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The Cost of a Range Calf

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THE PROBLEM which first, last, and always concerns the cowman, as well as any individual engaged in any line of business, is none other than the time-honored question of making the outfit pay. Owing to the adverse conditions which have affected the range cattle business during the past five years, the cattle-grower has not had to worry much about what he would do with his profits. It has been more a matter of drawing his belt up a little tighter from time to time, in order to meet the demands of

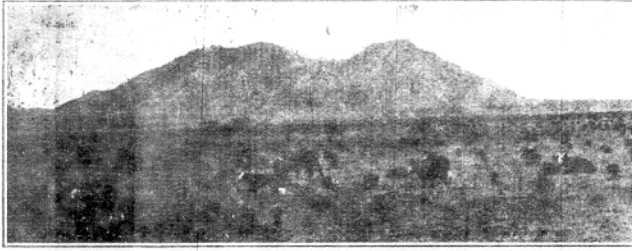
lean years. However, as has so aptly been said, conditions have already shown enough improvement so that the cowman can at least begin to look his problems in the face with a full stomach.

The cattle business in southern New Mexico has probably suffered more severely than the industry generally. The end of the war found ranges heavily stocked, as a result of the patriotic efforts of cattlemen to do their bit in producing more beef. The drought which prevailed from 1916 to 1918 continued,



ADEQUATE FEED AND GOOD BREEDING INCREASE THE PROFITS

with but short respites, through 1922 and 1924. Prices, often so low that they would not pay freight to central markets, increased the difficulties of reducing herds to a sound basis of stocking the ranges. Through all this the cattleman lived in hopes, but the



BABY BEEF IN THE MAKING

combined forces of drought, overstocking, deteriorating ranges, and depression were a difficult combination to cope with. Calf crops dwindled, death losses increased, and finally, in an effort to save what was left, thousands of cattle were shipped out of the country. Large numbers of well-bred breeding cows were sacrificed on a low market through forced liquidation, never to return.

The pressure having been relieved of late, ranges began to recuperate, and once again we see the ranges improving and sufficient forage on the ground to carry the stock. All this has eventually brought about a shortage in cattle, particularly breeding cows, manifested by a demand which has caused a noticeable rise in prices. It is easy to forget lean years in the midst of prosperity; so it will be well to consider the results of the past ten years, and see what opportunities there are for assuring more continuously profitable operation.

In modern manufacturing, profits have not been increased so much by raising the selling price of a commodity as by bettering quality, increasing production, and improving methods of manufacture. These same principles are equally applicable to the cattle business, which in a breeding country is nothing more nor less than a calf factory. Such being the case, success is primarily dependent upon the adequate production of calves. This means that enough calves must be produced and sold to pay running expenses, taxes, and interest to offset depreciation and death losses, and to leave a surplus for the owner as compensation for his efforts and interest on his capital.

A Sample Operation

Records are available for the operations on the Jornada Range Reserve since 1915. This period included over six years of drought, a period of good prices, and a period of depression. In order that the cost-of-production figures may be representative of

the recent past, and to simplify the example, values, wages, taxes, interest, and other factors have been adjusted, in the example given, to recent figures (1925), rather than using the widely varying actual figures of the past ten or twelve years. The figures also have been adjusted to apply to a herd representing the average number of breeding cows—1,600 head—which have been carried during the period. Actual calf-crop and loss records have been used:

CARRYING CHARGES INVOLVED IN PRODUCING A CALF

(Herd of 1,600 breeding cows)

