

Photo courtesy of Bobbie-Rutter.

# Do Preconditioning Programs PAY?

**Even in challenging economic times, there's still value in adding value to your calves.**

**By Burt Rutherford**  
Senior Editor

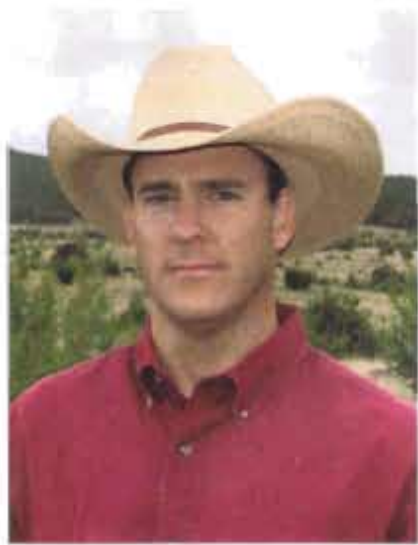
**T**rying to decide whether or not to spend the money to precondition your calves, given the profound incentive that cow-calf producers have to cut costs, may seem like an easy decision. After all, low cost wins when selling cattle in a commodity market.

Then again, as the man whose face adorns the \$100 bill observed those many years ago, penny-wise can sometimes be pound-foolish. And while 'ol Ben was referring to English money, cattlemen can take a lesson from his idea - being penny-wise when looking to cut costs may not only be dollar-foolish, but pound-foolish as well.

Yet, the decision to spend the money to precondition your calves must be made carefully, says Clay Mathis, New Mexico State University Extension livestock specialist in Las Cruces. "It's a cost vs. return issue. It pays if you can precondition the calves and add enough perceived value that the buyer's going

to pay more than what it costs to implement the preconditioning program. And I think, even with high feed costs, there are ways to do that."

The other added value that preconditioning can bring to the table is what



Mathis calls "true" value - the value that preconditioning adds to calves once they get to a feedyard by reducing losses resulting from sickness.

## Coordinating animal health

A number of animal health companies offer coordinated preconditioning and animal health programs (see page 24). Yet it's the dollars that make the difference, and several of the programs carry the effort all

**“ Net income during preconditioning was \$44.59 greater for pasture preconditioned calves, even though they gained less weight than the drylot preconditioned calves. ”**

**- Clay Mathis**

In addition to preconditioning his calves, cow-calf producer Donald Hampton from Hope, AR, encourages his neighbors to do the same.

the way through to marketing.

In last year's torrid feeder-cattle market, demand for feeder cattle was strong enough that just about anything sold well, says Donald Hampton, a cow-calf producer from Hope, AR. However, that didn't stop him from preconditioning his calves, and encouraging his neighbors to precondition theirs.

In addition to running his own 200-cow operation, Hampton has been offering trucking service to his neighbors for about 10 years. Hampton and some of his neighbors certify their calves under the SureHealth program, and Hampton hauls the cattle to the Oklahoma National Stockyards in Oklahoma City, where they're marketed through Central Haliburton Commission Company. "I run to Oklahoma City anywhere from two to three times a weekend for my customers, because Oklahoma City has a better calf market," he says.

In addition, Oklahoma National Stockyards holds a special SureHealth sale the first and third Mondays of every month, prior to its regular sale. The advantage, Hampton says, is that all the preconditioned cattle sell first. "And that's one of the key points that a lot of my customers like. You stop your shrink."

Preconditioned cattle do tend to bring a premium, especially if sold in a way that highlights their health background. Data from Superior Livestock Auction video sales show, since 2004, average price premiums for VAC-45 calves have ranged from \$6.50 to \$8/cwt. and VAC-34 calves have ranged from \$2.45 to \$4.68, Mathis says.

But, says Jerry Alexander with USDA's Market News office in Oklahoma City, buyers don't usually pay a premium on partial loads. "Small lots lose their identity and typically won't bring the premium," he says, because partial loads must be commingled. And he says that poorer-quality cattle won't bring a premium regardless of their preconditioning background. "They have to be the right kind of cattle," he says, and exhibit the genetics and visual traits that will encourage buyers to jump in on the bid.

