To Grass or Not to Grass…
That is the Calf Question
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The high cost of feedlot gains is making heavier weight cattle, compared to lighter weight cattle, more attractive to feeders. This is evidenced by the shrinking premiums for light-weight cattle seen recently in many markets across the United States. This goes along perfectly with the historic pattern of price-weight slides, with lower premiums for lightweight cattle entering the feedlot compared to heavier weight cattle when corn prices increase and/or fed cattle prices decrease.

The driver behind heavier weight cattle being attractive to feeders is that they require fewer days on feed prior to harvest than the lighter weight calves, therefore the over-all cost of finishing them may be less. Added gain prior to entering the feedlot can be more economical using lower cost feeds, such as grass and strategic supplements. Cow-calf and stocker cattle producers often wonder if it pays to send cattle to the feedlot heavier than usual. The questions that need to be addressed are: How much weight should be added, when will cattle be marketed, what is the cost of the extra gain, and what is an appropriate way to manage risk? Two different classes of cattle destined for the feedlots, calf-feds and yearlings, are examined here.

Calf-feds
Calf-feds are typically 5 to 7 month old calves that were recently weaned and placed directly into a feedlot setting. On average these calves spend approximately 250 to 280 days in the feedlot prior to slaughter. Prior to the current economic situation, the availability of cheap grains allowed feedlots to purchase these calves and feed them for extended periods of time (i.e. cheap cost per gain). Is this practice over? There still may be a niche for calf-feds in the current market.

Data out of Utah State University and University of California-Davis has shown that most weaned calves would be more profitable if they were “funneled” into stocker or intense grass feeding schemes. The one issue that has complicated this decision is the calf’s mature size. We have focused on cost of gain and on-feed weights, but it is the slaughter weight that may be the dictator of which program these calves should enter. If cow/calf operations are producing large-framed calves, then those calves may actually be more profitable going directly to a feedlot. Allowing them to graze and add frame has shown to result in a larger animal at time of slaughter (based on choice quality grade). Therefore, by moving those calves directly into a feedlot setting a feeder may actually reach acceptable quality and yield grades without having to attain heavier slaughter weights. Currently this would be advantageous since most packers are levying greater discounts on over-weight carcasses.

How do pre-conditioning programs fit into this? If producers are considering sending weaned calves directly to feedlots, a 30- or 45-day pre-conditioning program should be considered. The main point to remember is that these calves are immature, both physiologically and immunologically! If you have had illness problems with calves in the past or during the pre-weaning period then you may want to employ a pre-conditioning program. Either way, contact your potential feedlot cooperator and local veterinarian to get their input on pre-conditioning or other health programs for calf-feds.

Yearling cattle
One typical stocker cattle scenario is as follows. Spring born calves are weaned at 400 lb in October, grazed on fall pastures, over-wintered on harvested forages (good quality hay or balage) where they gain at a moderate rate (0.5 lb to 1.0 lb per day), then turned out weighing slightly over 500 lbs onto non-irrigated, spring pastures to take advantage of abundant, high quality forages.
Here they gain an average of 2.5 lb per day. The range in daily gain can be anywhere between 1.0 and 4.0 lb, depending on the month. When the spring grass dries up, they are sold as 750 lb yearling feeder cattle. There are at least two opportunities for additional weight to be added to these cattle. The first is increasing the nutrient density of the wintering diet. The second is by extending the spring grazing period. Both scenarios could be achieved in a few different ways. Each feeding scheme would have to put weight on the animals economically. That is, the cost of added gain needs to be balanced for nutrients. Studies show this helps to save money and reach goals. Test feeds and blend appropriately. Calculate the price of feeds on cost per pound of nutrient (CP or TDN) rather than on cost per ton of each feed. Work with a nutritionist (OSU Extension Service faculty or private consultant) or use the OSU Beef Nutrition Workbook free, on-line at http://ir.library.oregonstate.edu/xmlui/handle/1957/20383.

University of Nevada, Reno, has free downloadable software called CalfBack, a microcomputer program designed to help producers compare the economics of alternative production and marketing strategies. It allows users to develop and customize a partial budget for back-grounding calves in a feedlot, on pasture, or a combination of both. This could include keeping weaned cattle for a period of time or evaluating costs of feeding cattle before they are put in a feedlot and marketed as fed cattle. Find it at http://www.cabnr.unr.edu/resources/software/Bruce/calfback.aspx

Managing risk is important in assuring you don’t loose on your investment. This is especially important if you are trying a new production strategy. You can forward contract your cattle at a specific price or take insurance against declining market prices. Chicago Mercantile Exchange (CME) is one option; Livestock Risk Protection (LRP) insurance through USDA Risk Management Agency is another.

Some may question how alternate feeding schemes (longer on grass, strategic supplements) and age of animal (calf-feds verses yearlings) prior to the feedlot might affect the yield and quality grade and marketability of the beef product. Data has indicated that marbling is a linear process that occurs over the lifetime of the animal, but it is also energy dependent. Meaning, if the animal has the genetics to marble, then caloric intake is the primary regulator. Regardless of age of the animal, as long as adequate calories are provided during the feeding period (especially the last 120 days on feed) those calves can obtain an adequate amount of marbling to meet various quality grades. It is true that total pounds of beef produced may be greater with yearlings. However, yield grade (pounds of boneless, closely trimmed retail cuts) is influenced more by the degree of finish and genetics than by whether it is a calf-fed or a yearling. These animals can be fed to grade the same, but they would most likely finish at different weights. Whether or not the feedlot management takes them to that grade or endpoint is another matter. Feeders may respond to various market stimuli and harvest cattle earlier or later than a specific, predetermined finish (grade).

The authors would be please if you called to discuss these topics and share your ideas. Contact information is shelby.filley@oregonstate.edu / 541-672-4461 and chad.mueller@oregonstate.edu / 541-562-5129.