The Economics of Ranching

Ranching is easy – right? All you have to do is watch the cows eat grass and make you money. Wrong! Many people dream of doing it, and if it was that easy everyone would be doing it. So let’s take a look at the economics of raising cattle and see why all ranchers aren’t driving Cadillacs.

The first cost involved in raising cows is, of course, the cows themselves. The price of a cow varies widely depending on a number of factors including her size, her age, the current cost of feed, whether or not she is bred and how long you will have to feed her until you are able to sell her next calf.

As I write this in the fall of 2007 cattle prices are near record highs. But feed costs are also high due to drought, high oil costs, and diversion of corn from feed to the production of ethanol. Let’s just take the average cost of an average cow that is bred to calve in the spring and call her $1300.

To calculate the annual cost of buying that cow will take some figuring. There is the annual payment to the bank, which includes principle and interest; there is death loss; and our salvage value when we sell her will be less than half of what we paid for her. I figure that at 8.5% interest and 2% death loss, our payment for the cow will be about $154 per year.

And now we have to feed her.

In my part of Montana we plan on feeding hay for 5 months out of the year. The cow will eat half a ton per month, and this year the hay is going to cost at least $90 a ton. That is $225 per year for hay.

Grass is cheaper. It will only cost $20 a month for the other 7 months of the year – that’s $140 per year for grass. As you can see, our costs are already adding up. We have $519 invested in this cow for the first year, and we don’t have a calf yet. We better get her bred!
A reasonably good bull will cost us $3500. The annual cost of his purchase is about $734, but we will use him on 20 cows, so it will cost us $37 per cow to own the bull – and another $23 per cow in feed cost for that bull. So $60 to get the cow **bred**.

Now I don’t know about you, but as much as I love the business, I have to get paid for my time. One man should be able to take care of 250 cows if he works steadily at it. We’re asking for 7 days a week of feeding, and some long days through calving time, so let’s pay him $25,000. And our costs for workmen’s compensation and Social Security will run nearly 50% more. That totals **$150 per cow for labor**.

And of course we have to have a **pickup to feed** with. I’m sure that $350 per month is reasonable, divided by 250 cows – another **$17 per cow**.

**Vet expense**: vaccinations, parasite treatment, preg testing, and the occasional ranch visit - **$10/head**.

Now let’s add up these basic annual costs:

- Cow: $154
- Feed: 365
- Bull: 60
- Labor: 150
- pickup: 17
- Vet: 10

$756 per head cost per cow

These are the **major** expenses. They don’t take into account the little things like the cost of a horse with his training, feed, and shoeing. There are supplies, fuel, trips to see the banker. Corrals, working chutes, repairs. Taxes, utilities, computer. Stock trailer, flat bed trailer, and tractor. And **interest**.

Most ranchers go to the bank every year to borrow the money to operate until the calves are sold in the fall. In bad years he falls behind in his repayment, and in good years he catches up.

Now let’s look for a while at our income.

We’re hoping for a 600 pound calf. This year steers and heifers of that weight will average maybe $1.10 a pound. That’s a potential income of $660 per calf. But the heifers don’t weigh as much as the steers, and we’ll have some that don’t weigh up with the rest. We’d better figure on $600 per head. But only 90% of our cows will wean calves - $540 per head. We had to eartag those calves and vaccinate twice. And there is trucking to town. That brings our **revenue** down to **$530 per head**.
Wait a minute. We have a bare minimum annual cost for that cow of $756, and a potential income of only $530 – we’re losing $226 a head, and this is a good year. What would it be like in a bad year? Something is wrong with those calculations! Isn’t there?

No. Those are the real costs. In any other business a banker would laugh at the prospect of loaning money with those projections. But ranchers keep on raising cattle. How can that be?

How that can be is that no rancher recognizes all of the true costs of raising cattle. Every rancher has some gimmick to reduce some of those costs, to ignore others, and to find supplementary sources of revenue. Let’s start again at the top.

Most ranchers have a basic cow herd that is bought and paid for. If he were to sell those 250 cows he would have $300,000 to invest, and would likely realize more cash income from a conservative investment of that cash than he does after working all year at caring for those cows and paying the costs involved in their care.

