

# Swing for the Fences

PHOTOS COURTESY DOWNEY RANCH



Fenceline weaning can decrease stress and increase performance.

by *Kasey Brown*, associate editor

**H**umans know that there are adverse health effects to smoking, alcohol, poor diet, driving faster than the speed limit and texting while driving. When they are done independently, though, the effects are far more gradual, explains Terry Swecker, association department head and professor at Virginia-Maryland Regional College of Veterinary Medicine–Virginia Tech.

However, he adds, the risk increases exponentially “if you’re driving 95 miles per hour after consuming a pint of bourbon and you dropped the pork rinds while trying to light a cigarette and texting your broker on your cell phone.”

The example is equally applicable to calves. Risks for calves include weaning, vaccination, castration, dehorning, transport, diet change and commingling. Unfortunately for calves, these all happen at once all too often. This is also unfortunate for the producer, as a calf’s performance is diminished with this many stressors.

## Comparing three methods

Swecker explains that by looking at behavior, some stressors could be reduced to improve performance at weaning. In a completely natural weaning, calves stop drinking milk gradually between 7 and 14

## WEANING Strategies

months of age, and the social bond between dam and calf is still strong. The industry norm is to abruptly wean at 6-7 months of age by means of separation. A stressed calf at weaning vocalizes and walks more frequently, resulting in decreased weight gain, increased morbidity and increased mortality.

Swecker and colleagues in animal and poultry sciences at Virginia Tech looked at nose-clip (putting a clip on the calf’s nose to prevent suckling with no separation) and fenceline (separating cows and calves into adjacent pens/pastures, though calf can see dam) weaning to wean with lower stress levels. They studied 7-month-old, March-born, Angus-cross calves that were weaned in October and hauled 100 miles on weaning day. Fenceline calves were separated seven days before weaning. Nose-clip calves had the clip applied seven days before weaning, but were not separated until weaning day.

In comparison, nose-clip calves didn’t eat

as much the week before separation, while the fenceline calves started grazing sooner because they couldn’t suck. Swecker says the calves with the nose clips appeared to pout as they tried unsuccessfully to suck, so they didn’t eat as much before weaning day.

Once separated, feed intake fell for all three groups, but the control group — those weaned “cold turkey” — spent less time eating and more than double the time walking, expending energy and calories. By Day 42, all the growth had evened out between methods, he reports.

The nose-clip calves had increased concentrations of non-esterified fatty acids (NEFA), a metabolic parameter that reflects negative energy balance, meaning they were using tissue energy to meet their metabolic needs.

There was no difference in immune function, measured by oxidative enzymes, among the calves by weaning method in this study. To avoid added stress of taking blood, cortisol levels were measured in the feces. Cortisol levels indicated the fenceline-weaned calves were the least stressed.

Less stress can mean better immunological responses during vaccination, so stress is something that can affect the health of your animals and your bottom line.

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► **Above:** At Downey Ranch of Wamego, Kan., cows and calves are moved together to the weaning pasture.



### Real-life application

Using low-stress handling has been a tradition for Downey Ranch, Wamego, Kan. Barb Downey says they have used fenceline weaning for at least 10 years. She and her husband, Joe Carpenter, had read some articles about it, and the idea intrigued them. It certainly seemed easier than the traditional method of hauling the calves to a completely different location.

In traditional weaning, the calves would bawl for three or four days. They would walk the fences, stirring up dust, and thus needed more prophylactic antibiotics. In addition to the stress on the calves, she says it was incredibly hard on people. Listening to bawling calves, reweaning the inevitable escapes and administering added antibiotics in summer heat would take its toll.

They decided to try fenceline weaning in a drought year, Downey recalls. To reduce grazing pressure and prevent lower body condition scores of the cows, they decided to early-wean in addition to fenceline weaning. They weaned 400 calves in mid-July with 105° F heat. Most farmers and ranchers would say that's a rough environment in which to try something new.

"The calves performed beautifully," she reports. "It was a wonderful demonstration of how cattle can do with low-stress weaning and handling despite such awful conditions."

The way the Downey Ranch implements fenceline weaning is by moving the cows and calves together into the designated calf pasture a day or two ahead of actual weaning. This lets the calves get accustomed to the 80-acre pasture while mama is still there. Downey notes they built the pen to have



► Weaned with a six-strand electric fence between them, the calves can see mama, talk to her and graze on the same pasture that they have been grazing for several days, explains Barb Downey. They just can't physically nurse.

plenty of shade. Plenty of mature trees help minimize heat stress, so it isn't an added factor.

On weaning day, they sort the cows out of that pasture and into the adjacent two-acre drylot with shade trees, which is separated by an electric fence. The cows are accustomed to sorting and will go by handlers much easier than calves. Plus, the calves remain unstressed if they stay where they are. In this situation, the calves' environment is exactly the same. They can see mama, talk to her and graze on

the same pasture that they have for several days. They just can't physically nurse.

Typically, Downey explains, the calves go right back to grazing once the cows are sorted out. It takes them three to four hours to realize mama is gone. Downey says the calves go to the fence and find out that it's hot; they realize they can still see mama, though, and go back to grazing or lie down in the shade. Downey says they act like they are comforted that some form of contact is still possible with mama, but they don't get any more milk.

The calves stay there for five days until they are moved to another pasture for backgrounding. Downey Ranch has a traditional spring-calving herd, which calves in March and April, so weaning is in August or September. The calves are backgrounded on the ranch until the first of the year.

"This way is so much more pleasant. You know you're doing a better job for the cattle, too," Downey notes. "You can build something up in your mind and keep thinking of why you can't do something. Then you realize all that energy you spent on worrying about it could have just been used on the new task. You usually find out it's a lot easier than you thought. Fenceline weaning is very easy to implement."



► The cows are removed from the calves and placed in the adjoining drylot.