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Clell V. Bagley DVM
*Utah State University*

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Animal Health Fact Sheet

# HEALTH PROGRAMS WHICH IMPROVE THE MARKETABILITY OF CALVES

***Clell V. Bagley***, DVM, Extension Veterinarian
Utah State University, Logan UT 84322-5600

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The "winds of change" have the potential to drastically change the marketing of beef calves in the next few years. Economic pressures may force greater conformity in the way cow-calf producers manage and prepare their calves for market. Those who are slow to conform may be at a disadvantage for marketing.

Some producers have used retained (or partially retained) ownership to increase their share of the industry dollars and it still appears to be a viable option. "In the past 10 years, placing a 575-pound steer calf in the feedlot in October (targeting the April market) has resulted in a $100.29 advantage in added calf value over selling at weaning time." (Larry Corah, Utah Beef Cattle Field Day, 1997.) But there are increased risks involved and producers who are putting their money on the line with retained ownership will want to help insure their calves are healthy and remain that way. The Texas Ranch to Rail project has shown reduced net profit of $60 to $90 for each calf which becomes ill.

Alliances of various segments of the industry will depend on past data and records of healthy, well-doing calves in order to receive the maximum market value; this is "value based marketing."

Feedlots may not be paying a premium for properly prepared calves but more are giving a discount to those that are not prepared.

It will be to a producer's advantage to provide a product (calf) that most major feedlots will want to buy. It will be a disadvantage to produce a product which only a few feedlots will take, and that at a discount price.

## WHAT ARE THE COSTS AND BENEFITS FOR THE IMPROVED MARKETABILITY OF CALVES?

There will be extra costs to improve the health basis and marketability of calves. These costs may include feed, labor, facilities or yardage fees, interest, vaccines, parasite control drugs, labor for treatment, treatment medications, death loss and management time.

There are also potential benefits which might include increased weight gain of calves, the receipt of a "premium price" (or lack of a discount price), direct payments by the feedlot for specific procedures provided on the calves, and hopefully a better negotiated price because of records of prior feedlot performance. In surveys almost 90% of feedlot operators say they are

willing to pay extra for calves which have been properly prepared for the feedlot. There is some economic data to show they follow through in the actual prices paid.

Perception is as important as reality in marketing. Many western cow-calf producers feel they are providing a quality calf because of the relative isolation and lack of exposure to disease. A veterinarian from a major feedlot state recently showed the other side of that perception when he stated, “Calves from desert ranges have no titers (immunity) to anything and are like a time-bomb when they get exposed.”

Computers can easily provide “what if. . .” information that may help producers better predict whether certain procedures will be profitable. A simple formula is also available which will provide a quick estimation of a potential breakeven price for value-added calves. The formula and a simple example of weights and prices is listed below:

Breakeven Price = (initial weight X current price per pound) + ($ costs to keep) / (final weight)
= (500# X $.65) + ($25) / 550# = $325 + $25 / 550# = $0.636 per pound (breakeven price)

This formula comes from work done at the University of Wyoming in 1970. Researchers found that calves had to be held for a minimum of 30 days in order to regain initial weight and enough extra weight to pay for the costs incurred. Others have re-affirmed similar information a number of times since then.

