

OWYHEE COUNTY CATTLEMEN'S CORNER BEEF NEWSLETTER

NOVEMBER, 2011

University of Idaho
Extension

Cattle Marketing Opportunities

K. Scott Jensen, UI Extension Educator, Owyhee County

Articles in two of the most recent trade magazines talk about the importance of marketing. In his column in BEEF Magazine, Burke Teichert stated that an emphasis on marketing is one of the essentials for successful ranch management. Do you actively participate in the marketing of all of your cattle?

Consider the marketing factors such as time, form, and place. A good manager should consider the time, form, and place for the marketing of every class of cattle that is sold. Mr. Teichert stated that every animal (even from very large herds) should be sold to its highest and best use, and for the best possible price.

Take non-fed market animals (cull cows and bulls) for example. Believe it or not, these animals typically make up 15-20% of beef production annually. There is considerable value in these animals and they are used for more than just ground beef. A recent (last five years) University of Idaho Extension research project has shown that much value can be added to these animals with just a short time on feed. In other words, a little change in time and form.

What other changes in form might a producer consider? How about natural, Angus Source, Oregon Trail Beef, Double R Ranch, Country Natural Beef, or one of the many other branded beef programs. With a little change in management or marketing, could you meet the requirements for one of these programs and gain some of the associated premiums?

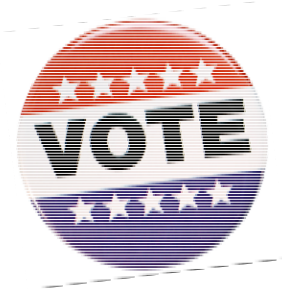
One final question is this: Have you ever taken the time and made the effort to meet consumers of your product? The Idaho Beef Council often provides those opportunities for producers. Recently they hosted a tailgate party prior to a BSU football game in Boise. Producers had the opportunity to serve beef and visit with those that stopped by the booth. Another producer I know recently went to Oregon as part of a marketing activity for the program in which they market their beef. Here are comments from that trip in her own words.

"Well just back from St. Helen's, Oregon from the Burgerville birthday celebration. Wow the place was just packed all day long. Bryce and I taught lots of people how to rope and talked to hundreds. I was surprised at how thankful everyone was for the product CNB provides to the Burgervilles and so glad to be able to meet one of the ranches who provide the hamburger. Overall, it was a great experience."

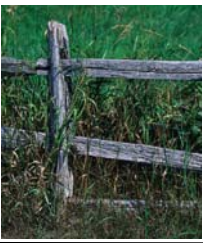
Take home message... Take time to review your marketing plan. Are there potential opportunities you might be able to take advantage of with a few tweaks in time, form, or place? Have you taken the opportunity to meet some of the consumers of your final product? You might be surprised at the opportunities you discover.



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Short-Term Cows

Ron Torell, Long-Standing Educator and Advocate of Agriculture

For years our industry has referred to spent cows as culls. This is perhaps a poor choice of words used to describe market-ready animals. As beef producers each of us has the responsibility to recognize when it is time to send a cow to market. The industry cannot tolerate the marketing of shelly, weak, and down cows. In an effort to capitalize on the best calf market the beef industry has ever experienced, many cattlemen are looking at ways to economically expand their 2012 brood cow inventory. One option is to defer issuing pink slips to the experienced veterans of the herd; those pregnant, smooth-mouthed cows who are ten years old and beyond. These senior bovine employees have already proven themselves yet are past their prime largely due to their age and lack of teeth. Squeezing that last calf out of an old cow does not work in every case. It may, however, if you apply a few basic management principals.

With old cows, consumption and feed efficiency decreases while nutrient requirements remain the same. A proper functioning ruminant digestive system is dependent on small particle sizes of feed stuffs. Mechanical breakdown of feed stuffs requires a full mouth of teeth which are often absent in these older animals. In the absence of teeth, the particle size of consumed feed stuffs is increased. As a result, passage rate is slowed and consumption reduced. In addition to increased particle size, many of these old cows have lost some of the villa in the lining of their digestive tracts. The combination of these two issues requires that these cows be placed on a nutritive dense ration which is softer in texture and smaller in particle size.

