et that one stay, these
three go out — hold
the red one!"

Sorting cattle is as easy, or as difficult, as the facilities, system and labor available. At the feedlot level, it's a relatively new practice adopted with the aim of giving customers a chance at a better return on their investment.

"By sorting we provide the market with a more uniform set of cattle that are more alike in their composition," says Max Deets, Beloit, Kan. The former feedlot manager and past president of the National Cattlemen's Beef Association (NCBA) serves as a consultant to the Certified Angus Beef (CAB) Program.

With the demand for greater uniformity in cattle, sorting can be one of the most important services a feedlot can offer its customers — if it is done correctly. But there is more to sorting than just creating a more consistent set of cattle.

"Considering all things involved, sorting is a complex issue," says Todd Milton, Extension feedlot specialist at the University of Nebraska. "Issues like availability of labor and facilities must be considered if a particular sorting system is going to be effective."

And, Deets points out, "the more time cattle are away from their normal routine, the more effect it has on their performance."

In the 1980s animal scientists began to sort cattle to projected-finished outcome groups by ultrasound ribeye scan, usually in conjunction with routine implanting. Some commercial feedlots adopted the technology; others added frame measurements as well; while some experimented just long enough to calibrate their visual sorting.

Facilities must be equal to the task of sorting, Milton says. "The most technologically advanced sorting system may not be profitable if the facilities cannot handle large cattle to reduce stress and carcass defects such as bruising and dark cutters."



PROFIT: Sorting It Out

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BY JENNIFER WHITE & STEVE SUTHER

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If sorting looks like a viable alternative from a cattle-handling perspective, consider the other implications, Milton suggests. Feed costs, for example.

"The relationship between feed costs and the Choice-Select spread is important in sorting cattle if you are feeding longer in an attempt to increase quality grade," he says.

"Some of these issues may be problems for some feedyards, but not for others," he continues. A feedlot must develop an integrated program of management and marketing to more than offset the costs if it is to set up a sorting system.

Often the total cost or benefit of sorting cannot be determined until the cattle are processed. The information on how a particular set of cattle graded and their relative feed efficiency and gain may not have a valid frame of reference until the next year's calf crop is fed, but it can become a valuable piece of the overall picture.

Justifications

Obviously there can be several justifications, reasons for a feedlot manager to state, "We don't sort." But Ken Conway, manager of the Angus GeneNet marketing alliance, says many objections won't stand up to close scrutiny.

"There are various ways to sort cattle that won't cost much more time, money or bruising than you get with the typical allin, all-out pen," he says. "You have to have a system, but we deal with a large number of lots that are doing it with no problems from bruising or dark cutters.

"As for feed costs," Conway continues, "you can feed a partial lot for so many days, and if you start figuring out what you stand to make vs. yardage and feed, it isn't even close — if you have the kind of cattle that can hit a carcass-merit target. I would put sorting at the top of the list of things you have to do to hit a target. If the whole industry would sort, we might get rid of the outliers, the

heavies and YG (Yield Grade) 4s and 5s."

Tech neutral

Technology doesn't always have to play a part in the effectiveness of a sorting program.

"I would guess sorting is 60% instinct," says Steve Havens, feeding manager at Hergert Land and Cattle, Greeley, Colo., a licensed CAB Program partner. Other parts include "knowing the history of the cattle, how they've been handled in the past, whether they have a history of sickness," he says.

The history on a pen of cattle, combined with their overall appearance, can help determine their economic performance in the feedyard.

"I also look for straightness of side," Havens says. "If their shoulder goes smoothly into their rib" and the degree of apparent fat around the tailhead are other visual clues.

He or owner-manager Don Hergert walk through the pens in the 2,500-head feedlot regularly, evaluating relative finish. The sorting tradition goes back to Don's father who started feeding in the late 1930s, always pulling off the biggest and oldest cattle first, trying to maximize the number of Choice-grade cattle without overfeeding. They never have used ultrasound, partly because their facilities are not geared for it, and mostly because visual sorting at the finished end has been so successful.

The driving motivation for sorting, according to Havens and Milton, is to avoid the discount. "The rule in sorting is [to avoid] overweight carcasses and overfat cattle," Milton says. "An equally important factor is to find a way to get more of the cattle to at least the Choice grade without having overweight carcasses."

Conway developed a table showing the dollar advantages of intensive sorting on what was already a high-quality set of calves, gaining more than \$40/head in two years (see table). Milton says one way to get more cattle to grade Choice or higher is to feed the leaner cattle longer — if they have the propensity to grade.

Last year a couple of 2,000-cow Montana ranches sent their leftover yearlings to the Colorado feedlot to be fed after they were passed over by calf buyers. Each pen contained about 100 head. Using their visual sorting, the Hergerts got 96% of one and 91% of the other pen to grade Choice or better without overfeeding them. Premiums, including those for *Certified Angus Beef*TM carcass acceptance, were paid through Angus GeneNet.

"All they could say was, 'What would our best cattle have done?' " Hergert relates.

"The general premise is that leaner cattle are nonperformers," Milton says. "But feeding leaner cattle an additional amount of time may improve profitability and quality grades if the cattle have the genetic potential."

Establishing benchmarks

Finding out if they have that potential is the basic reason to start gathering performance and carcass data, Hergert says. Sorting to find an ideal feeding period can help benchmark the true value of a calf crop.

"Historical data on the cattle complements most sorting systems," Milton agrees. "In this case you have some idea of the genetic potential of the cattle. It would be beneficial to know the matings so that EPDs (expected progeny differences) can be used in the decision-making process."

By feeding at a CAB Program-licensed feedlot, producers can use the performance history together with American Angus Association sire data to plan genetic herd improvement.

"Over time," says Hergert,
"ranchers can then develop a
history that becomes quite
valuable in marketing cattle,
especially if they are aiming at
the high-quality market."



"There are various ways to sort cattle that won't cost much more time, money or bruising than you get with the typical all-in, all-out pen."

- Ken Conway

Year born: Quality Grades	1995 ^a %	1996 ^b %	1997 ^c %
Prime	9.6	16.2	23.2
CAB®	30.8	41.6	48.9
Choice and above	78.1	92.1	98.2
Select	18.5	7.0	1.8
Standard	2.2	0.9	0.0
Other (dark cutter, etc.)	1.2	0.9	0.0
Yield Grades:			
YG 1	0.0	1.2	11.2
YG 2	21.2	38.4	55.4
YG 3	73.9	58.4	33.4
YG 4	4.6	2.0	0.0
YG 5	0.3	0.0	0.0
Carcass Weights:			
Light (≤ 535 lb.)	1.2	0.0	0.0
Heavy (≥ 950 lb.)	2.1	1.2	0.0
Group total:			
Premium/head	\$16.22	\$32.16	\$58.62

^aThese steers, 323 head, were all sold on one day, no sorting.

Source: Angus GeneNet

^bThese steers, 342 head, were sorted once. The first half was harvested one month before the second half.

^cThese steers, 365 head, were sorted a load at a time and sold over a period of 70 days.

Table 1: The effect of sorting (three years' calf crops from one producer)					
Year born:	1995a	1996 ^b	1997c		
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