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Western States

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COMMENTS ON THE USDA PUBLICATION: COW/CALF RANCHING 10 WESTERN STATES

By

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Comments on the USDA Publication: Cow/Calf Ranching 10 Western States (ERS Report #682, May 1994)

Darwin B. Nielsen and E. Bruce Godfrey

The following comments are responses to the portions (Summary, etc.) of the original publication.

**Summary:**

A big deal is made of the supposed fact that fees on public lands are below the market value for forage. A single grazing fee for all public land users cannot collect full market value from each rancher. Regardless of the distribution of individual rancher values of grazing, there will be some with high total costs where the current fee is too high. There will be others where they have a low total cost and/or high returns associated with the use of public lands and the fee is less than they would be willing to pay at the margin. Low-cost ranchers are in a position to pay for permits if they choose. However, in recent years, new players have entered the permit value game and have distorted the logic of the original model of public land grazing. The new players are environmental organizations who buy permits with the sole purpose of retiring them from grazing. The Nature Conservancy is one such organization. In addition, one of the main thrusts of "Rangeland Reform 94" is to make it easier for these groups to buy and retire permits via "conservation use."

The authors argue that permittees "cannot own grazing permits," but this is not a valid argument. The government recognizes permit values for inheritance
taxes. When the government deems it practical, they purchase permits to put land to other uses. BLM and FS officials have been party to transferring permits and aiding the parties in determining sale prices for permits. Thus, grazing permits are bought and sold in the market like other types of property.

The authors argue that current fees do not cover the cost of administration, and that fees should be increased to cover these costs. This, however, is looking at the problem from only one side. Has anyone investigated to see if administration costs are too high? In the short run, at least, the cost of production has never been the driving force to set market prices. If market prices do not cover the costs of production in the long run, the producer of the goods goes out of business since he/she is too inefficient to produce and sell at competitive prices. Nonfee costs, which are major costs and much more than the fee, are never mentioned, even though they should be accounted for in the budgets if they are accurate!

The statement is made that rancher net income would decline as the fees increase, but more funds for federal, state, and local governments would offset ranchers losses in local spending. This may not be the case. One important detail has been overlooked. It has been assumed that ranchers will be able to remain in business as the fee and nonfee costs increase over time, which also implicitly assumes an inelastic demand curve for federal grazing. If there is any empirical data to support this, it should be listed. It also assumes that all of the grazing fees collected would be returned to the local area.
The statement is made that "the cow/calf version of the 1990 FCRS represents just over 98 percent of the U.S. beef cow inventory." If that is the case, why didn't they include the states of Nevada and Washington in the analysis? North and South Dakota are included but have been treated differently in the fee issue for the past several years. The argument has been that the Dakotas were different than the 11 western states. They make a statement that the grazing fee formula or amount can be changed in two ways. "Congress can pass grazing fee legislation, the fee can be altered by executive order or agency regulations." Isn't this three ways fees can be changed?

"Most published research results indicate grazing fees charged were below market value at the time of the studies." Could a list of these publications be provided? If a reasonable return on the permit value was counted as a cost of grazing public land, I doubt that statement would be valid. The argument--grazing fees do not cover the cost of administration, thus, they should be increased--is an invalid argument as mentioned above. If grazing fees were forced to cover administrative costs, there would be even less incentive for the agencies to be cost conscious. In fact, increasing grazing costs could be an incentive to raise fees and eliminate grazing. For example, Nelson (1979) showed that the difference between administrative costs and revenues for most uses of Interior lands was much greater for other uses (e.g., recreation) than it was for grazing. In addition, the total cost of an activity is not a defendable basis for fees. One has to consider the costs that would be incurred "with"
versus "without" an activity. In the 1986 Grazing Fee Review and Evaluation, BLM personnel found that fees, based on the "with" versus "without" principle, were nearly equal to the fees being charged livestock operators to graze federal lands. If the government insists that the cost of administration is a valid argument for fees and fee levels, why don't they apply this principle to all users of public lands? Under this system we would not have to worry about determining values to the users of public lands, we would just have all of them pay the costs of administration of their particular use. The authors discuss "arguments for higher fees": (1) to cover costs of administration, (2) to be reasonable, and (3) to reflect the value of public forage. Which argument do the authors prefer?

