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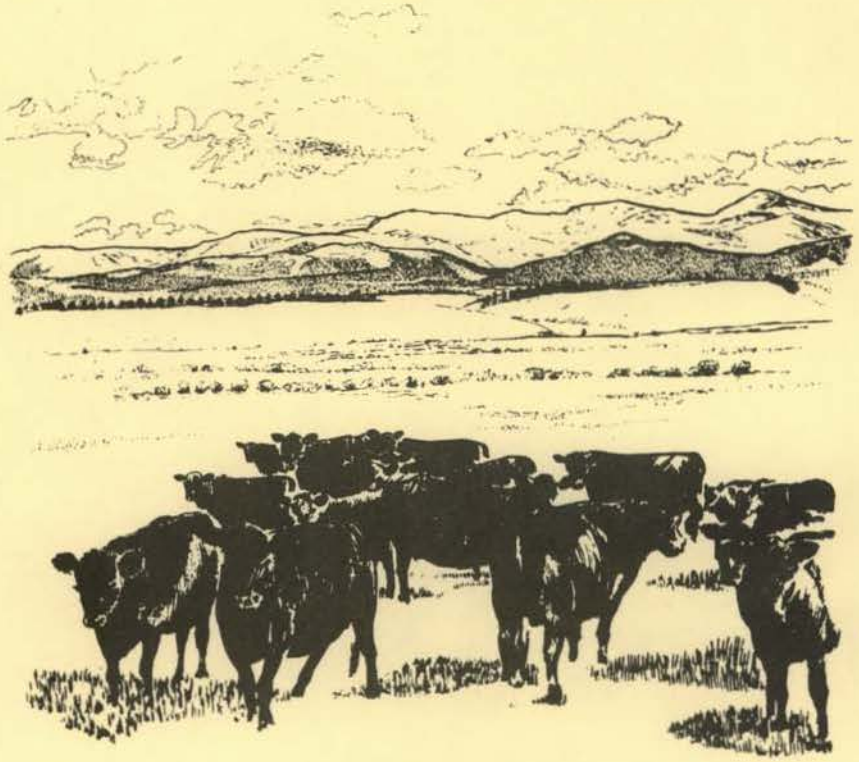

Costs and Returns for Cattle Ranches in Custer County, Idaho

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Costs and Returns for Cattle Ranches in Custer County, Idaho

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Agriculture has been described as the cornerstone of Idaho's economy (Hamilton, 1973) because its importance is second to no other sector by most criteria that can be chosen. Likewise, the production of cattle and calves represents the major sector in Idaho agriculture. One of the reasons why the production of cattle and calves represents a major sector of Idaho's economy is the large volume of forage obtained by domestic animals from federally administered land in Idaho. For example, 308,490 head of cattle and horses together with 558,923 head of sheep and goats were permitted to take more than one million AUMs[1] (952,445 AUMs by cattle and horses and 229,657 AUMs by sheep and goats) of forage from Bureau of Land Management (BLM) lands while 130,156 head of cattle and horses and 362,515 head of sheep and goats were allowed to remove 607,409 AUMs of forage from Forest Service lands during the calendar year 1972. The use of these lands is extremely important to the 2,034 operators who held permits to graze BLM lands and 1,561 operators who paid for permits to graze Forest Service lands during 1972.

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[1] AUM (animal unit month) is defined to be the amount of feed or forage required to feed a mature cow with calf (or their equivalent) for one month.

The profitable use of federal lands is important to more than the local rancher, however, because the purchase of inputs -- gasoline, fertilizer, machinery, etc. -- and the sale of agricultural products directly or indirectly touches the lives of most people in Idaho. It can safely be said that the economic health of range livestock operators is important if the livestock sector is to remain a viable part of Idaho's economy.

