December 1991

How Much Fat Can the Different Segments of Our Industry Accept?

Bill Mies
Texas A&M University

Follow this and additional works at: http://digitalcommons.unl.edu/rangebeefcowsymp
Part of the Animal Sciences Commons

http://digitalcommons.unl.edu/rangebeefcowsymp/234

This Article is brought to you for free and open access by the Animal Science Department at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Range Beef Cow Symposium by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
HOW MUCH FAT CAN THE DIFFERENT SEGMENTS
OF OUR INDUSTRY ACCEPT?

Bill Mies
Beef Cattle Science Section
Department of Animal Science
Texas A&M University

The management of fat content of the carcass, both subcutaneous fat and marbling, will
be the challenge of the future for the cattle feeders of the U.S. The cattle feeder will have to
juggle carcass weights, quality grade and yield grade in order to determine the appropriate end
point for fed cattle. The input data for decisions will be the Choice-Select spread, yield grade
discounts, feed costs, interest costs, cost of feeder cattle and genetic potential of the cattle in
question.

There is a perception among cattle feeders that, in the future, the packers will simply
dictate the type of cattle they wish to kill, and it will be up to cattle feeders to hit that low-fat
target. Nothing could be further from the truth. The market will get more complicated, not less
complicated. The packing industry will undoubtedly set up a scale of discounts for both quality
and yield grades with minimum and maximum carcass weights. It will not always be in the best
interests of feeders to exactly hit those targets. Cattle feeders will feed all cattle available. Since
not all cattle will readily find a home on the specification list of a packer, it will be up to feeders
to manage the end point of those cattle as close to target as is economically feasible. Discounts
may be a more acceptable way to go rather than using the extra feed needed to gain a par price.
Those decisions will be part of the juggling act that cattle feeders will do as an extra part of their
routine management.

Increasing demand by foreign consumers for a higher quality product will complicate
many of the management decisions. If we were moving to a product with a minimum acceptable
level of quality and lowered levels of fat, the management job would not be difficult, as we
would select for muscling and away from excess fat to hit our targets. The demand for higher
quality will cause feeders to increase the subcutaneous fat on certain genetic types of cattle in
hopes of developing a higher percentage of cattle reaching the high quality target. These cattle
may receive a quality grade premium and a yield grade discount. Thus, the relative size of the
premiums and discounts will have to be weighed against the increased cost of feed to create the
fat.

The greatest change that this type of marketing could cause is a desire by feeders to
initially sort their feeder cattle, as much as possible, into potential outcome groups. Today,
feeders are accustomed to feeding mixed groups of cattle in the same pen. Most of these pens
sell for approximately the same price at slaughter. When packers begin to purchase cattle for
certain targets, the feeder will not be able to aim at the target unless he has shaped the genetic
potential of the group in such a way that he can predict the outcome. Thus, cattle may sell for
different prices when aimed at different targets but may have a relatively similar net profit
potential. For example, cattle that are fed to Select grade (yield grade 1 and 2) may sell for less
than cattle fed to Choice (yield grade 3), but the improved feed efficiency attained in feeding cattle to lower fat contents may give both groups the same net bottom line profit. This will be a departure in philosophy from many of the management practices used today.

It will not be logistically possible to sort all incoming cattle due to availability of types, size of pens, ownership and other factors. Some cattle will be sorted at finish in order to more accurately hit the targets established by the packers. At first glance, it would seem that this might be a cure-all in terms of maximizing the efficiency of various cattle types. However, the logistical problems encountered with sorting pens of fed cattle, such as dark cutters, labor, weather and record keeping, dictate that at the most a pen of cattle might be sorted once before marketing.

What will be the appropriate end point of a given set of cattle? This answer will be different for each group of cattle and will change with grain prices and market fluctuations. The data are just now becoming available for cattle feeders to make the kinds of decisions discussed here. Until now, cattle feeders have known that feeding to heavier weights and amounts of fat increased costs. They have never been able to quantify those differences with any accuracy. Feeders were also aware that time on feed had a direct relationship with percentage Choice. Again, no data were available to quantify this relationship so that an economic projection could be made as to the consequences of attempting to achieve the higher quality grade. As cattle feeding decisions become more complex, the decision making will have to become more sophisticated. While "looking across the fence" at cattle will still be necessary, the use of computer decision-making models will also be necessary to complement the experience and knowledge of cattle feeders.

The communication of the economic signal from packer to feeder will change in the future. In the past, the signal has been subtle in that feeders have had to detect trends in preferences by buyers. While buying systems have been talked about, none have been implemented at the feedyard level. The signal will remain subtle as long as packing house capacity exceeds the supply of cattle. When supply equals or exceeds capacity, packers will be able to set targets with economic consequences attached to them. The signal will then be direct and apparent. Cattle feeders will have to respond to the signal by making the appropriate marketing decisions on their cattle. The large discounts on carcasses over 950 pounds that were evident this fall are evidence that when tonnage can be achieved easily the packers will send very strong economic signals.

The feeder will send fat signals to the cow-calf producer as well. These signals will be concerned with how much fat is on the calf at the time of entry into the feedyard and how much fat is deposited at market weight. The amount of fat on a calf at weaning is a reflection of genetics, milking ability of the cow and amount and nutrition of grass available during the season. Today, feeders try to discriminate against calves with large amounts of fat at weaning because of the decreased performance of these calves in the feedyard. When packers discriminate against fat in finished cattle to a greater degree than they do today, feeders will begin to discriminate among feeder cattle based on their potential to fatten at market weights. The cow-calf producer will then have a juggling act to perform in selecting cows that flesh well
and carry appropriate amounts of fat in their bodies to survive in cold weather, reproduce and milk while their calves must grow and finish on grain rations without becoming excessively fat. These goals are not easy but they are possible through the use of crossbreeding and EPDs for carcass merit in conjunction with some of the EPD information that we have today. The cattle industry is working hard to develop the technology to use the carcass EPDs so as to prepare for the coming changes in the market system.

Therefore, how much fat is appropriate for cow-calf producers, cattle feeders and packers? The answer to this question is -- whatever is economically feasible. Cattle feeders will look at the economic incentives set up by packers and then build feeder calf prices, feed costs and interest cost into the equation to decide on how much fat is appropriate for each given set of cattle. The feeding industry will be driven by these bottom-line decisions in order to try to maintain profitable margins.