The authors talk about the size differences between permittee and nonpermittee ranchers. The conclusion they make is that there is "some advantage accruing to permittees that allowed them to become larger in the first place." What is the empirical basis for this statement?

A $106 cost differential between permittee and nonpermittee is suggested. Is this difference statistically significant?

"Forage from other public sources was often more costly per forage unit than FS/BLM forage . . . ." Was this statement based on fees collected by an agency or total cost of grazing to the rancher or were the goods and services comparable? If it was not based on total cost to the permittee or leasee, then the comparison is erroneous.
Permittees had more capital for fences, horses, and breeding stock while nonpermittees had greater costs for machines, equipment, buildings, and trucks. How were the costs of these capital items allocated by enterprise and over time? Is the allocation of these costs just to the livestock enterprise, or were these costs allocated to other enterprises? If so, what criteria was used?

There are a few questions about Table 1 that need to be explained, since they are not discussed in the text. The key point made in the USDA publication is that permittee ranchers are economically better off than nonpermittees. There are several points to be made that question this conclusion.

Permittee ranchers had more stocker cattle than the nonpermittee ranchers and purchased fewer stockers than nonpermittees. Permittee ranchers kept a significant number of calves over as yearlings, so they gave up any profit on calves. Looked at another way, permittee ranchers get stockers at a lower cost than those purchased by nonpermittees, thus they make more on them. Since nonpermittee ranchers brought more stockers than permittee ranchers, they have lower returns on their stockers by the difference in the cost of stocker cattle going into the operation. This difference is equal to the profit given up on selling calves.

It is very difficult to allocate costs between sheep and cattle enterprises on the same ranch. Permittee ranches have more sheep than nonpermittee ranches. If the costs allocated to sheep production are overestimated, it will make permittee ranches appear more profitable than nonpermittee ranches.
Cost of bulls is not included in the budget (Table 1), and it is not clear if the value of cull bulls is included in receipts from other cattle. Permittee ranches would normally require more bulls per 100 cows than nonpermittee ranches. It is conceivable that a permittee ranch would require one bull per 25 cows, while a nonpermittee ranch-pasture operation might require one bull per 50 cows. Permittee ranchers would have significantly higher costs per cow for bull service.

The year 1990 appears to have been a relatively good year for running stocker cattle. Price data for Utah shows 1990 as the highest price stocker cattle year from 1988-92.

The materials presented by USDA are confusing as to what year they are reporting. The budget in Table 1 is for 1991, the material in Tables 2 and 3 is for 1990 and is used in Table 1. On page one, it is reported that the data used was collected in the 1990 Farm Costs and Returns Survey.

It is mentioned that permittees use more pickup trucks and three times as many horses than nonpermittees. Given all of the harvested feed used by nonpermittees, how can permittees use more fuel and lube than nonpermittees? Is all the difference in gas for the pickup? Where is the cost of horses in any of these budgets? Horses are not free and they eat year-round so they should have a cost to the cattle enterprise. The fact that permittee ranchers have more horses than nonpermittee ranchers is probably related to the type of grazing land permittees are using (public land), which is usually more difficult to manage for grazing.
If stocker enterprises were relatively unprofitable and if the purchase and sale of stockers were a larger part of nonpermittee costs and receipts, this would bias the results downward for nonpermittees. While one is not able to determine the profitability of stocker enterprises for either permittees or nonpermittees from the data provided in this publication, data from Cattle Fax suggest that stocker operations were not profitable in the 1990-91 period.

The authors indicate (page 6) that the average costs for permittees were significantly less than they were for nonpermittees. Was this purported difference statistically significant? If so, how was this determined? The authors also indicate that regression was used to determine if differences in size could be used to account for the difference(s) in costs. However, these results are not given. The only indication of the "goodness" of these regressions is suggested in footnote #10, where the R-squared values "ranged from .32 to 0.006." If this is the $R^2$ for the regression equations, it is likely that the equations could not be used to test the significance of any variable. As a result, the suggestion that there was no difference according to size could not be tested!