Range livestock operators have always had a difficult time making decisions that would affect the profitability and thus the economic health of their operation. These problems have been amplified during the last five years, however, as inflation and widely fluctuating prices have caused increased uncertainty. For example, the price of calves varied from a low of $29.50 to a high of $63.40 per hundred weight during the 1969-75 period. Thus both sizable gains and substantial losses have been possible. These problems require that ranchers carefully weigh any decision that will affect returns from ranching. The information in this publication can be used to help range livestock operators make decisions that will improve returns received from ranch operations, and can also provide needed information to federal land administrators concerning the financial status of livestock permittees.

Custer County Ranches

A study of federal planning procedures, started in 1972, emphasized use of the Morgan Creek/Prairie Basin (MC/PB)[2] allotment. Part of this study involved the collection of data concerning the use of lands owned by the 10 ranchers who had permits to graze federally administered lands in the MC/PB allotment.[3]

The general operating characteristics of ranchers using the MC/PB allotment are felt to be typical of most ranchers in this general area. The size of the ranches varied from less than 50 to more than 450 head of brood cows. Half of these operators sold some yearlings at various times during the year; the others sold only weaner calves during the fall period. In general, these ranches can be classified as cow-calf operations because the returns from the sale of calves were more than twice as great as the returns from the sale of yearlings for all but one ranch.

The general feeding pattern for these ranches included grazing on public lands from May 1 to approximately October 1 after which privately owned forage resources were utilized. Most operators ran commercial cows and bulls, with Hereford blood lines predominating. One operator also raised horses for sale as riding and pack animals.

Three of the ranchers surveyed worked off the ranch at least half of the time. In addition, one other operator did custom work for neighbors during the summer to supplement ranch income.

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[2]The Morgan Creek/Prairie Basin allotment is located in Central Idaho near the town of Challis. Data concerning the use, characteristics and status of this allotment are found in Godfrey, 1976.

[3]Copies of the questionnaire used can be obtained from the author.

The 10 operators using the MC/PB allotment owned 4,710 acres of land which was primarily used to produce hay and grains as feed for livestock when they were not on public lands. Production of much of this land was relatively low, due primarily to the short growing season. For example, most ranchers obtained from 2 to 2 1/2 tons of hay per acre while the State average was approximately 3 tons per acre in 1973.

Relatively wide differences in calving and weaning percentages were evident. For example, one rancher had a calving percentage of 80 percent and a weaning percentage of 70 percent but the calving percentage was in the low 90's and weaning percentage in the high 80's for most ranchers.

Ranch Returns and Costs

The average returns obtained and the costs incurred by these operators during 1972 and the estimated costs and returns for 1975 are summarized in Table 1 on a per ranch and animal unit basis. The data indicate that the average gross income was $34,867 which might be considered relatively high. However, operating costs were $25,437 per ranch, so net cash returns were only $9,430.

The 1972 data include two peculiarities. First, the reported gross and net returns are higher than these operators had received in the past because feeder prices were 45 cents per pound -- 5 to 10 cents per pound higher than during any other period in these ranchers' memories. Second, there were wide differences in the costs and returns reported by individual ranchers. Net cash income averaged $9,430 but showed even more variability between ranchers than did gross returns. Net cash income varied from negative (three ranches) to more than $30,000 (two ranches). Five of the ranchers were trying to expand the size of their herds by either buying additional brood cows or heifers or by

TABLE 1. Average Returns for the 10 Ranchers Using the Morgan Creek/Prairie Basin Allotment, 1972 and 1975.