Cows living and producing past their prime are usually worn-out and need all the help we can give them in order for them to produce their last calf. For this reason, a winter ration that is high in protein and energy is ideal for the older cow. An example of a nutritive dense ration may include chopped hay with a concentrate or one of the inexpensive, softer vegetable matter, by-product feeds. It is also important to take into account that many of the vital organs of the older cow may not be running at peak performance. For this reason they will often benefit from a micro-mineral package and administration of a type 2 de-worming product.

In every herd of cows, the "boss cow" pecking order chain-of-command is well established. Never winter feed the short-term cows with the main bunch. Consider winter feeding these old cows separately or with the younger, higher nutrient demanding group. Some of these old cows have had their way for more than ten years, so allow plenty of bunk space to compensate for the "boss cow" hierarchy. If feeding on the ground, feed over a large area so the older cows can have their share.



It's important to do your homework when making the decision to short-term your older bovine employees. Short-termining works best in years when fall market-ready cow prices and feed costs are low and there is a good probability of relatively high calf and market-ready cow prices the following year. In contrast, given the high feed costs and cow prices we are currently experiencing, this scenario may not work unless you have access to inexpensive feed required by this class of livestock.

Be very selective on the cows you short-term. Some cows are depleted and will not produce under any circumstances. Short-term candidates need to be pregnant to calve early, stand structurally correct and strong, and must be able to travel. Make sure their mammary system is still functional having no bottle teats or blown-out bags. Given today's high feed costs, avoid those cows that are extremely thin and weak. Flesh cannot be economically returned once it is lost. Issue the pink slip immediately to those cows that have already

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Injection Hygiene Protects Animal Health

J. Benton Glaze, Jr., Ph.D., Extension Beef Cattle Specialist
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Medications are commonly given to beef cattle as a part of regular husbandry practices or part of a herd health plan. Medications may be given by mouth, topically, or by injection. Injections are commonly given in the muscle (intramuscular – IM), under the skin (subcutaneous – SubQ), or in the bloodstream (intravenous – IV). Medications are administered to cattle by injection for a variety of reasons including preventing diseases (vaccines), treating infections (antibiotics) and controlling parasites (anthelmintics). Intramuscular injections of almost any medication results in some form of injection site lesion or blemish. The severity and economic loss of the resulting lesion can be reduced through the use of beef quality assurance (BQA) approved injection techniques and proper injection hygiene.

For a couple of decades, the beef industry has made an effort to reduce the economic loss from injection site lesions. This effort included educating beef cattle producers and beef industry workers to administer all intramuscular and subcutaneous injections to cattle in front of their shoulders in an area known as the injection site triangle. This BQA recommendation has proved beneficial to the beef industry, as the number of injection site blemishes found in higher priced cuts of meat has greatly been reduced. In fact, injection site lesions were not included on the list of top ten quality challenges in the most recent National Beef Quality Audit (NCBA, 2005).

In a report from the Kansas State University Veterinary Diagnostic Laboratory (KSU Veterinary Quarterly Vol.10, No.1), veterinarians agree that a majority (not all) of injections in beef cattle are being given in the neck region away from the more expensive, better cuts of beef. However, even though the beef industry has responded and improved beef quality with recommended injection sites and techniques, some concerns remain, particularly in the area of animal health.

Veterinarians at the KSU laboratory reported encountering several cases of cellulitis (result of bacterial infections) in beef cattle (and swine) that resulted from injections. For the most part, the damage from injections is localized in the tissues around the injection site (i.e. injection site lesion). However, if cellulitis occurs due to bacteria entering the animal via the injection site, greater amounts of animal tissue may be compromised and animal performance (intake, gains, etc.) may be negatively affected. In severe cases, cellulitis can lead to the death of the animal.

