

# Managing Cow-Calf Production Costs: <br> What To Do Before The Money Runs Out 

By<br>J. Walter Prevatt, Auburn University

Cow-calf producers are a lot like jet pilots. That is, cow-calf producers and jet pilots have to think far in advance of where they are at the present time in order to react to the problems they may be confronted with in the future. Therefore, if you're a cow-calf producer looking to improve future cow-calf profitability, you must begin today managing your cow-calf production costs.

Figure 1 illustrates the average cash production expenses incurred by U.S. cow-calf producers from 1972 to 1994. During this 23 -year period, cow-calf cash production expenses have nearly quadrupled. In 1994, U.S. cow-calf cash production expenses averaged about $\$ 412$ per exposed cow. In order to cover cash production expenses per exposed cow of this level with average calf weaning weights of 550 pounds, the average cow-calf producer would need to receive average calf market prices of about $\$ 75$ per hundredweight. When adjustments for weaning percent and allocations for depreciation, unpaid family labor and management, and the use of equity


USDA, ERS. Note: 1990-94 estimates were based on a revised methodology.
capital are included, the cow-calf producer would need to receive average calf market prices that are substantially greater than $\$ 75$ per hundredweight. Therefore, when calf prices are well below $\$ 75$ per hundredweight, it is absolutely essential that cow-calf producers know their production costs and seek ways to control, manage, and/or reduce them.

## Where Do I Start?

First, collect your production costs and separate them into categories. Common categories may include purchased feed, raised feed, grazing, cattle, indirect, and interest costs. Sorting your production costs into categories will allow you to group common types of costs together. Too many categories will result in chaos and too few categories will not provide you with sufficient information to manage production costs. Separating production costs into these categories for your financial records may be done by hand or with a computer program.

Once you have defined production cost categories, you can easily determine where you are spending money and the amount in each category. The use of categories will offer you a closer look at the types of inputs you are using and what they cost. Now you can begin to evaluate opportunities to lower input use or costs, select substitute inputs, and/or eliminate these inputs if they are unnecessary.

In addition, production cost information may be


## Dollars Per Breeding Cow \$248



Dollars Per Cwt. \$58

used to view the cow-calf operation based on total dollars (e.g. $\$ 24,812$ ), dollars per breeding cow (e.g. $\$ 248$ ), and dollars per hundredweight (e.g. \$58) of calf production. These measurements are useful for evaluating net income, identifying high-cost areas, and for comparing input and management alternatives.

You are now equipped with the necessary information to begin investigating opportunities to
improve the net income of your cow-calf operation. During years of low calf market prices, your objective should be to lower your unit cost of production. You can lower your unit cost of production by one of four different actions. They include 1) maintaining the same pounds of calf production while lowering production costs, 2) maintaining the same production costs and increasing pounds of calf production, 3) lowering production costs by more than you lower pounds of calf production, and 4) increasing pounds of calf production by more than you increase production costs.

The key to lowering your unit cost of production is being able to estimate the effect that a change in production costs will have on the pounds of calf production. The selection decision about which option to use requires management expertise. Do not hesitate to consult with others (ranchers, Extension agents, lenders, accountants, veterinarians, IRM-SPA team, etc.) when making this difficult decision.

## Factors to Consider to Lower Cow-Calf Production Costs

Dramatic production cost differences exist among U.S. cow-calf producers. Current annual financial cow cost data from the cow-calf IRM-SPA program ranges from $\$ 156$ to $\$ 969$ per breeding cow. These differences are due to the enormous variety of inputs, resources, production practices, and management used by cow-calf producers. The following is an itemized list of factors to consider as opportunities to lower your production costs or unit cost of production.

## Purchased Feed Costs

- Develop a purchasing plan for feed (amount to spend, type of feedstuffs, quantity, quality, etc.).
- Minimize the need for the use of purchased feeds.
- Have feed analyzed for nutrient composition.
- Use purchased feeds based on nutritional needs of cow-herd and replacements (lactating, gestating, dry, growing, etc.).
- Buy purchased feeds in volume and at seasonal low prices when storage is feasible.
- Identify alternative feeds and by-product feedstuffs.
- Compare alternative feed prices and nutrient costs.
- Develop feed rations based on feed and forage analyses.
- Minimize feed losses during storage and feeding.
- Compare alternative feed, storage, and feeding costs.
- Buy feedstuffs by weight and quality (\%DM, \%TDN, \%DP, etc.) instead of bulk measure ments (bale, roll, trailer load, etc.).
- Use limit feeding techniques (fat, salt, rolling out hay, etc.) when practical.
- Consider incorporating cool- and warmseason forages (grasses/legumes) in your grazing plan to reduce dependence on purchased feeds and nitrogen fertilizer.
- Consider whether forage species or forage variety selection can lengthen the grazing season and thus lower purchased feed needs.


## Raised Feed Costs

- Develop a plan that describes your anticipated raised feed needs (best and worse case scenarios).
- Minimize the use of raised feeds when growing forages is economically advantageous. - Compare the costs of raising, harvesting, and storing alternative raised feeds.
- Compare your cost of harvesting raised feed with custom harvesting rates.
- Compare your cost of raised feeds with alternative purchased feeds (buy feed if it is cheaper than self raising and harvesting feed).
- Minimize harvest, storage, and feeding losses.
- Consider weather, labor availability, and machinery readiness to minimize harvested feed losses.
- Consider feed storage facilities to minimize feed losses.
- Consider the use of feed panels/rings to minimize feeding losses.
- Borrow, share, and/or rent machinery and labor with neighbors.
- Use limit feeding techniques (rolling out hay, etc.) when practical.