	Average per Ranch		Average per Animal Unit*	
	1972	1975	1972	1975
Returns				
Sale of Calves	$23,797	$18,509	$131.11	$101.98
Sale of Yearlings	7,121	5,222	39.23	28.77
Sale of Cull Cows and Bulls	3,489	2,790	19.23	15.37
Other Receipts	460	522	2.53	3.04
Gross Returns	34,867	27,073	192.10	149.16
Expenses				
Land Rent	380	400	2.09	2.20
Feed	3,805	5,860	20.96	32.28
Livestock Expenses	599	922	3.30	5.09
Livestock Purchased	10,930	8,197	60.22	45.16
Insurance	511	787	2.82	4.34
Labor Expense	2,505	3,676	13.80	20.25
Taxes	1,367	2,007	7.53	11.06
Seed	571	879	3.14	4.84
Fertilizer	196	302	1.08	1.66
Machinery Operating Expenses	1,636	2,519	9.01	13.88
Repairs	1,161	1,787	6.39	9.85
Utilities	432	616	2.38	3.40
Federal Grazing Fees	631	896	3.48	4.94
Association Fees	483	743	2.66	4.10
Supplies	110	169	.61	.93
Misc. Expenses	120	190	.68	1.05
Total Cash Expenses	25,437	29,950	140.15	165.03
Net Ranch Cash Income (Gross returns minus Cash Expenses)	9,430	-2,877	51.95	-15.87
Estimated Ranch Perquisites	727	727	4.01	4.01
Change in Inventory	1,508	1,206	8.31	6.64
Net Ranch Income [Net Ranch Cash Income Plus (or Minus) Change in Inventory and Ranch Perquisites]	11,665	-944	64.27	-5.22
Return for Operator Labor	7,600			
Average Ranch Capital	218,898			
Percent Return to Capital	1.86%			

*Average per number of brood cows owned.

not culling closely. This resulted in a relatively large increase in inventory for these ranchers. Two ranchers also had relatively large inventory decreases (more than $10,000). These actions resulted in estimated average net ranch incomes of $11,655 -- returns which can be used to pay the operator for his labor, management and return on invested capital.

If we can assume that the operators could earn at least $7,600 per year in other occupations and if this is an acceptable figure as a return for the operator's labor and management, then $4,065 ($11,665 - $7,600) would remain as a return to the capital invested in 1972. This would represent less than a two percent return on the $218,898 average capital investment (4,065 ÷ 218,898 = 1.85%) -- a relatively low return today when banks commonly pay at least 5 percent on passbook savings accounts.

An alternative way of looking at the returns being obtained by these ranchers is to assume a "reasonable" return on invested capital and find what amount was left to pay these operators for their labor and management. If short-term capital is assumed to earn a return of 8 percent and long-term capital a return of 5 percent, only 3 of the 10 ranchers had sufficient net returns to pay the operator for his labor and management. Seven operators would thus be paying for the privilege of ranching in 1972.

Ranch costs and returns for 1975 were estimated from the 1972 data and from secondary data -- cattle prices and grazing fees -- that would likely apply to this area. All other cost or return items were inflated or deflated using index numbers.[4] The estimated costs and returns for 1975 reflect the decline in

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[4]Numerous price indices are available. The primary indices used in this study were obtained from a Council of Economic Advisors (1976) report. The applicable index used can be derived by dividing the 1975 value by the 1972 value (e.g., $2007 ÷ $1367 = 1.468 for taxes). Readers should recognize that the estimated 1975 values may be different from the actual costs and returns experienced by these ranchers.

livestock returns that has occurred since 1973 throughout the nation. The data in Table 1 indicates that returns in 1975 declined to $27,073 while cash expenses increased from $25,437 to $29,950. These changes resulted in estimated negative average net cash ($-2,877) and net ranch incomes ($-944). Only two ranches had estimated net ranch incomes which were positive, and both were lower than the net incomes received during 1972.

Ranchers who might use this data to compare with their returns should note the following points that would affect any comparisons that would be made. First, the miscellaneous receipts include returns received by the operator who ran horses[5] as well as various other receipts such as government payments and custom work. Second, three of the operators were rapidly expanding the size of their operations in 1972. This resulted in a relatively large livestock purchase expense and corresponding change in inventory for the periods indicated.[6] Third, two operators worked "off the ranch" most of the time including one who was phasing out of the livestock business. This necessitated hiring more labor than the other ranchers who use the MC/PB allotment.

The gross returns reported for 1972 are less than those reported by Goodsell (1972) for ranches in the Central Idaho -- Western Montana area, while the operating expenses are nearly the same. This difference resulted in net ranch incomes which were less than those reported by Goodsell. However, only one of the ranchers included in this study was as large as the average ranchers included in the Goodsell study. These relatively small ranch operations would be expected

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[5]This operation was not profitable. The returns from producing these animals was less than the costs being incurred.

