History of Forest Service Grazing Fees

W. L. DUTTON

Chief, Division of Range Management, Forest Service, U. S. Department of Agriculture, Washington, D. C.

THE FILES of the Forest Service contain a great mass of information about grazing fees. Most of the material is in the form of correspondence and unpublished reports extending over almost half a century. Much of it is gathering dust in the National Archives. With few exceptions the men who took an active part in establishment of early day grazing fee policies are no longer with the organization. The purpose of this paper, therefore, is to present what are now little known facts about the origin and development of grazing fee charges on national forests.

EARLY REGULATIONS

Provision for charging for grazing use of the National Forests followed transfer of the old "Forest Reserves" from the Department of the Interior to the Department of Agriculture in 1905. In that year James Wilson, Secretary of Agriculture, approved the following regulation, through authority granted by the Act of June 4, 1897 (30 Stat. 35; 16 U.S.C. 551):

Reg. 25. On and after January 1, 1906, a reasonable fee will be charged for grazing all classes of livestock on forest reserves. In the beginning the minimum price charged will be as follows, depending upon the advantages and locality of the reserve: From twenty (20) to thirty-five (35) cents per head for cattle and horses for the regular summer grazing season, and from thirty-five (35) to fifty (50) cents per head for the entire year; from five (5) to eight (8) cents per head for sheep for the regular summer grazing season; and from eight (8) to ten (10) cents per head for goats for the regular summer grazing season. These prices will be gradually advanced when the market

conditions, transportation facilities, and demand for reserve range warrant it, but the grazing fee charged will in all cases be reasonable and in accordance with the advantages of the locality. An extra charge of two (2) cents per head on grown stock only, will be made for sheep and goats which are allowed to enter the forest reserves for the purpose of lambing and kidding.

From 1906 until 1910 there was little change in the fees, except that a few adjustments were made between forests and regions in order to assure like fees for like ranges. The regulations in 1910 provided for the establishment of cattle fees from 35 cents to 60 cents, raising the maximum limit 10 cents per head per annum, and of sheep fees from 10 cents to 18 cents yearlong.

In 1915 the regulation was again amended and the per annum fees were established at 40 cents to \$1.50 per head per annum for cattle, and the rates for sheep at 25 percent of the rates for cattle.

First Study of Comparable Privatelyowned Ranges

The year 1916 marked the first comprehensive attempt of the Forest Service to determine a fair compensation for national-forest range in comparison with similar private-land ranges. It was at this time, too, that comments by certain Members of Congress favoring increased grazing fees assumed noteworthy proportions.

After careful consideration by the Forest Service of the rental value of some 900 tracts of private land similar to national-forest range, the Secretary of Agriculture, under date of November 3,

1916, issued an order increasing the grazing fees from 12 to 20 cents per head for 1917 with the same amount of increase for each of the succeeding years of 1918 and 1919, provided no single increase or series of increases resulted in a fee in excess of \$1.50 per annum. A minimum rate of 60 cents per annum was established. These were flat rate fees and the examples are on a cattle basis.

In 1920 the House Committee on Agriculture made efforts, in the form of appropriation riders and otherwise, to increase grazing fees by as much as 300 percent. The Forest Service, however, took the position that it would not be fair to change the fees during the life of 5-year permits which had been issued in 1919. In addition, it was felt that economic conditions surrounding the livestock industry in the West were too unstable to justify a hasty increase in fees at that time.

First Comprehensive Appraisal

As an alternative to the course proposed by the House Committee on Agriculture, the Forest Service suggested that a comprehensive study of the range values in the western States be made, with a view to determining a fair basis of compensation for use of national-forest ranges. The plan for the appraisal was worked out and approved by the Secretary of Agriculture in November 1920. C. E. Rachford, Assistant Chief of Grazing for the U. S. Forest Service at that time, directed the study.

In the early stages of this study several methods for applying the principle of a fair and reasonable compensation to the Government for the use of national-forest range were considered. Among these were cost of production, open competitive bid, study of a sample range in each locality, value of range in relation to market value of livestock, and the rental value of

comparable privately owned lands. All were discarded in favor of the last named, i.e., rentals paid for comparable lands in private ownership.