In an effort to determine the cause of the cellulitis, KSU veterinarians performed necropsies on several animals. They isolated the bacterium *Clostridium perfringens* from neck tissues (near injection site) of affected animals. Additionally, they isolated the bacterium from the vaccine vial that was used in the vaccination process. The vial was previously used and stored prior to the incident. The previous use allowed contaminants to enter the vial and the storage allowed those contaminants to grow. In comparison, no bacteria were isolated from an unopened, unused vial of vaccine. Veterinarians identified the main culprit in these infections to be the storage and use of partially used animal health products. They also suggested that infections can result from the use of unclean syringes and needles.

To gain some perspective on how many partially used animal health products may be stored on farms and ranches, consider the results of a study that examined the refrigeration and storage of animal health products on Idaho beef operations. A total of 2,257 bottles of animal health products were found in the refrigerators of the 129 surveyed producers. Of those animal health products, 463 (20%) were expired and 614 (27%) were opened or previously used. Considering the findings at KSU, producers should choose to discard any open/previously used products.

For a number of years, the beef industry has worked diligently to reduce the impacts of injections on carcass quality and provide beef consumers with safe, high quality, and wholesome products. When administering animal health products, the same level of commitment needs to be



exhibited in regards to injection hygiene to protect an animal's health and allow for maximum productivity. Following are several injection hygiene recommendations that when observed and followed should result in healthier, better performing cattle.

- 1) Read and follow all animal health product label and package insert information.
- 2) Store and maintain animal health products as indicated on the label.
- 3) Discard any partially used/previously opened animal health products.
- 4) Discard any expired animal health products.
- 5) Wash (with boiling water) syringes between uses. Store syringes in a clean place.
- 6) Use clean/sterile transfer needles to draw animal health products out of vial.
- 7) Use clean/sterile, sharp needles of the correct length and gauge.
- 8) Clean/change needles between uses if they become soiled. Change dull, bent, burred, or broken needles immediately.
- 9) Change needles after each animal if the potential of spreading blood borne diseases (i.e. Anaplasmosis, bovine leukosis) exists.
- 10) Clean (remove mud, manure foreign matter) injection site prior to animal health product administration.



BVD Control in Beef Herds

James J. England, DVM, PhD, Caine Veterinary Teaching Center, Caldwell, Idaho

Bovine Virus Diarrhea virus control is predicated on three management practices: Biosecurity, Vaccination and identification and removal of persistently infected (PI) animals.

Biosecurity encompasses all the programs of a beef operation to limit access to and/or the movement of a disease within a herd. The first line of defense is best exemplified by the adage "Good Fences Make Good Neighbors!" This also means, to me, know where your replacements and bulls come from and how your neighbor manages his PI risk. In this era of rapid movement of animals between ranches, etc, those fences should include transportation equipment. Of course in Idaho, we also have the grazing association situation wherein each member must rely on the good management practices of the members to control disease introduction and communication. Unfortunately, the vast majority of BVD PIs and BVD problems arise from exposure of non-immunized animals to PI individual.

Fortunately, we have a unique situation with BVD in that we can identify the primary culprits in the continuing saga of BVD disease within our cattle industry—we can identify and remove PI animals from the population. These animals can be identified by laboratory methods—remember, these rascals rarely look any different from their playmates!—using either an ear notch or blood. Once an animal is identified as a PI, the animal is just that, *persistently infected for life*.

Testing can occur any time in an animal's life, but it is best to utilize a program that will identify and remove PI animals as early as possible from a herd. I recommend testing calves at birth which facilitates the earliest identification and removal of infectious sources within a herd. Once a PI calf has been identified, the mother should also be tested although 93+% of PI calves are not from PI mommas. If there are siblings, they should be tested also.

Part and parcel of biosecurity as well as an entity of its own is vaccination. Every animal needs to be vaccinated every year! There are a multitude of high quality vaccines available for protection against BVD and several other important disease causing agents. Working with your veterinarian, vaccination programs need to be individualized to the operation AND vaccination programs need to be re-evaluated every year!

Lastly, PI animals should be humanely destroyed and not passed into the production chain. PI animals are safe to eat.





Nutrient Requirements for Beef Cows During the Winter Feeding Period

Jim Church, University of Idaho Extension

What Do They Need?

