

Economics of Ranch Appraisal¹

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Let me point out that *efficiency* is the key to a sound ranching venture. The past is a poor pattern to follow and has little relationship to conditions of the present time.

The methods and techniques employed a few generations ago when a large outfit ran 75,000 head of cattle in unfenced territory from the Yellowstone River in Montana to the North Platte River in Wyoming have changed considerably. The old methods are steadily disappearing as our agricultural technology has progressed. We have a tremendous back-log of technical know-how that is yet to be applied. The great progress that has been achieved to date is only a token compared with that which is still to come.

In about 1900 the big outfits, with millions of acres of free land, began to disappear as the homesteaders came in. Then began the change to a more complex form of ranching. The change was very slow at first but is now taking place at a highly accelerated rate.

We must be very careful now, and appraise every angle of our ranching operations with non-sentimental, cold facts. We can no longer afford to keep 50 ponies just for the sentimental value attached. Competitive conditions in ranching today are separating the men from the boys. In the early 1950's when good cows were selling for \$250 to \$300 a head and still going higher, every drug store cowboy

who could afford 25 head went into the cattle business, hoping to get rich in a few seasons. Cattle was King and the ranchman rode an unprecedented crest of popularity.

By the fall of 1953, some were requesting Government aid. The "High Stakes", suddenly topped with the \$250 cow at that time, which is now (Jan. 1957) selling for \$110 to \$125, and costs of production have risen sharply.

Carrying Capacity

Since the bubble has burst and things have settled down these questions arise: How much can I pay for a home for a cow? What is an economic unit to operate? What percent of the total investment is most favorable for Land? For livestock? For equipment and buildings?

In actual ranch appraisal, the most important item is to determine the average year long carrying capacity.

Unless this information is determined accurately, the operator is inviting disaster and is beaten before he starts. The true carrying capacity must be known, or it is impossible to know how much is being invested per animal unit, which is the basis of his investment. Knowing the cost per animal unit for production, is just as important in ranching as it is in the manufacture of tractors, hay balers, or shoes.

It is very important that the operator does not stock up to the last stem of hay or the last blade of grass, but be prepared for a hard winter followed by a dry spring. But on the other hand, being understocked can also cause unsuccessful operation.

This is why practical experience and the factual appraisal of the situation is invaluable.

There are several agencies that assist ranchers in determining the proper stocking rate, if they need the help, and wish to take advantage of this service. We cannot ignore the large number of actual, and practical tests showing that conservation and proper range management pay many dollars to them that practice it. Now, even fertilizing pastures and the better range lands in certain areas, in addition to conservation practice, has paid off handsomely.

It is not difficult to determine generally, the carrying capacity.

If you will visit several of the successful neighboring ranches and ascertain how many cattle they have run over a period of years, and determine the average number; then compare their ranges with the optimum you desire, and, considering long time conservation and good range management practice, you can obtain a good index of the proper carrying capacity for your ranch, or on any ranch you desire to purchase in any locality.

Factors in Ranch Prices

The cost of a ranch varies a great deal according to: (1) The locality; (2) the livestock market at the time; (3) its desirability as a ranch unit, which involves many factors such as dependability of year around feed production, availability of assured leased lands; whether the unit is well blocked, adequacy and distribution of stock water, buildings, corrals, fences and natural shelter; and (4) the salability—will the ranch sell in times of stress for a reasonable figure? The better ranches do not change hands frequently.

When cattle bring just an average price, the speculators and business men are not inclined to get the fever to be ranchers and run the price up. If a purchaser

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has the cash to buy, and outside income to enable him to operate *without a net profit*, thereby benefiting on his income taxes, it is not such a serious matter what is paid for a home for a cow. But, if ranching is his only income, and if borrowed capital is required — then, whether the price is right, is just a matter of success or failure in the ranching business.

When individuals pay high cash prices for ranches to operate at a loss, a false sense of value is given to some of the boys who expect to make a profit. They will later realize that most of their profit came from just the pleasure of being a rancher. This false sense of value also causes some purchasers to think they are getting a bargain, but bargains in ranches these days are rare.

As a rule, when the price of livestock has been down for a few years, ranches can be purchased at a reasonable figure, based on what they produce. At such times business men are rarely interested, ranchers are not financially able to buy, and many lending agencies fear the risk. Foreclosure records in every County Court House in the West will prove that the greatest interest is shown in buying and lending to ranch enthusiasts when the cost of a home for a cow approaches the summit of a boom.