## WHO ARE YOUR CUSTOMERS (BUYERS) AND WHAT DO THEY WANT?

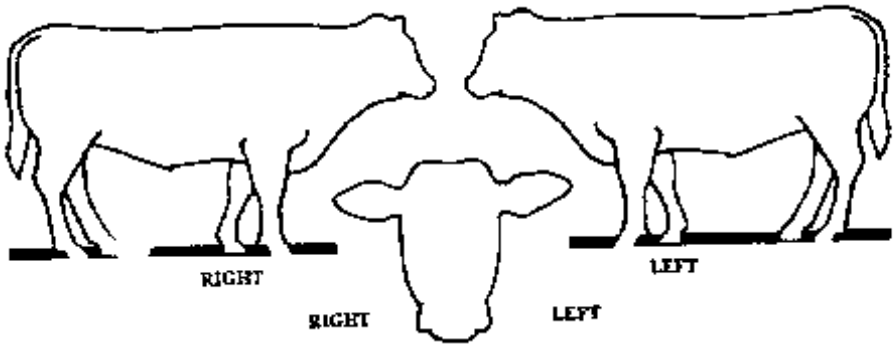
The product of a cow-calf operation is the calf and ultimately it must please the meat consuming public. But a closer customer is the feedlot operator who will finish out that product. If you are participating in retained ownership, you must be able to please yourself with the economic returns to both the cow-calf and feedlot segments. What do you, as a retaining owner-feedlot operator, want? Most feedlots will consider the following product qualities to be essential for all calves.

A healthy, vigorous calf that is ready to grow and fatten. This implies that it is free of serious calfhood diseases and deficiencies. Severe scours or calf pneumonia may not leave visible signs but become apparent when production and finishing date are recorded. Copper deficiency doesn’t always cause a faded haircoat but it may impair immunity and slow growth rate. Cow-calf producers will have to identify and prevent these problems in order to negotiate the best price or for their retained calves to make effective gains.

Feedlot buyers want calves dehorned, castrated and healed for 30 days prior to entering. The newer “banding” technique for bulls is not a better answer than was the old burdizzo technique. The best answer is to castrate calves by 1–2 months of age and implant them to compensate.

Other information which the cow-calf producer can provide will be very helpful to feedlot operators and will aid in negotiating a better price. A vaccination and drug use record along with a map of injection sites are valuable tools for the feedlot. (See Table 1.) This communication with records avoids duplication and waste of vaccines and deworming products, etc. Producers must also exercise quality control of vaccine use and handling. The genetic background of the calves (predominant breeds of dams and sire) as well as data on performance of calves from prior years could be important tools for price negotiation. Moving brands away from the ribs and using a smaller size brand could have a favorable impact on price; it does affect hide value.

**Table 1. Total quality management preconditioning processing map**




| Site No.* | Product/Company | Used for | Dose | Admin. Route | Dates of Administration | |
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*Place corresponding number on animal map at site of administration.

DATE PROCESSING COMPLETED _____

OWNER/MANAGER SIGNATURE _____

If you are planning to retain partial or complete ownership, be sure to consider the economic risks (as well as potential benefits) that may be involved. It is essential that your calves have the genetic potential for efficient growth and that you and the feeedlot implement sound health and nutrition programs.

## SPECIFIC QUESTIONS TO ASK YOUR BUYERS

There is still a lot of room for individual preferences in the feedlot industry and there are still many different opinions. The following are questions that you should discuss with your most likely buyers (or the feedlot operator with whom you are working on retained ownership). For consumers (your buyer), perception is reality and if they have strong feelings about certain procedures or products, you need to try to meet those expectations. However, you can't please everyone and if requests for one feedlot just can't be accommodated with your program or if they are in direct contrast to most other feedlots, you may have to remove them from your list of potential buyers.

**1. Do they prefer ranch fresh or value added calves?**

Ranch fresh calves are removed from their dams, put onto the trucks and shipped to the feedlot. Value added calves would be weaned for 30 to 45 days, broke to water troughs and feedbunks, adjusted to a forage and concentrate ration, and vaccinated for respiratory disease. Most feedlots would much prefer the value added calves because the feedlots are not prepared to give fresh calves the special attention they need during the adjustment period. However, there may still be some feeders in your area that prefer the ranch fresh calves and that should be considered if it better fits your program. The favorable breakeven formula or some other economic calculation is an important consideration as you make that decision.

Many cow-calf ranches are not set up with facilities, feed, personnel, etc., to manage calves efficiently during this critical post weaning period. If not, it would be much better to find a reputable "backgrounding" lot and pay them to manage the calves during this period rather than try to do it on the home ranch. This type of backgrounding is usually for just 30–45 days rather than like some backgrounding operations where calves are kept until they have gained 300 pounds or more. That decision will depend on your timing and the market cycles, etc.