The nutritional requirements of a mature beef cow during the winter feeding period can vary due to many factors. Producers need to ask themselves the following questions:

- ◆ Where does the cow fall in the reproduction cycle?
- ◆ If the cow is a spring calver, is she in the second or third trimester of the gestation period?
- ◆ Does the cow milk heavy or is she an average milking cow?
- ◆ If she is a fall calving cow, is she bred back or still open?
- ◆ How much does she weigh?
- ◆ What is her body condition score and does she need to gain weight?

As you can see, there are many factors that need to be considered when designing a ration that meets the nutritional requirements of cows during the winter feeding period at the least cost to the producer.

The following tables will outline the requirements for cows based on where they are in the reproductive cycle and their body weight. If weight gain is needed to reach the desired body condition score of 5 on the calving date, they will require additional energy and protein.

Table 1: Daily energy (TDN) and protein (CP) requirements of mature pregnant beef cows in the second trimester.

Weight (lbs)	TDN (lbs/day)	TDN (%)	CP (lbs/day)	CP (%)
1000	10.5	53.6	1.6	7.9
1200	11.8	52.9	1.7	7.8
1400	13.1	52.5	1.9	7.6

Table 2: Daily energy (TDN) and protein (CP) requirements of mature pregnant beef cows in the third trimester.

Weight (lbs)	TDN (lbs/day)	TDN (%)	CP (lbs/day)	CP (%)
1000	11.4	56.6	2	9.6
1200	12.8	55.5	2.1	9.3
1400	14	54.7	2.3	9

Let's look briefly at these two tables. Notice the difference in the amount of protein and TDN that is required by cows as they progress through the gestation period. A 1,000 pound cow requires almost 2 pounds more energy and 1/3 of a pound more protein each day when she is in the third trimester compared to the second.

As cattle producers, we need to adjust the ration to accommodate the increase in requirements as we progress through the winter feeding period. So ask yourself, am I making adjustments or just feeding the same thing all winter?

If you think the requirements change a great deal during the gestation period, they really increase after the cow has her calf. Table 3, outlines the energy and protein requirements of cows 3 to 4 months postpartum.

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Table 3: Daily energy (TDN) and protein (CP) requirements of mature beef cows 3 to 4 months postpartum that produce an average amount of milk.

Weight (lbs)	TDN (lbs/day)	TDN (%)	CP (lbs/day)	CP (%)
1000	8.8	48.8	1.3	7
1200	10.2	48.8	1.4	7
1400	11.4	48.8	1.6	6.9

As you can see, the requirements really increase after calving. A 1,000 pound cow requires almost 1 pound of additional TDN and almost a half pound of additional crude protein after she calves compared to the last trimester.

What Needs to Be Done to Balance the Ration?

The first step towards balancing a ration at the least cost is knowing what feed stuffs are available in the area either grown on your home ranch or close by and the cost of these feeds. Secondly, the nutrient content of these feed stuffs should be determined. Have a forage analysis conducted on the feed. The cost is around \$20 per sample.

Next, determine the nutrient requirements of your cows. Use the information listed in the three tables in this newsletter. Then use the forage analysis data and the requirement tables to formulate a ration.

There are several computer programs that can help you balance a ration. Oklahoma State University has a free easy to use ration balancing program. It is called COWculator and can be accessed at <http://www.ansi.okstate.edu/exten/cowculator/>. I like the fact it is free. There are other programs that also can be purchased.

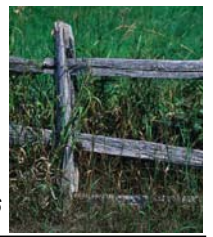
Finally, be willing to make adjustments during the winter feeding period to match the needs of the cows. Many people feed the same thing all winter which may result in exceeding the needs of the cattle or the ration may come up short on nutrients. Both scenarios will cost you money.

Example Ration:

Let's look at an example ration using hay available in North Central Idaho. We have a lower quality grass hay that tests out at 6.8% CP and 48.5% TDN. By the way, this is an actual hay sample that I tested this summer.