We have just gone thru one. It is temporarily rough for some ranchers; there have been and will continue to be a lot of heartaches and tough adjustments. The efficient ranchers are going to prosper and grow, and the inefficient ones are going to have to sell out.

Several persons polled, including ranchers and finance lenders, were of the opinion that outfits with 250 animal units or more, with expert management, could go on indefinitely as an economic unit on the present basis facing the "cost-price" squeeze. How-

ever, the optimum family sized ranch should carry about 300 to 400 animal units. But of course, we all know that in individual cases some families have made a living on less than 250 units.

Twenty-five years ago an operator could survive under severe adversity for 9 years before his total investment was wiped out; now this can happen in just 2½ years.

We must consider, especially when borrowed capital is used, that the ranch must first earn a living for the family; second— pay all taxes, and third — have sufficient funds remaining to retire the mortgage under normal price conditions and not only at boom-time prices.

In a study of 45 ranches in 1950, scattered throughout Wyoming and averaging 390 animal units each, there was a total average investment of \$427 per animal unit; that is— there was \$166,530 invested in land, livestock, buildings and equipment. (An animal unit is considered to be a mature cow; a yearling is 85 percent of an animal unit; a weaned calf is 65 percent of an animal unit).

Cattle and Feed Investments

Of the 45 Wyoming ranches those having the largest rate of return on the investment had the largest percentage in cattle and feed, and less invested in improvements, machinery and equipment. The average was 42 percent in cattle; 38 percent in land; 10 percent in buildings, 5 percent in machinery and equipment, and 5 percent in feed. *The highest net income* producing ranches had 50 percent in cattle; 33 percent in land; 7 percent in improvements; 4½ percent in machinery and equipment and 5½ percent in feed.

In the Nebraska Sandhills in 1955 \$400 per animal unit was about the selling price for ranches carrying 500 or more units. Some smaller outfits sold for as high as \$425 per animal unit. These figures seem a little

high per animal unit, considering the present price of livestock.

Let us consider the costs from a few scattered sections and see just how much capital it takes to keep one animal unit in operation. The figures obtained for ranches in northern Nebraska and southern South Dakota on today's costs per animal unit for the 300- to 400-unit class show expense items in production to be \$44.50 per unit.

A study in Western Colorado in 1954 with an average of 376 animal units per ranch showed operating expense per head for all cattle to be \$47.17, not including the operator's labor or interest on his investment in land, livestock and equipment. On the 45 Wyoming ranches studied the total average expense per animal unit was \$47.74.

Actual income per animal unit on today's (Jan. 1957) market may vary from \$55 to \$70. This is a small margin between cost of production and selling price, and every effort must be made to keep costs down, if the operator is going to show a profit.

Value of Buildings

The value of buildings to a ranch is often confusing. Unless one understands the theory back of the appraisal process, the appraiser's decision sometimes does not make sense. To illustrate this, let me recount an experience of a couple of appraisers who also had with them an elderly uncle of one of the men. The men were traveling through western South Dakota. One deal they looked at was a small upland ranch with a rather elaborate set of buildings. An appraisal for a loan had already been made on this place. The men agreed with the rather conservative appearing valuation of the ranch and the loan recommendation. "Well," the uncle exclaimed, "you couldn't even put the buildings on it for that. You fellows must be crazy."

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our method by asking him how much he would pay for the place.

Without thinking of the effect on his argument he said, "I wouldn't have it—too many buildings."

"Well," they continued, "somebody would pay something for it. How much could you sell it for?"

Then he got down to thinking like an appraiser does by saying, "The grazing land is good, but there isn't enough of it. It would be all right to add it to this good place down the creek. It will summer a hundred and fifty head or maybe two hundred head of cattle. But a man would starve to death trying to make it on this place—it's too small. He'd never pay out with all these buildings."

"That's probably right," they said, "but if we acquired this place, we would have it to sell. What would it bring?"

What will something sell for? That presumably is its value. It makes little difference what you have paid for it. To find out what it's really worth try to sell it.