### Cutting costs

But are potential premiums enough to make it worth your while to precondition



## Is Always in Season.

Suddenly, all Americans are more aware of the need for greater efficiency. Of course, this awareness is nothing new for the beef industry, where feed efficiency has always been a goal for cow/calf producers and feedyards.

Record-high input costs make savvy production decisions more important than ever. That may make this fall's preconditioning and weaning period the best time ever to gather DNA samples and start benefiting from the new feed efficiency traits in the comprehensive IGENITY® profile.



Dr. Kevin DeHaan  
Technical Services  
Director, IGENITY®

Not only is fall a convenient time to gather DNA samples, but when it comes time to sort calves, producers can use the inside information they gain from the new feed efficiency analyses included in the IGENITY profile to help ensure each calf is headed down the most profitable path.

The IGENITY profile now provides analyses on two multiple-marker traits — residual feed intake (RFI) and dry matter intake (DMI) — which can impact an animal's ability to use feed efficiently. DMI simply analyzes the genetic potential of an animal to consume feed, while RFI analyzes how an animal's feed intake differs from its expected feed requirements for growth and maintenance.<sup>1,2,3</sup>

By using the power of these feed efficiency analyses, the IGENITY profile helps customers predict an animal's ability to:

- Produce similar gain while consuming less feed
- Produce greater gains from the same amount of feed
- Eat less but still produce a calf each year and maintain a desirable body condition score

What's more, the results help predict genetic potential for efficiency whether an animal is young or old,<sup>4</sup> as well as its ability to produce efficient calves.

The analyses for feed efficiency are currently validated and commercially available for *Bos indicus* influenced cattle only. Research is under way in *Bos taurus* cattle and will be available soon.

Collecting a DNA sample is as simple as applying an ear tag and can be easily worked into this fall's processing routines. The comprehensive IGENITY profile will then turn a single DNA sample into analyses of feed efficiency traits. It also analyzes potential for carcass quality, as well as maternal and yield traits and more.

For more information on the IGENITY profile, to order collection tags for fall processing or for updated information about the availability of feed efficiency analyses for *Bos taurus* cattle, contact your IGENITY Sales Representative, call 1-877-IGENITY or visit [www.IGENITY.com](http://www.IGENITY.com).

<sup>1</sup>Carstens BE, Tedeschi LD. Defining feed efficiency in beef cattle. Presentation at Beef Improvement Federation Conference, 2005.

Available at: <http://www.bifconference.com/2005/pdfs/Carstens.pdf>. Accessed May 26, 2006.

<sup>2</sup>Residual feed intake related to cow productivity. *Genetics World*, May 2006:15.

<sup>3</sup>Crews DH. The genetics of feed efficiency in beef cattle. Presentation at Beef Improvement Federation Conference, 2005.

Available at: <http://www.bifconference.com/2005/pdfs/Crews.pdf>. Accessed June 13, 2006.

<sup>4</sup>Salm RD, Paulino PV. Residual feed intake. Sierra Foothills Research & Extension Center, Paper 2004, residual\_feed\_intake4.

Available at: <http://repositories.cdfb.org/cgi/viewcontent.cgi?article=1055&context=anrnc/strc>. Accessed June 10, 2006.

<sup>5</sup>IGENITY is a registered trademark of Merial. ©2006 Merial Limited, Duluth, GA. All rights reserved. LAGEIGB03 7/06

your calves? They can be if you can control your costs, Mathis says. In a three-year study he recently completed, he compared a low-input pasture preconditioning approach to a high-input drylot preconditioning approach. The high-input drylot calves got a pelleted ration of corn and wheat midds, along with 1½-2½ lbs./day of alfalfa. The pasture calves ran on native grass plus 1.25 lbs./day of a 32% protein range cube delivered three times a week.

During the preconditioning phase, the drylot calves gained 0.32 lb./day more than the pasture calves and were worth an extra \$6.90/head. However, the higher value of the drylot calves was offset by \$52.76 greater cost. "Consequently, net income during preconditioning was \$44.59 greater for pasture preconditioned calves, even though they gained less weight than the drylot preconditioned calves," Mathis says.