[6]These same changes were also included in the estimated incomes for 1975. It is unlikely, however, that these operators would be expanding the size of their operation during a depressed livestock market such as 1975. Thus, the actual costs and returns for 1975 would probably differ in this respect from those estimated.

to have lower returns as there are commonly savings associated with increases in size (Workman and Hooper, 1971) due to the high fixed costs associated with livestock ranching. The net returns received by these ranches were approximately equal to the returns received by the largest and most profitable ranches reported by Bevan (1965), however.[7]

Several comparisons of ranchers in this study and those studied by Bevan (1965) are summarized in Table 2. This comparison indicates that the Morgan Creek operations are smaller but their efficiency is comparable. The average selling price of all animals was significantly higher in 1972 as were gross returns, expenses and animal weights. Net returns, however, were not as large as would have been expected, given the rate of inflation that prevailed during the 1960-72 period. Therefore, these ranchers on a real income basis, after the effect of inflationary prices have been removed, probably did not receive incomes in 1972 as high as those reported by Bevan.

If the net returns reported above are typical of most ranchers operating in the Salmon River Basin, one would expect financial problems to be extremely important. For example, some of the ranchers like ranchers reported in other areas (Smith and Martin, 1972) are probably subsisting on these lands at relatively low returns as part of a way of life. These low returns will probably result in the consolidation of ranches in the future or ranch operators will feel the need to "work off the ranch" to supplement ranch income. These ranches particularly need to carefully weigh management decisions affecting ranch income in the future if they are to continue to successfully operate in this area.

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[7] This comparison is not strictly valid because Goodsell's data are for 1971 and Bevan's were for 1963 while those reported here are for 1972. One would expect that the receipts and expenses reported by Goodsell and Bevan would be higher for 1972 because of inflation associated with expenses and the rising cattle market.

TABLE 2. Comparison of Ranches Surveyed by Bevan (1960 & 1963) and Morgan Creek Ranchers.

	1960	1963	1972	Your Ranch
Number of ranches	24	24	10	
Number of cows per ranch	241	231	182	
The capital investment per ranch	$ 162,657	$ 154,837	$ 218,898	
Gross income per ranch	27,411	24,424	34,867	
Total cash expenses per ranch	15,364	14,338	25,437	
Return to operator's labor and capital per ranch	4,942	8,548	11,665	
Net cash income per ranch	12,047	10,086	9,430	
Gross income per cow	113.91	104.02	192.10	
Total expenses per cow	63.85	60.71	140.15	
Return to operator's labor and capital per cow	$ 37.15	$ 37.66	$ 64.27	
Net cash income per cow	$ 50.06	$ 43.31	$ 51.95	
Capital investment per cow	$ 676.00	$ 670.14	$1,206.05	
Percent gross income from cattle	96	91	99	
Percent cow herd sold during year	11	8	8	
Percent calf crop	89	89	88	
Weight per calf sold	442	444	480	
Weight per yearling sold	654	631	630	
Weight per cow sold	1,098	1,059	1,100	
Weight per bull sold	1,456	1,445	1,500	
Selling price per cwt. calves	$24.78	$24.97	$46.50	
Selling price per cwt. yearlings	$22.18	$22.64	$42.00	
Selling price per cwt. cows	$12.77	$12.50	$20.00	
Selling price per cwt. bulls	$16.88	$17.15	$25.00	

Ranchers having costs higher (or returns that are lower) than those reported earlier should carefully analyze their operation in the areas which are relatively high (or returns low). These comparisons should indicate those areas where improvements in net returns might be expected. If further analysis is desired, ranchers should consult Extension farm management specialists or others trained in analyzing farm records. Anticipated changes should be carefully analyzed using tools such as partial budgets to check the effect of alternatives on ranch incomes.

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Auttis M. Mullins
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