The study included a survey of the rental value of over 2,000 tracts of privately owned and controlled land comprising over 20 million acres. Of these, 1,575 tracts or some 16 million acres were finally used for purposes of comparison with national-forest range lands.

The average per head per month rentals paid for the 16 million acres of privately-owned lands over a period of some 10 years ending in 1923 were 24.6 cents for cattle and 7.5 cents for sheep.

For the approximately four million acres studied but discarded, the average rentals per head per month were 54 cents for cattle and 14 cents for sheep.

Some ten thousand odd national-forest grazing allotments involving about 110 million acres were also surveyed and analyzed. Primary factors, such as forage, water, topography, and accessibility, influencing grazing values were graded or rated on both the privately-owned tracts and the national-forest allotments. For example, the water on a given cattle range was graded 100 percent if the cattle were required to travel one mile or less: 90 percent if travel was between one and two miles; 70 percent if travel was three to four miles; and 50 percent if travel was four to six miles. The grades for all factors were than averaged to obtain the final grade for the unit.

The basic value of the national-forest allotments was then determined by the following formula: The grade of the comparable privately-owned tract of land is to its rental price (in cents per head per month) as the grade of the national-forest allotment to be compared therewith is to X.

Recommended charges per head per

month for national-forest range resulting from the study as of the fall of 1923 averaged 18.1 cents for cattle and 6.2 cents for sheep. Actual charges per head per month in effect on the National Forests at that time averaged 10.4 cents for cattle and 2.9 cents for sheep.

These proposed fees were presented to approximately 9,000 national-forest permittees at about 400 meetings held throughout the western country. Permittees from New Mexico and Arizona attending the meetings, and numbering about 1700, were favorable. (Proposed fees per head per month for those two States averaged only 8.6 cents for cattle and 2.9 cents for sheep.) The great majority of the remaining 7,300 permittees agreed to the fairness of the method but, as a business proposition, were almost unanimous in opposing any increase at that time.

Casement Appointed to Review Appraisal

As a result of these objections the Chief Forester recommended to the Secretary of Agriculture that he select some competent man, wholly disconnected with the Forest Service, to make a thorough-going check of the appraisal. This recommendation was accepted, and Mr. Dan D. Casement, Kansas livestock breeder and leader in the industry, was selected to make the review with the understanding that the 1919 fee rate would continue through 1925 and 1926, except where the appraisal had shown the 1919 rates to be in excess of the value of the forage.

During the interim—1924—1926—the original appraisal was rechecked by the Forest Service and new data on current privately-owned land rentals added. In some instances these had been reduced below the previous ten-year average; in others the trend had been upward. The recheck also went further than the

original appraisal in giving the permittee the benefit of any doubt which might exist as to the accuracy of the data. The result of the recheck and additional data was to recommend a still lower fee, so that when Mr. Casement began his assignment on January 2, 1926, the appraisal recommendations per head per month averaged 16.6 cents for cattle and 5.9 cents for sheep.

Mr. Casement completed his assignment June 30, 1926, with a report of that date. He made two important recommendations for reductions in the fees proposed by the Forest Service (1) "an arbitrary reduction from the appraisal fees for National Forests in Oregon and California to bring them to the same general level as the average fees proposed for" the Northern Rocky Mountain, Rocky Mountain, and Intermountain Regions; and (2) a general reduction, after application of No. 1, ranging from 10 to 40 percent of the increases proposed by the appraisal and "averaging in the aggregate 25 percent" of such increases. Mr. Casement also recommended that the general reduction be applied "in the manner that will best meet any unwarranted differences and discrepancies. . . . " Another recommendation was that the fees be related to the prices of beef and lamb after 1930.

In explaining his recommendations Mr. Casement said that the "conspicuously high fees" proposed for Oregon and California could not be justified "except on purely commercial grounds..." As to his recommendation for a general reduction he said: "My belief that social and economic principles have been and should continue to be applied in the administration of forest grazing leads me to recommend that precise recognition of these principles be given by a general reduction in the proposed fees."

