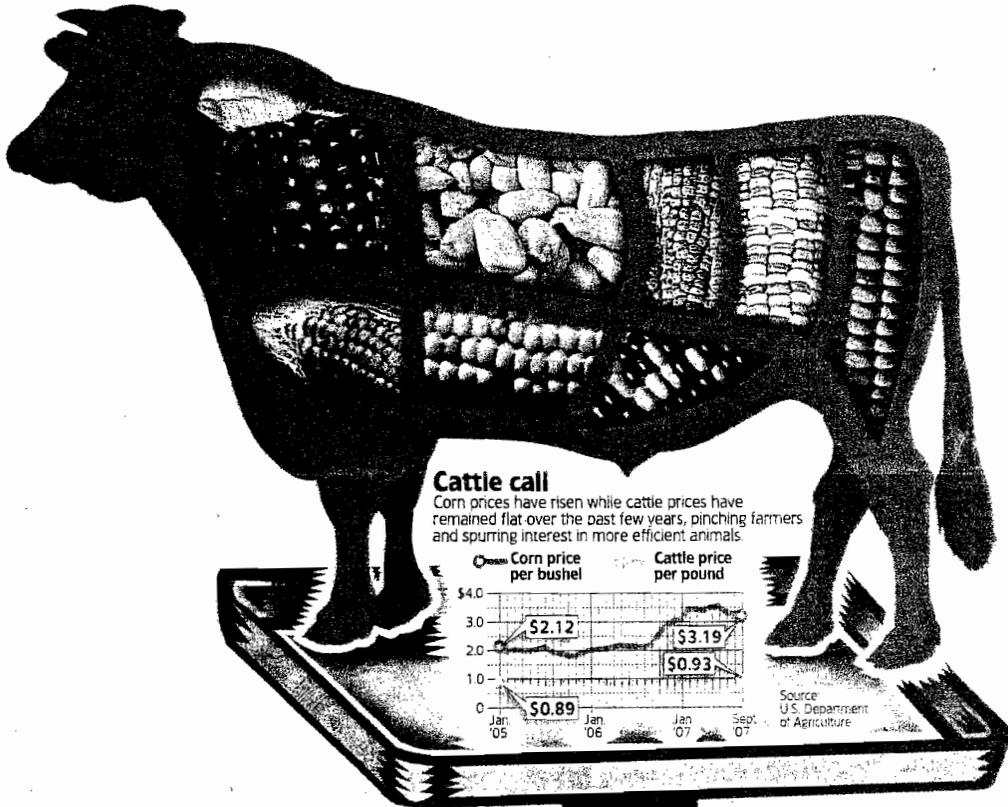


WEIGHT WATCHING



With feed costs rising, ranchers are looking for cattle that gain pounds while on a diet

By Jim Downing
 BEE STAFF WRITER

Susanville rancher John Barnum is trying to build a herd of cattle that sounds like something out a dieter's nightmare:

They eat less, but they still get fat.

That trait is increasingly seen as a key to staying in business for California ranchers reeling from the effects of high-priced corn.

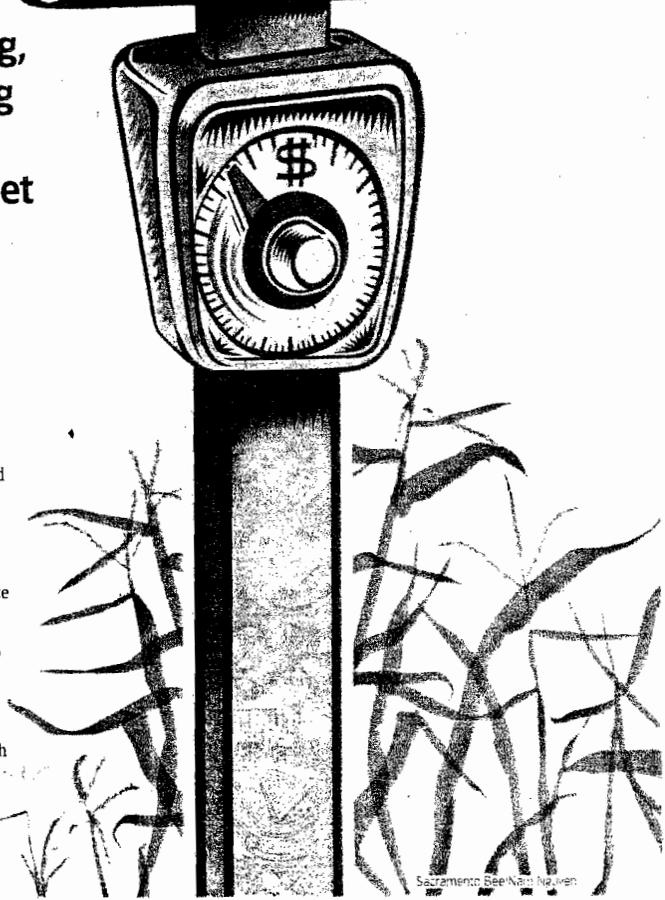
"We're hoping it'll make us more profitable in the long run," said Barnum, 23, who manages a family ranch that recently moved to the rangelands of northeastern California after generations in Calaveras County.

Last year, the ethanol boom drove the price of corn up nearly 65 percent over six months, sending feed, the cattle business's main expense, soaring. Meanwhile, the price of those animals at slaughter has hardly budged.

