fee formula for next grazing year.

**Actual amounts charged by FS and BLM.

$$\text{Fee Formula: Economic Value} = \frac{1.23 \times [\text{FVI}/(\text{BCPI}-\text{PPI})]}{100}$$

where:

\$1.23 = The base value established in 1966 through the Western Livestock Grazing Survey.

PGLLR = Private Grazing Land Lease Rates.

FVI = Forage Value Index, derived by dividing annual PGLLR by the base period of 1964-68.

BCP = Beef Cattle Price

BCPI = BCP Index, derived by dividing annual prices of beef cattle over 500 pounds by the base period value.

PPI = Prices Paid Index, derived by indexing selected prices that livestock producers pay for production inputs.



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