Final Appraisal Fees

The Casement recommendations were applied. The results were discussed with representatives of the livestock industry in Salt Lake in January 1927, minor adjustments made and, on January 25, 1927, approved by the Secretary of Agriculture.

The following tabulation shows the relationship of the final fees per head per month established in 1927 to the per head per month fees (a) in effect on the National Forests in 1927, (b) on comparable privately owned lands in 1923, (c) recommended by the appraisal in 1923, and (d) recommended after a recheck in 1926:

	CATTLE	SHEEP
National Forest fees—1927	10.4	2.9
Privately owned land fees over 10-year period—1923	24.6	7.5
Original appraisal fees—1923	18.1	6.2
Appraisal recheck fees—1926		5 .9
Final adjusted fees—1927	14.5	4.5

Increases called for by the final adjusted fees were applied in installments of 25 percent each during the years of 1928, 1929, 1930 and 1931, the full increase being effective in 1931. Under this schedule the average fee per head per month for cattle was increased from 10.4 cents to approximately 14.5 cents; for sheep from 2.9 to about 4.5 cents. Fees by Regions, Forests, and grazing allotments of course varied considerably above or below the average.

MARKET PRICE FORMULA ADOPTED

In 1933 the users of the National Forests urged that the previously recommended plan for relating fees to market values be made effective at once. Such a plan was approved by the Secretary on May 27, 1933, and provided:

1. That the average national-forest

- grazing fees of 14.5 cents per head per month for cattle and 4.5 cents per head per month for sheep in effect during 1931 be used as the basic fees, subject to adjustment each year in accord with fluctuation in livestock prices.
- 2. That the adjusted fees each year shall have the same ratio to the basic fees that the average price received by producers in the eleven western States during the immediately preceding year had to the corresponding average price during the period 1921-1930 (\$6.62 per cwt.), inclusive in the case of cattle, and during the period 1920-1932 (\$9.15 per cwt.) inclusive, in the case of sheep. Reducing this to an equation for cattle. we have: \$6.62:14.5 cents::preceding year's beef cattle price: X. X equals current year's average fee rate. (A specific example of how local fees are computed is presented in a following section.)
- 3. That the cattle prices to be used in adjusting the fees shall be the prices received for beef cattle as compiled by the Burcau of Agricultural Economics, and the sheep prices shall be the prices received for lambs as likewise compiled by the Burcau of Agricultural Economics.
- 4. That in adjusting the grazing fees for 1933 in accordance with the provisions of the preceding paragraphs, 4.13 cents be considered the average price per pound for beef cattle for 1932, and 4.18 cents the corresponding price for lambs; that the average fee for 1933 as thus determined will be 9.05 cents per head per month for cattle, or 38 percent less than the average cattle fee determined by appraisal. For sheep the average fee in 1933 will be 2.05 cents per head per month, or 54 percent less than the average sheep fee determined by appraisal.

The approval of this plan marked an innovation in the past policy. While it

maintained the basic schedule of fees adopted in January 1927, it recognized that prices received by the producer year by year are indices to the ability to pay for a given commodity. It was understood that this plan had to be applied nishes the Forest Service with preliminary price data at the beginning of each year. These preliminary figures normally do not differ sufficiently from the final figures to make any difference in the charges.