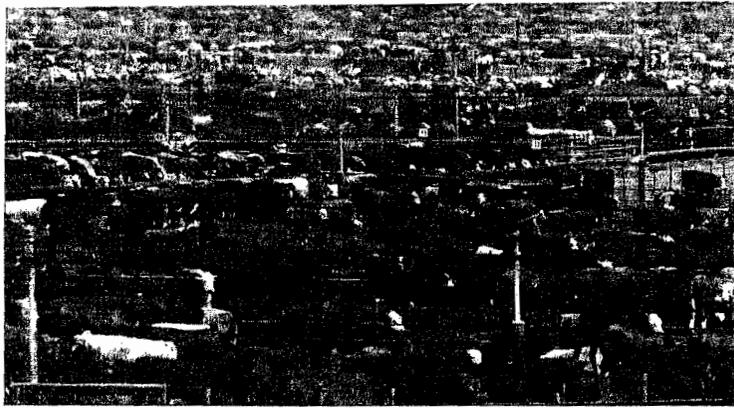
In response, many ranchers are hoping to trim their costs by looking at "feed efficiency," a measure of how effectively an animal turns grass or corn into muscle and fat. Ideally, with a higher-efficiency herd, a rancher saves on feed costs but ends up with the same amount of marketable beef.

It's yet another way that high prices for global commodities, from petroleum to grains to milk powder, are altering the economics of food production.

► COWS, Page D3



Sacramento Bee/Neil Newman



Fresno Bee file, 2000/Kurt Hegre

The Harris Feeding Co., which runs this 120,000-animal feedlot visible from Interstate 5 near Coalinga, has become a buyer of efficiency-monitoring systems to fine-tune the eating and growth patterns of cattle.

Cows: Breeding bulls touted for their feeding efficiency

► FROM PAGE D1

And it's accelerating a move away from a 50-year trend toward larger but generally less-efficient animals.

For the first time, breeding bulls are being marketed for their efficiency, not just their size and pedigree, said David Daley, a cattle expert at California State University, Chico.

"We started realizing that there's also the issue of how much feed does it take to get all those pounds, and maybe big isn't better," said Glenn Nader, a livestock adviser with University of California Cooperative Extension.

The potential for improvement is dramatic. Researchers at the University of California, Davis, have found that some steers beat the average by nearly 30 percent, though others have found improvements closer to 10 percent.

Jim Oltjen, a UC Davis animal nutrition expert, said a typical steer will eat 20 to 25 pounds of feed — mostly corn — and gain 3 to 4 pounds during each day of the typical three- to four-month stay at a feedlot.

The beef industry is the fifth-largest segment of California's agricultural economy, behind dairy, grapes, nursery products and almonds. Receipts from beef cattle totaled \$1.7 billion last year, according to the U.S. Department of Agriculture.

Major cattle-feeding operations are installing electronic systems to monitor how much each animal eats and how much weight it gains. That information feeds into breeding programs aimed at producing more efficient cattle in subsequent generations.

GrowSafe Systems Ltd., based in Alberta, Canada, says its sales of efficiency-monitoring systems to commercial cattle operations have doubled in the past year.

One of the company's customers is Harris Feeding Co., which runs the 120,000-animal feedlot visible from Interstate 5 near Coalinga.

Harris last year launched a program aimed at improving its purebred Angus cattle. For years, the animals had been bred for size and meat quality, but the ranchers who sell to the company became concerned that they were missing out on other desirable traits that affect the bottom line, including calf survival rates and, especially, feed efficiency.

"It's a major driver in terms of profitability," said Mike Smith, the company's director of special projects.

But there are trade-offs. While

the first generation of steers in the program showed significant efficiency improvements, Smith said the grade of their meat — prime, choice or select — dropped significantly. Smith said it wasn't clear whether the lower-quality end product canceled out the savings on feed.

Unlike Harris, which owns most of the cattle on its lot, most U.S. feeding operations sell "room and board" to animals that still belong to the ranchers who raised them.

That system sets up a tension: Ranchers want to pay as little to the feedlots as possible, but they've only got so much grass to feed their cattle. But with higher-efficiency herd, a rancher can produce bigger, fatter cattle on grass that require less time at the feedlot to reach slaughter weight.

"What the price of corn does is add value to our grass," said Steve Nash, a rancher in Etna.

For producers of grass-finished beef, who don't feed their animals any corn at all, high-efficiency cattle are especially attractive. These producers need their animals to mature and get fat without the huge caloric input than they'd get on a feedlot.

What makes an efficient cow? Oltjen, the Davis animal nutrition expert, said researchers and breeders all over the world are looking for answers, but it's been hard to isolate any single

factor.

Smaller breeds tend to be more feed-efficient, he said, but that's not always the case. Other factors range from the natural variation in the size of an animal's liver to the way it absorbs certain nutrients. Some low-efficiency animals, he said, might simply be gluttons, eating more than their digestive systems can handle and eliminating the rest.

In any case, he said, it appears that efficiency is a trait that's passed on genetically, so concentrated breeding programs may be able to yield significant gains.

The godfather of the efficient-cow movement may be Kit Pharo, an outspoken Colorado bull breeder who publishes a popular industry newsletter.

He began breeding smaller cattle about 20 years ago, when he realized that though hulking steers were impressive to look at, they took a great deal of feed to get to that size. He started experimenting with breeding smaller, sleeker animals, and now sells about 800 bulls annually to ranchers all over the country.

"The goal wasn't to make 'em smaller," Pharo said. "It was to make more money."

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