## Grazing Costs

- Develop a grazing plan to better utilize your inputs, resources, and forages.
- Soil test to determine fertilizer nutrients and/or lime needs.
- Evaluate alternative fertilizer formulation prices and spreading costs to reduce the cost of fertilization.
- Where possible, incorporate legumes into
perennial pastures to lower nitrogen fertilizer inputs and improve forage quality.
- Split fertilizer applications if it will minimize fertilizer losses.
- Use non-commercial fertilizer inputs (animal wastes, sludge, light industry and mining materials, etc.) when prices and availability permit.
- Consider leasing additional land when lease rates are cheaper than fertilization costs (compare dollars per AUM or dollars per unit of dry matter forage production).
- Perform weed control practices (chemical or mechanical) only when it is economically advantageous.
- Where feasible, improve forage utilization with improved grazing methods (creep, limit, rotational, intensive, etc.).
- Adjust fertilization and stocking rate levels based on calf and fertilizer prices (i.e. higher fertilizer costs imply lower fertilization levels which result in lower stocking rates, less cows per acre).
- Utilize crop aftermath and woodland browse when possible.
- Consider stockpiling certain forages for use as standing hay if this is possible in your area.
- Consider drilling/overseeding cool-season forages (grasses and legumes) to lengthen the grazing season and reduce purchased and/or raised feed needs.
- Provide animals having the highest nutritional requirements access to the highest quality pasture.


## Cattle Costs

- Develop a cattle management plan (produc tion, reproduction, nutrition, herd-health, feeds, forages, marketing, etc.).
- Adopt a controlled breeding season to improve/reduce management and labor costs.
- Consider adjusting cow-herd inventory and stocking rate due to lower beef prices and/or higher input costs (i.e. lower calf prices imply lower fertilization levels which result in lower stocking rates, less cows per acre).
- Review cow-herd records and cull open, defective, low producing cows and especially older cows to lower production costs.
- Retain only the essential number of replace ment animals to achieve the desired herd
inventory. Developing replacement animals is expensive.
- Evaluate buying versus raising replacement animals.
- Try to keep cows productive over a longer time period.
- Consider leasing high quality bulls, cows, and replacement heifers.
- Perform preventative herd-health practices to reduce "emergency" costs and losses.
- Compare prices of herd-health animal products.
- Reduce cow frame size over time if needed to lower total feed requirements.
- Sort cows into groups based on nutritional needs to improve/reduce management and feed costs.
- Use caution when selecting inputs to increase weaning percent or weights during low beef market price years. The cost of some inputs will exceed the revenue generated by their use.


## Indirect Costs

- Identify overhead items that are not essential to maintain production and eliminate them.
- Monitor utility costs and manage their use.
- Maintain only essential inventory items of farm supplies.
- Compare insurance coverage and rates.
- Plan vehicle, machinery, and equipment use to reduce labor and operating costs.
- Control and monitor family living withdraw als.
- Be selective about educational, travel and entertainment opportunities.


## Interest Costs

- Develop a financing plan and review financial records to identify time periods that loans will be needed and when they may be repaid.
- Minimize the use of borrowed money during low beef market price years. Delay purchasing machinery, equipment, pasture renovation, facility improvements, etc. until market condi tions justify these capital expenditures.
- Thoroughly evaluate all capital purchases that require financing to ensure they result in profitable investments and have a reasonable payback period.
- Compare interest rates and financing charges among financial institutions (negotiate when possible).
- Consider consolidating debt when necessary to reduce debt servicing requirements.
- Consider reducing borrowed funds by liqui dating non-essential or non-productive assets.
- Consider liquidating assets (land, cattle, timber, machinery, etc.) in advance to avoid making delinquent payments or defaulting on loans.


## Summary

In the beef cattle industry, production costs are constantly changing due to weather conditions, fluctuating feedstuff and input prices, animal performance, domestic and export markets, technology, and agricultural policies. Consequently, cow-calf producers need to continually measure and manage the production costs of their operations.

By collecting and organizing production cost data, cow-calf producers will be able to determine their total production costs, costs per breeding cow and cost per hundredweight of calf production. The process is simple, but it requires a lot of discipline to continuously record and tabulate production cost data.

Without production cost data, cow-calf producers will not know if they are a high or low cost operation. They cannot determine what is an acceptable bid price for their calves. They cannot evaluate profitability, nor can they make informed decisions about what pays and what does not. The chances of making correct management decisions is extremely limited if cow-calf producers do not know their cost of production. However, by knowing their production costs and being able to estimate the effect that a change in production costs will have on the pounds of calf production, cow-calf producers will improve their chances of making profitable management decisions.

Cow-calf producers, just like jet pilots, need to be knowledgeable of current and future conditions. Current and projected cow-calf production costs will provide cow-calf producers with the knowledge and time to make adjustments in their operations in advance of adverse beef market price conditions. Therefore, if producers are looking to improve future cow-calf profitability, they must begin today managing their cow-calf production costs.