TABLE I

Average National Forest grazing fees and livestock prices by years

YEAR	AVERAGE NATIONAL FOREST GRAZING FEE (CENTS PER HEAD PER MONTH)		AVERAGE PRICE IN DOLLARS PER CWT. PER CENT OF BASE PRICE*			
			Beef cattle		Lambs	
	Cattle	Sheep	Amount	Percent	Amount	Percent
1932			4.13	62	4.18	46
1933	9.05	2.05	3.43	52	4.85	5 3
1934	7.51	2.38	3.67	55	5.51	60
1935	8.04	2.71	5.96	90	6.84	75
1936	13.05	3.36	5.73	87	7.45	81
1937	12.55	3.66	6.84	103	8.62	94
1938	14.98	4.24	6.11	92	6.74	73
1939	13.4	3.3	6.80	103	7.49	82
1940	14.89	3.68	7.29	110	7.82	86
1941	15.97	3.85	8.64	130	9.39	102
1942	18.9	4.6	10.50	159	11.30	123
1943	23.0	5.5	11.70	177	12.60	138
1944	26.0	6.25	11.30	171	12.30	134
1945	24.8	6.03	12.10	183	12.90	141
1946	27.0	6.25	14.20	214	15.30	167
1947	31.0	7.5	18.40	278	20.20	221
1948	40.0	10.0	22.20	335	22.40	245
1949	49.0	11.0	19.40	293	22.10	241
1950	42.0	10.75	23.10	349	24.80	271
1951	51.0	12.25	29.10	440	31.10	340
1952	64.0	15.25	24.50	370	24.00	262
1953	54.0	11.75			1	

^{*} Cattle \$6.62, sheep \$9.15.

broadly because fees could not be subject to adjustment to meet special conditions affecting individuals or localities only.

Final agricultural price data are ordinarily published by the Bureau of Agricultural Economics in April, and in order that current year's fees may be calculated prior to the beginning of the forest grazing seasons, the B.A.E. fur-

Computation of Current Local Fees

Use of 1952 price data in computing the 1953 current local fee for a given range is explained as follows:

The 1952 average market price for beef cattle was \$24.50 per cwt.; the base livestock price is \$6.62 per cwt.

Base fees fully applied in 1931 as a

result of the appraisal study varied by individual forests and ranges. Assume a cattle range with a 1931 base fee of 12 cents per head per month.

Reducing these to an equation we have

6.62:12::24.50:X

X = 44.4 (or 44 cents when rounded off to the nearest cent, and becomes the 1953 cattle fee on the assumed range)

Stated another way, the 1952 market price of \$24.50 per cwt. for beef cattle is 370 percent of the base market price for beef cattle. Therefore the 1953 fee to be charged on a range with a base fee of 12 cents is 370 percent of the 12 cent base fee, or 44 cents.

Included is a tabulation showing

average grazing fees and livestock prices by years (Table 1).

NEED FOR A NEW APPRAISAL

The present fee structure is based on a study undertaken more than 30 years ago. Some adjustments in base fees are needed in order to iron out certain inconsistencies which have developed over the years or which were inherent in the original appraisal. When or how this will be done has not been decided at this writing.

ACKNOWLEDGMENT

To Mary E. Price, Administrative Assistant in the Washington office Division of Range Management, goes most of the credit for searching out and assembling the material used in this paper. Her unerring help in checking dates and figures was a major contribution.



SOME INFILTRATION CHARACTERISTICS OF SAGEBRUSH COVER.

(Abstract of a thesis submitted in partial fulfillment of the requirements for M.S. degree in Forestry at Colorado Agricultural and Mechanical College, Fort Collins, Colorado, June 1952.)

This thesis presents a study of some of the infiltration characteristics of sagebrush cover.

The relative infiltration capacities of sagebrush sites in various conditions were determined by Rocky Mountain infiltrometers. The data are from 38 plots located in northwestern Wyoming, southwestern Colorado, and southwestern Utah. These plots are representative of some common conditions found on sagebrush ranges.

This study is concerned with the determination of the effects on infiltration characteristics caused by: 1) grazing,

2) reseeding, and 3) burning of sagebrush range.

The relations noted in this study imply that disturbance of sagebrush range by heavy grazing, reseeding practices, or burning will reduce the infiltration capacity of the site. Related studies conducted on the plots in the course of the main investigations indicate that soil stability of the sites supporting sagebrush will also be reduced by heavy grazing, reseeding, or burning sagebrush range.

The author recognizes that applications of research findings such as these must be limited due to the small number of samples involved. However, trends and implications developed in this study can provide material of value for future range management research.

MERLE H. TIGERMAN