But a rancher doesn’t look at it that way. He looks only at what he can make from running those cows, and isn’t interested in alternative uses for that capital. Thus he doesn’t account for the cost of the cows.

Most ranchers put up their own hay. They plant the hay with old equipment on land that is long since paid for, and irrigate it and bale it themselves. So the only cost they account for in haying is the cost of fuel, twine, and repairs. He could sell the hay he put up for those 250 cows and be paid $56,000 – more than double what we planned to pay out in labor, and he’d have all winter to lay on the beach in Mexico.

Then there’s the grass… Again, the ranch has long since been paid for. The rancher could take in cattle at $20 per head per month and receive another $35,000 for his trouble, but he assigns no value for the grass that his ranch produces.

Cash for family living expenses may come from a number of sources: town jobs for him and/or his wife, income from hunting/fishing/guests, sale of rocks/timber, sale of small parcels of land.

Let’s figure this out so far. Sell the cows and put the money in Certificates of Deposit at 4.5% - $13,500 per year. Sell the hay for $56,000, and the grass for $35,000. He could be pocketing $100,000 a year by selling his assets to someone else and just taking it easy.

But instead, the rancher ignores the value of his cows, his hay, his grass, and his time. Delete those four costs and he is left with money at the end of the year - enough money to buy
a new pickup one year, a new tractor another, and a 4-wheeler in between. He can build a new shed every 10 years, and roof the barn every 20.

There was a time a generation ago when a man could build up a small cow herd while working for wages, and eventually lease some ground and go into business for himself. After the cows and equipment were all paid for he could begin buying land. But these days it takes more than just hard work and determination to put a ranch together – it takes money. Lot’s of money. There are plenty of people who have inherited ranches and who couldn’t hold the operation together.

So how does a common rancher stay in business? **Appreciation in the value of his land.** The cattle operation itself has little, if any, margin – far less than the potential income from selling the hay, grass, and cows to someone else. But the value of the land keeps rising far faster than the liability from raising cattle.

It is this continuous increase in land value that makes the whole deal feasible. When the market is down and the cash flow is in the negative, the rancher can always borrow money on his land.

And so many ranchers go, year after year, operating on borrowed money and continually working to pay it back. After a few years of good prices they may buy a new piece of farm equipment, and after a few years of bad prices they may refinance the ranch.

There are exceptions of course. If the ranch is big enough there are economies of scale. And if the rancher is clever enough he can find ways to save on feed and labor costs, raise bigger calves, and generally operate more efficiently. There are some who honestly make a good living in the cattle business.

But the real economic return in the ranching business is in the increasing value of the land. As the supply of land decreases and the demand increases, prices have risen exponentially. There are few places left in Montana where land can be purchased at a price that is even remotely related to its productive ability. And what value is that land to the rancher? The only way to withdraw any of the wealth he has accumulated over the years is to sell some or all of that which he has worked so hard to build up.

And what about his children? The ranch can only support one family, so the rest of the kids must move to town. The one who stays on the ranch earns only a fraction of the money that his town siblings make, but the ranch is now worth millions. How do the town kids get their share of the legacy? There is no way the son on the ranch can buy out the interests of
his siblings and keep the ranch together, and there is no way that he can continue to scratch out a living if a sells a portion of the ranch to pay them off.

And then there is the estate tax. A ranch that may be worth only $750,000 in its ability to produce grass and hay for cattle is now worth $7,500,000. Mom and Pop can give only $3.5M to the son tax free. So when they die the IRS is after the son for half of the remaining $4M.

Where can the son get $2M to pay the inheritance tax? Not by raising cattle - I guarantee it! The only place to get that kind of money is to sell some or all of the ranch. And if he sells any of it he can no longer make a living.

And one more ranch family is gone.

What conclusions do we derive from this little exercise? The first is that were a rancher to win the lottery, he’d just keep on raising cattle until the money was all gone.

A second conclusion is that while the economics of every operation are different, in the scenic areas of Montana it is rarely the cattle operation that pays for the land, rather it is the land that pays for cattle.

And so it is only the very wealthy who can afford to own a ranch in Montana. Fortunately, any family that has been in the ranching business for a generation or more is very wealthy, both in the monetary sense: their land is worth millions - and in the literal sense: their life and their work are one, and it all plays out in the grandeur of the mountains and prairies under “Montana’s Big Sky”.