The difference continued once the calves reached the feedyard. While there wasn't any difference in overall average daily gain, finished body weight, days on feed or carcass characteristics, there was a tendency for the drylot preconditioned calves to suffer more sickness (48% vs. 34% over the three-year period) than pasture preconditioned calves. The drylot calves also had greater death loss, Mathis says - 7.6% vs. 0% for the pasture

**Table 1. Impact of two preconditioning systems**

	Drylot preconditioning	Pasture preconditioning
<b>Preconditioning phase</b>		
# of head	125	125
ADG, lbs./day	1.42	1.10
Total cost	\$66.77	\$14.01
Net income <sup>a</sup>	(\$28.87)	\$15.72
<b>Finishing phase</b>		
# steers	66	67
ADG, lbs.	2.93	2.98
Days on feed	168	173
Treated for sickness (%)	47.6	34.3
Death loss (%)	7.6	0.0
Net income	(\$98.33)	\$4.68

<sup>a</sup>Price premium for "VAC-45" was not included in the analysis  
Source: Mathis, et al., 2008

calves, averaged over three calf crops. For their stay in the feedyard, the pasture preconditioned steers profited \$103/head more than the drylot steers (Table 1).

The study results show what feedyard managers and veterinarians occasionally have to deal with - even the best vaccination and preconditioning program can sometimes become overwhelmed with a disease challenge. Morbidity rates in the final study results were higher than normal, Mathis says, due to an unusually high degree of respiratory sickness in the second year.

Calves in the second year of the study in both the drylot and pasture-preconditioning programs had about 60% morbidity because of the respiratory disease outbreak. Morbidity in years one and three were closer to normal, Mathis says, with no death loss in either of those years.

However, drylot-preconditioned calves tended to have higher morbidity and pull rates in the feedyard over all three years than did pasture-preconditioned calves, he says. And, even in the face of an overwhelming disease challenge in the second year, Mathis points out that the pasture-preconditioned calves still didn't experience any death loss.

There is mounting scientific evidence that managing calves on pasture between weaning and shipping may render them better able to withstand subsequent immune challenges, Mathis says. In fact, he says that's probably what was in play with this trial.

"The additional stressors of greater dietary and environmental change experienced by the drylot preconditioned calves during the 45-day preconditioning phase possibly yielded a long-term susceptibility that rendered the drylot preconditioned steers less competent than the pasture preconditioned steers to withstand the immune challenge during the finishing phase," he says.

Which brings up an important point - preconditioning is more than just giving calves a shot. Ranch resources, management systems, cattle types and potential markets all vary, Mathis says, meaning a single preconditioning management program does not fit all operations. However, most preconditioning programs call for parasite control, castration, dehorning and as much as a 45-day weaning period prior to shipping, in addition to vaccination.

Although there are preconditioning programs designed for producers who ship shortly after weaning, Mathis says a 45-day weaning period can yield some benefits.

"Separating the stressors of weaning and the stressors of shipping and commingling better prepares the calves. By not stacking (those two practices), we have the potential to better prepare those calves to handle the challenges that their immune system is going to face once they're commingled," he says. ■

## Preconditioning programs

There are a number of programs designed to help cattlemen with their preconditioning efforts. To add your program to this list, please contact Burt Rutherford at [brutherford@beefmag.com](mailto:brutherford@beefmag.com).

### Schering-Plough/Intervet

Tri-Merit  
[www.trimerit.com](http://www.trimerit.com)

### Novartis Animal Health

[www.livestock.novartis.com/hp\\_beef.html](http://www.livestock.novartis.com/hp_beef.html)

### Pfizer Animal Health

SelectVac  
[www.selectvac.com](http://www.selectvac.com)

### Fort Dodge Animal Health

Prime Protection Preconditioning Program  
[www.fortdodgelivestock.com/beef/beef-prime-protect.htm](http://www.fortdodgelivestock.com/beef/beef-prime-protect.htm)

### Superior Livestock Auction

[www.superioranimalhealth.com/index.cfm?auction=program&ID=23](http://www.superioranimalhealth.com/index.cfm?auction=program&ID=23)

### VAC 45 Preconditioning Program

[http://animalscience.tamu.edu/ANSC/publications/beefpubs/vac\\_vaccine.pdf](http://animalscience.tamu.edu/ANSC/publications/beefpubs/vac_vaccine.pdf)

### Merial

SureHealth  
[www.surehealth.com](http://www.surehealth.com) ■