The statement (page 7) that there should be no difference between permittee and nonpermittee costs and returns is only true, theoretically, in the long run--after inefficient producers have been forced out of business. If small operators are willing to subsidize cattle operations as a "way of life," one would expect their costs to be greater than (larger?) operators who are not able to subsidize their cattle operation.
The statement in paragraph 2 (page 8) suggests that the cost of operating on rough terrain with inadequate water would be higher than it would be on lands where water is in ample supply and where the land was level. This difference is not reflected in the budgets (Table 1)—unless one assumes that permittees operate on "better" land than do nonpermittees.

Given the size differences in the number of cattle and sheep for permittees and nonpermittees, there would be many more full-time livestock ranchers in the permittee category. The residual returns part of Table 1 is misleading. If you are a full-time rancher with a permit, you are much more dependent on these residual returns than a small part-time or hobby livestock man in the nonpermittee category. Even though neither group is doing very well, a full-time rancher with negative returns is shown to be better off than a nonpermittee "rancher" with negative returns. These negative returns only amount to a small portion of his/her business and/or time for the small nonpermittee rancher.

The fees paid to the BLM/FS for grazing should give some strong evidence of dependency on public lands. The grazing fee in 1991 was $1.92/AUM. Since calves go on the cows and are not counted, the cows would be the major grazing animal on the allotment. There should be a few bulls in the summer, and some yearlings might be grazed on a permit. But, these exceptions do not explain all of the problems of reported dependency on public lands. Let us look at data from Table 1:

cow-calf--$11.13 paid in fees ÷ $1.92/AUM = 5.8 AUMs/cow unit
cow-calf yearling--$13.80 paid in fees ÷ $1.92/AUM = 7.2 AUMs/cow unit
average--$12.50 paid in fees ÷ $1.92/AUM = 6.5 AUMs/cow unit.
This would indicate that, on average, 6.5 months of grazing are provided by the BLM/FS. This appears to be significantly different than the 25 percent dependency reported in the text of the report footnote 6 on page 3.

An examination of the materials in Table 2 raises a few questions. The peak number of cattle per operation for permittees is reported to be 471 head. In footnote 9, this number is broken down as follows:

- 471 hd. cattle
- 221 hd. cows
- 250 hd. cattle
- 206 hd. calves
- 44 (assumed by report to be yearlings)
- 10 what about bulls? assume 10 hd. needed
- 34 what about replacement heifers?
- 34 assuming 15 percent replacement rate

There does not appear to be any room for yearlings except for replacement heifers. This raises questions about the assumed number of yearlings for sale in Table 1.

If grazing fees (page 9) should be increased to account for inflation, one would also expect permit values to increase as a result of inflation. The data available suggest, however, that they have not increased in either monetary or real terms. This suggests that permits have declined in value (rate terms) even when fees have not increased (monetary).

The report seems to put a lot of importance on permit values until it comes time to use them. Let us assume the average value of permits per ranch of $56,168 is correct. The permittees should be entitled to a return or an opportunity cost on the money invested in permits. If this amount is added to the full ownership costs for
permittee ranchers, it will erase more of the reported difference between permittee and nonpermittee ranchers.

There are problems with the cost of production approach to value that have been discussed earlier in these comments.

In the conclusion section, they say: "One reason permittee's costs average lower is their lower costs for forage and pasture to which the relatively low FS/BLM grazing fees contribute." Since fees were the only item listed, they must think they are the only cost of grazing public lands. On the same page, they say: "the effect of increasing FS/BLM fees is relatively small for the average permittee because FS/BLM fees are only 3.7 percent of total cash costs per cow." Again, they fail to recognize nonfee costs, which would raise the percentage significantly.

The fee collected by the government is not the total cost to the rancher of obtaining an AUM of federal forage. The nonfee portion of total costs is not handled well in this report, and realistic comparisons of public and private costs of grazing can only be made on a total cost basis.

This statement is made in the conclusions: "Permittees adjust to lower land charges by increasing expenditures per cow for some other production items, such as hired labor, horses, fences, protein feeds, fuel, and lubricants." These items comprise many of the nonfee costs of grazing. Yet, it is difficult to see where they are considered in the budget. Horse costs are not considered, fence costs are hidden in labor, and miscellaneous, if they are included. Much of the time of the
owner-manager is spent on public land grazing tasks that are required by the agencies. This time was "lumped off" in a negative return to management.

In the discussion of permit values, these economists slip over into the policy arena and forget their economics. They list the economic institutions that recognize permit values as assets to be taxed or held as security but cling to the policy that they have no value.