We are feeding 25 pounds of this hay to our cows each day and the cows are in the second trimester of pregnancy and they weigh 1200 pounds. We feed free choice TM salt and that is all the cows get. Are we meeting the nutrient requirements for our cows? Let's look:

- ◆ The first thing we do is convert the 25 pounds of hay from an as fed to a dry matter basis: Our hay is 8% moisture so we multiply 25 by .92 to get the dry matter consumed.
- ◆ $25 \times .92 = 23$ pounds of hay consumed on a dry matter basis per day.
- ◆ Next we figure how much protein the cows are getting in pounds per day:
- ◆ $23 \times .068 = 1.56$ pounds per day.
- ◆ Then we figure how much TDN the cows are getting in pounds per day:
- ◆ $23 \times .485 = 11.16$ pounds per day.
- ◆ Our cows need 1.4 pounds of protein each day and 10.2 pounds of TDN (Table 1.). Compare this with our hay: CP Needed = 1.4 the hay provides = 1.56. TDN needed = 10.2, the hay provides = 11.16. The ration meets the requirements of our cows.



When the cows reach the last trimester of pregnancy and we continue to feed 25 pounds of our grass hay to the cows per day, do we still meet the requirements?

Table 2. shows that a 1200 pound cow in the third trimester of pregnancy requires 1.7 pounds of CP per day and 11.8 pounds of TDN. Our hay supplies 1.56 pounds of CP and 11.16 pounds of TDN.

Third Trimester of Pregnancy

Crude Protein

Cow needs = 1.7

Hay = 1.56

Diff. = 0.14 pounds short

TDN

Cow needs = 11.8

Hay = 11.16

Diff. = 0.64 pounds short

We are short on both nutrients. We need to adjust the ration.

When the cow has her calf she will need even more protein and energy. If we continue to just feed our grass hay, we will really be short changing her on nutrition.

At Calving and 3 to 4 months post calving

Protein

Cow needs = 2.1

Hay = 1.56

Diff. = 0.54 pounds short

TDN

Cow needs = 12.8

Hay = 11.16

Diff. = 1.64 pounds short

If we make no adjustment to our ration when the cow has her calf and in the 3 to 4 months after calving, we will be setting ourselves up for a wreck. Milk production will suffer resulting in smaller calves at weaning and future reproduction performance will also suffer.

Summary

Management Decisions

As the ranch manager you will have to make decisions on rations during the winter. If your ration is not meeting the requirements of your cattle you will have to look for feedstuffs that provide the nutrients needed at the least cost. It may be as simple as adding a couple of pounds of alfalfa hay to your ration or it may require some other supplements such as barley.

Know what your cattle need to meet their nutrient requirements. You will need to know their weight and where they are in the reproduction cycle. Know what your feed provides in regards to nutrients. This will probably require a nutrient analysis. Use this information to balance the ration.

Feed prices are extremely high this year. It will pay to balance a ration to prevent over feeding expensive feed or under feeding and losing production and calf weight. Balancing the ration will protect the bottom line.



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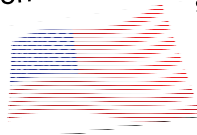
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on **Friday, November 11**, the day
set aside as "a celebration to honor
America's veterans for their patriotism,
love of country, and willingness to serve and sacrifice
for the common good." We are grateful for your service.



Short-Term Cows . . . continued from page 2

turned the corner. They are a poor risk. Timely marketing of market-ready cows is the right thing to do.

Taking advantage of the late summer, market-ready superior cow market will often pay for the extra feed and care required to get that extra calf. An option employed by many ranchers is to over-winter their old March calving cows on the ration previously discussed. They will then graze the cow-calf pairs inside on quality pasture in the spring and early summer. After weaning the calves at about 170-days of age, the old cow is then immediately sold.

Quantity has a quality all its own. This certainly holds true when it comes to short-term cows. A smooth-mouthed pregnant cow often brings a small premium over market-ready rail prices. If you are not willing or able to follow the management suggestions made in this article, perhaps you are better off to haul the old-timers to town and let someone else with the necessary resources put together the quantity of short-term cows to make it work. 

As beef producers each of us has the responsibility to recognize when it is time to send a cow to market. The industry cannot tolerate the marketing of shelly, weak, and down cows.