The uncle finally concluded that the best prospective buyer was the adjoining owner, but the buildings still bothered him. He knew that the man down the creek would not want them and would not pay much for them. The alternative, he reasoned, would be to sell it to someone who would occupy the buildings. Such a man, if he could be found would probably pay more than the fellow who only wanted the land. But, he would not pay too much more unless he could find more land to add to the unit. And such land was not available.

Basing their judgement on other sales in the area, they finally arrived at an amount for which they thought the land *alone* could be sold, probably to enlarge the next ranch. Then in a similar manner they determined what the place as a unit would sell for. It was apparent that the owner could not expect to recover his investment in

buildings because *they were not in keeping with the land resource*, nor were they in keeping with the accepted community standards.

While a building is still unexpended labor and quantities of lumber, cement, and steel, it has a value equal to the cost of construction because the market place has fixed a price on the component parts. Once the building is affixed to a piece of land it becomes real estate, and its value is not the summation of the component parts, but instead it is the amount which it adds to the value of the land.

If we accept the fact that ranch buildings are a part of the ranch unit, then it follows that appraisals on ranch buildings are actually appraisals on ranches and consequently, must meet the tests that fall in line with ranch appraisals generally.

The appraisal of ranches is not an exact science; it cannot be done by formula. It is an expression of judgement based on the market and the skill of interpretation of the data.

The Rancher's Problem

The limiting factor on ranch value, to an owner, when borrowed capital is used, is not the market value but rather the net income available for debt service, if he expects to retain the property. This important factor is often misunderstood and may lead the unwary into financial distress. How much can we expand our holdings for increased profit? This question is asked many times. Some risk all their holdings, which may not be warranted, in order to expand, on the theory that land is limited, and when it's for sale they must have it at any cost. This outlook also tends to keep the price of land high.

I heard a story setting forth "The Rancher's Problem." It went something like this: "Livestock are animals that are bred and raised in the Western States

to keep the producer broke and the buyer crazy. Livestock are born in the spring, mortgaged in the summer, pastured in the fall and given away in the winter. They vary in size, color and weight. The man who can guess nearest the weight is called a livestock buyer by the public, a robber by the rancher, and a poor business man by his banker.

"The price of livestock is determined by consumers and goes up after you have sold and down after you have bought. A buyer for a Nebraska packer was sent to Omaha to watch the Livestock Market. After a few days' deliberation he wired to this effect: Some say the market will go up—some say it will go down—I say the same. Whatever you do will be wrong. Act at once.

"When you have light cattle the buyer wants heavy ones; and when you feed heifers they want steers, and vice versa. When they're thin they should be fat; and when your steers are fat the buyer tells you the market on tallow is all shot to hell, and you've got 'em too doggone fat. Yes sir! Some days you just can't make a nickel."

Let's watch these nickels, let's watch the balance between feed production and grazing land. The Wyoming ranches mentioned showed that the greatest profits came from those having the greatest investment in livestock and feed. This is important to have a balanced ranch unit where winter feed will be sufficient for the summer grazing capacity. Do not inadvertently become a high cost operation ranch with long feeding seasons and poor layouts. Keep your operational balance in line by constantly keeping good records and adjusting to better practices. A high percentage of calf crop is another prominent factor in profit making.

Don't forget what research can do for you in increasing production; explore newly developed methods and apply them to your

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operation. The National Planning Association, a non-profit organization, says that even if the amount of cultivated lands and numbers of livestock remain unchanged, increased yields alone can be expected to raise production 21.3 percent by 1965. The Colorado State University has announced feed lot gains of better than 4 pounds per head per day on steers. These fabulous results came from hormone injections—probably not practical for general use yet, but in the offing.

Be sure to change and adjust to the new proven methods of ranching, including feed production.

Finally, for a sound investment in ranching, you must base the price you can pay on what the ranch will produce. Remember that efficiency in labor and management is the key to a sound investment.

Know the facts, don't guess; plug the leaks, manage the resource well, and make your en-

terprise pay by realistic analysis.

Acknowledgement

Some of the information used in the preparation of this paper has been taken from a 1953 University of Wyoming thesis by Guy Brook, Jr. "Some important management factors affecting profits on Wyoming cattle ranches." Other excerpts have been taken from an article by R. T. Burdick in Western Farm Life, July 1, 1953, and from a report by Eli Ferguson of the Equitable Life Assurance Society of the United States.