	Total	Per Cow
Water service—		
Windmill man (12 months at \$75).....	\$ 900.00	
Helper (3 months at \$40).....	120.00	
Ford car (300 days, 15 miles per day, at 7 cents per mile).....	315.00	
Gasoline and oil for pumping.....	325.00	
Windmill and engine supplies.....	150.00	
Maintenance, surface tanks.....	250.00	
Total	\$ 2,060.00	\$ 1.287
Salt (18 lbs. per head cattle and horses, 31,032 lbs., at \$1.05 per cwt., put out)....	325.84	0.204
Labor—		
Foreman (12 months at \$75).....	900.00	
Cowboy (12 months at \$50).....	600.00	
Fence rider (12 months at \$40).....	480.00	
Combination cook and cowboy (12 months at \$50).....	600.00	
Wagon work—branding, weaning, shipping, etc. (12 cowboys, 1 month at \$40 each).....	480.00	
Total	\$ 3,060.00	1.912
Provisions, groceries.....	1,200.00	0.750
Sundry supplies and equipment.....	1,000.00	0.625
Taxes, state and county.....	1,504.90	0.946
State land leases (21,600 acres at 3 cents)...	648.00	0.405
Maintenance and depreciation on ranch equipment (5% on \$56,562).....	2,828.10	1.767
Live-stock charges—		
Cows (value, \$48,000):		
Depreciation (2%).....	960.00	
Feeding cottonseed cake, cottonseed, and soapweed (average yearly feeding, 9 years).....	1,810.38	
Loss (2%, average for 9 years).....	960.00	
Total	\$ 3,730.38	2.332
Bulls (value, \$6,400):		
Depreciation (12½%).....	800.00	
Feeding (included under cows).....		
Loss (3.12%, average for 9 years).....	200.00	
Total	\$ 1,000.00	0.625
Horses (value, \$2,400):		
Depreciation (8%).....	192.00	
Feed (at \$6 per head per year).....	360.00	
Loss (3.33%, average for 9 years).....	80.00	
Total	\$ 632.00	0.394
Grand total	\$17,988.38	\$11.247

These records show that, on the basis of 1925 charges, it cost \$11.25 to carry each cow a year, exclusive of interest and owner's compensation. This cost would be practically the same regardless of the



number of calves produced over a series of years. In the dry years, which bring smaller calf crops, however, there are actually increased expenses for feed and water service. These are offset by lower costs in the other years when the calf crop is larger. The average calf crop on the reserve for the ten-year period from 1916 to 1925, inclusive, was 65 per cent, the maximum being 83.2 per cent in 1920, and the minimum 43.7 per cent in 1919, as a result of the severe drought of 1918. In other words, the 1,600 cow average herd produced 1,040 calves a year. There was an average loss of 21 calves, which left 1,019 for sale or to take care of replacements. Since it cost \$17,988.38 annually to carry the breeding herd, each calf cost an average of \$17.65, exclusive of interest and owner's compensation.

Much Depends Upon Size of Calf Crop

During the last five years, which include three years of drought, the average annual calf crop was 72.4 per cent, or 1,158 calves. The loss during this period averaged only 1.6 per cent yearly, or 19 calves, which left 1,139 for sale or replacements. With this number of calves produced, each calf cost an average of \$15.80, exclusive of interest and owner's compensation. The lower cost resulting from the larger calf crop would, in a period of depression such as the last few years, easily spell the difference between breaking even and running at a loss. In periods of higher prices the lower cost assures just that much greater profit. The interest required to take care of the investment will vary widely on many ranches, on account of the varying conditions and differences in initial investment. The investment involved in this operation is \$74.35 per cow, when the value of government improvements used is included. Total ranch values are as follows:

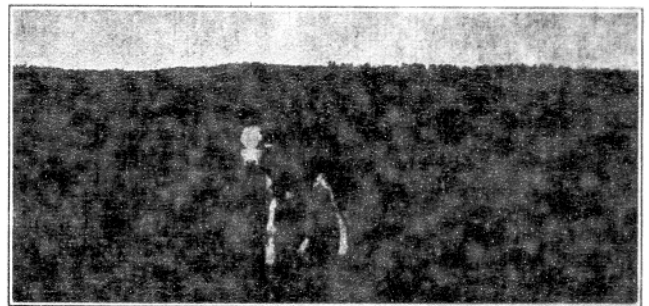
Ranch—		
Improvements and equipment.....	\$56,562	
Buildings	\$ 4,909	
Mills and towers.....	4,425	
Wells	12,198	
Engines	2,000	
Windmill and pipe-line water storage	1,775	
Flood-water reservoirs, "tanks"	4,209	
Pipe line.....	5,600	
Corrals, etc.....	2,275	
Fences	13,800	
Troughs, etc.....	920	
Wagons, tools, etc.....	1,103	
Telephone line.....	1,600	
Miscellaneous	1,748	
Land	2,240	
Springs, water rights.....	3,350	
Total	\$62,152	
Live stock—		
Cows (1,600 at \$30).....	\$48,000	
Bulls (64 at \$100).....	6,400	
Horses (60 at \$40).....	2,400	
Total	56,800	
Grand total.....	\$118,952	

Interest at 6 per cent on the total investment would amount to \$7,137.12, which means that calves would have to sell at \$24.66 in order to pay such interest with a 65 per cent calf crop, or they could be sold at the proportionably smaller figure of \$22.06 per head and still pay 6 per cent interest with a 72.4 per cent calf crop. The average price of common heavy veal calves in southern New Mexico for the period 1916 to 1925, inclusive, was \$22.33. This average leaves a margin of \$4.68 over the \$17.65 net cost on the basis of the 65 per cent calf crop, equivalent to 4 per cent on the investment of \$74.35 per cow. On the basis of the 72.4 per cent calf crop, the margin is \$6.53 over the net cost of \$15.80, which is equivalent to 6.3 per cent on the \$74.35 investment per cow. The entire investment is charged against the cows. Steers should be held only when there is surplus feed available for them, and this has been rare during the past ten years.

Few calves in the vicinity of the reserve, even as short yearlings, have sold for such prices in the past few years—only those of good breeding and of thrifty growth. During the winter of 1925 and 1926, however, prices improved, and a number surpassed these values. Calves sold from the Jornada in the fall and winter of 1926 and 1927, mostly six to eight months of age, averaged \$27.50 per head. On the basis of the 72.4 per cent average calf crop of recent years, and a herd of 1,600 breeding cows, this sale value of calves would afford a net profit of 7.5 per cent for interest on the valuation given and for owner's compensation.

Death Losses Small

Most of the carrying charges are more or less fixed. Death losses may vary widely. The 2 per cent average loss for the ten-year period on the Jornada



WHAT DOES HE COST?

Reserve is less than one-third of the average loss on similar ranges. The higher the loss, of course, the greater the cost of each calf. The fact that seven calves more from each hundred cows increase the percentage of profit from 4 to 6.3, on the basis of average sale price, shows the importance of obtaining as high a calf crop as possible. The average calf crop of southern New Mexico, however, is hardly

more than 50 per cent, which is clearly an unprofitable basis.

The methods which are being followed on the Jornada Range Reserve to assure adequate feed, minimum losses, larger calf crops, and well-developed, readily salable calves should, therefore, be of interest. The reserve is representative of the semi-desert range country of southern New Mexico, where droughts periodically play havoc with range forage. This erratic climatic condition requires conservative stocking of the range, so as to leave in the average year, as an insurance against drought, at least 20 per cent of the previous summer's growth of forage on the range at the close of the grazing year, or at the time the next summer growing season gets well under way. The breeding herd should equal approximately 50 per cent of the range capacity in the best years, or about 65 or 70 per cent of the capacity in the average year. This will assure maintaining the breeding herd in the drought years, with a minimum of supplemental feeding, by close culling of the herd and sale of calves at weaning time.

The reserve is fenced into summer-fall and winter-spring pastures, which makes it possible to utilize the tobosa and other types of most value during the summer, and to reserve the grama-grass types for winter and spring use, providing adequate palatable forage at that time and assuring maximum growth of grama during the summer, which is the main growing period.