Weaning and keeping the calves for just 10–14 days should usually be avoided because you will incur all the weight loss, and early illness without sufficient time to recoup those costs with the calves' compensatory gain. Moving them to a feedlot after this short time usually imposes enough other stress so they do poorly there as well and both you and the feedlot lose.

**2. Which clostridial (blackleg type) vaccines do they prefer?**

It has been shown that some clostridial vaccines caused greater loss by reduced weight gain than was being gained by their prevention of death loss. Many feedlots are using much fewer vaccinations for the clostridial diseases than they did in the past. So ask what they prefer and try to fit your program to it. Most calves should have been vaccinated at some time but there are also products with which one dose is sufficient. The newer vaccines tend to be less stressful than some of the past. There are 5 and 2 milliliter dose vaccines; ask if they have a preference.

**3. For respiratory disease, do they prefer modified live virus (MLV) or the killed (inactivated) virus vaccines?**

There is still debate in scientific circles about which is best. The main conclusion is that each has a place and can be of help if used properly. But your main objective is to meet the perceptions of your buyers—even if that perception is not completely correct scientifically. That perception swings back and forth like a pendulum and you have to ask your buyers to know

where the perception is going. The current position seems to be summarized in the following statement: “Vaccinate calves at weaning with modified, live IBR and BVD vaccines. Killed viral vaccines have not performed well in a feedlot environment. Practical research, including Texas A&M University's Ranch to Rail Program, now indicates these vaccines are not as effective at the ranch level as well.” (D. Miles, and J. Sears. National Cattlemen, September 1995.)

A critical point to remember is that if killed (inactivated) vaccines are used, it is essential that both doses (the initial and booster) be given, and in a timely manner, or the immunity produced will be substandard.

**4. Do they want Pasteurella, Haemophilus or BRSV vaccines given?**

Again perceptions vary and you need to know the specific opinions of those feedlots where you are trying to market your product. One survey of feedlots indicated that 85% want or expect Pasteurella and Haemophilus vaccines to be given. However, another major opinion group contrasts with this stand:

“The Tex-Vac program was amended to eliminate a vaccination for Pasteurella. . . .with a well- structured viral vaccination program. . . . Pasteurella was not warranted from an economic standpoint.” (BEEF, August 1995.)

There are Pasteurella products which are effective as one dose and these are easier to fit into a vaccination program. Both Haemophilus and BRSV require two doses to be effective; giving just one dose is wasting money.

**5. Would they prefer that calves be recently implanted and if so, which product is preferred?**

Try to fit your program to what most buyers want. Several products are available from which to choose. If you implant, be sure it is done properly.

**6. Do they want the calves treated for roundworms and / or liver fluke? Grubs?**

If you have an effective parasite control program implemented with your cow herd, including monitoring of fecal egg-per-gram counts for calves, you may be able to save this extra expense for both you and the feedlot. But the perception of your buyers is the deciding factor.

**7. What is their preference for the nutritional / ration status; what percent concentrate would they prefer in the ration that the calves have been receiving?**

Many feedlots now want written information on prior nutrition before they even negotiate on the price. Calves that have been on a high forage diet will not be able to adapt quickly to the high concentrate rations which the feedlots want to start them on and many calves may be affected with acidosis.

**8. When is the ideal time for the actual transfer of calves to the feedlot?**

Timing is critical to the feedlots in order for them to use feed, labor and facilities most efficiently. You may be able to adjust your timing to better meet their needs and at the same time match a higher level in the pricing cycle. You do need to match the transfer date with your own feed and other resources. Calves in the western states are often being left on the cows longer than is economical—past the point where they can gain efficiently from the forage available.