The breeding season occurs during the summer and early fall when the vegetation is most succulent, and, by limiting the bull service to this period, reasonably uniform and even-aged calves are obtained. Being a relatively level range, four or five pure-bred bulls are sufficient for each 100 cows, if an effort is made to keep them well distributed. Aged and otherwise undesirable individuals are culled regularly and replaced by well-matured, selected heifers. If the calves are to be sold as long yearlings, they are weaned from their mothers in the winter and placed on grama pasture, reserved especially for this purpose. Otherwise it is well to sell the calves direct from the cows, if they are to be sold as short yearlings. The result has been calves and yearlings of good Hereford breeding which have topped the New Mexico market in practically every year.

EXPORT DUTY ON MEXICAN CATTLE SUSPENDED

YIELDING TO URGENT REQUESTS from cattle-raisers throughout the northern states of Mexico, President Calles has agreed to postpone the application of the duty of 25 pesos (about \$12.50) per head on cattle exported from the republic. The present law, according to which cattle are shipped out of the country free, will be allowed to stand for the time being, barring a few minor changes.

LESS BEEF TO BE GROWN NEXT YEAR

BY JAMES E. POOLE

NO MATTER WHAT HAPPENS, 1928 beef production will be light. Making due allowance for a direct movement of unfinished cattle from western pasture to feed-lot, no other result is possible. Not only will the number of cattle be less, but there will be a vast shrinkage in tonnage because of lighter weights and younger age. Repetition of the ample crop of heavy steers that went to the shambles during the first half of 1927 will be out of the question, as it has not been possible to replace mature or fleshy feeders this fall, and no one is in a mood for long feeds at present cost of thin, or fleshy, cattle and feed. Investment during the corresponding period of 1926 was with the object of working off a corn surplus; under present conditions, the main purpose with a large percentage of feeders is to clean up roughage, of which the country is full.

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The year's beef supply, especially when measured on a tonnage basis, will be considerably under expectancy. Figures do not tell the whole story, owing to light weights. During the first eight months of 1927, 6,154,484 cattle were slaughtered under federal inspection, against 6,379,556 during the corresponding period of 1926; but there was a shortage of at least 100 pounds of beef per head; otherwise current cattle prices would be impossible. This recalls the prediction made early in the year by an executive of one of the big packing concerns, that, with respect to numbers, cattle slaughter in 1927 would equal that of 1926. Probably he was engaged in a propagandistic effort to talk prices down; more likely, in common with much of Packingtownt's talent, he had acquired the habit of jumping at conclusions.

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This is an era of good feeling, long considered impossible either in production or in distribution circles. Feeders have made more money on the crop of beef just garnered than on any previous season's production, the war period not excepted, and processors, packers, or whatever term is applicable, also admit having made "a little money." As the consuming public has been able to go the price pace, retailers have secured their "bit," and everybody concerned is satisfied. The statement that it has been the most profitable crop of cattle ever made may be open to dispute, but such nevertheless seems to be the fact, as, when prices were substantially higher during the war period, both stock cattle and feed were correspondingly high, while the crop of steers marketed so far in 1927 was acquired at bargain prices and fattened on cheap corn.

* * *

Forecasting prices is obviously absurd—a fact that Washington dopesters have recently discovered—but certain trends are distinctly discernible. We know somewhat definitely that the year 1928 will be a period of short beef production, as that of 1926 was excessive. That reserve stocks of aged cattle have been dissipated all over the country admits of no dispute, creating a condition that makes excess beef production impossible for a long period; and meanwhile our requirements, on an aggregate, if not a per-capita, basis, will increase, the probability being that added cost will have a tendency to reduce per-capita consumption, which has been the trend in recent years. Before the war, beefsteak had a place on the national breakfast table, from which it has now disappeared. Other foods are more economical, and the American people are injecting variety into their diet, so that less beef per capita will be needed. But, with western herds depleted, many over-age cows, and the route from calfhood to the shambles reduced by two or three years, more breeding cattle will be needed.