“Wean early in the fall and put calves in a growing program. In many operations, we leave calves on cows way too long, resulting in cows that are thin, and in need of additional feed during the winter.” (Larry Corah.)

**9. When would you prefer that the vaccines be given to calves?**

Table 2 lists several alternatives for vaccination of calves. Other alternatives or combinations are possible but as you consider those remember the following guiding principles:

a. Vaccines used on calves which are nursing pregnant cows must be safe (so they could be used on pregnant cows).

b. Vaccines which indicate a booster be given will not stimulate much protective immunity until 7–14 days after the second dose is given. Giving one dose entails the cost and stress on the calf but provides little if any benefit.

c. Using the killed products at weaning and post-weaning will provide almost no additional protection at the time calves are most vulnerable to respiratory infections.

d. Additional vaccines could be given at these same times of handling, when warranted.

## OTHER TIPS FOR SUCCESSFUL WEANING

Little things make a major difference when trying to provide value-added calves at weaning. Recording these practices and using them during price negotiation may also help bring an improved price. They will help reduce illness at weaning.

- Feed hay to cows and calves prior to weaning so the calves are acquainted with harvested forage. Acquaint calves with water troughs while they are still on the cows, if possible. After weaning, provide the water so it makes a trickling noise to get their attention but provide an overflow drain so it doesn't also create puddles that expose the calves to coccidiosis.
- Control the dust by wetting down corrals.
- During hot weather, begin working cattle early in the morning and quit by early afternoon.
- Sort calves away from dams quietly, without extra running and stress. Provide and use a cutting chute for large numbers of cattle.
- Either keep cows and calves just through the fence from each other (with good tight fences) or keep them far enough apart they cannot hear each other.
- Provide grass hay for first day after weaning and hang some of it out through the manger to attract the calves attention. Then begin to top-dress the concentrate or total mixed ration onto the grass hay at a rate of about 0.5% of body weight per day. Increase the amount on a daily basis but don’t feed over 50% of ration weight as concentrate during that first 30 days.

## SUMMARY

With a little extra work and planning, you can provide added value to the calves you raise while at the same time greatly improving their ability to resist and avoid disease. This will greatly improve the efficiency of the entire beef industry. Records and information on the calves can provide you with excellent tools for improved marketing and price negotiation.

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**Table 2. Alternative Vaccination**

| AT BRANDING[a] | 3-4 WEEKS POST-BRANDING | 6 WEEKS PRE-WEANING | 3 WEEKS PRE-WEANING | AT WEANING | 3 WEEKS POST-WEANING |
|---|---|---|---|---|---|
| ① IN[b] IBR, PI3<br>Clostridial (1 dose) | | | | MLV[c] - IBR<br>BVD<br>Clostridial (1 dose) | |
| ② | | | IN-IBR, BVD<br>Clostridial (1 dose) | MLV - IBR, BVD | |
| ③ Killed - IBR, PI3, BVD, BRSV<br>Clostridial (2 dose) | Killed - IBR, PI3, BVD, BRSV<br>Clostridial | | Killed - IBR, PI3<br>BVD, BRSV<br>Clostridial | (Or could do here) | |
| ④ | | Killed - IBR, PI3, BVD, BRSV<br>Clostridial, Pasturella Haemophilus | Killed - IBR, PI3<br>BVD, BRSV<br>Clostridial, Pasturella Haemophilus | | |
| ⑤ | | | Killed - IBR, PI3<br>BVD, BRSV<br>Clostridial, Pasturella Haemophilus | Killed - IBR, PI3<br>BVD, BRSV<br>Clostridial, Pasturella Haemophilus | |
| ⑥ | | | | Killed - IBR, PI3<br>BVD, BRSV<br>Clostridial, Pasturella Haemophilus | Killed - IBR, PI3<br>BVD, BRSV<br>Clostridial, Pasturella Haemophilus |

**a** Also perform castration & dehorning

**b** IN = intra-nasal (or use MLV before putting bulls in)

**c** MLV = modified live virus