

Weaning Techniques for Beef Calves

Dr. Ron Gill, Professor and Livestock Specialist; Associate Department Head for Extension,
Texas A&M, Kleberg Center, College Station

and

Dr. Bruce Carpenter, Associate Professor and Livestock Specialist,
Texas AgriLife Center, Ft. Stockton

Weaning is the most stressful time a calf will experience. It has been well documented that health problems such as bovine respiratory disease (pneumonia, “shipping fever” etc.) usually begins with stress at weaning. For this reason, all preconditioning programs begin with attempts to minimize stress at weaning. Regardless of whether or not you implement a complete preconditioning program (vaccinations, feed, 45 day weaning period, etc.) low-stress weaning techniques will pay off with healthier and likely even heavier calves. Montana and Canadian researchers reported that calves-weaned by low stress methods bawled 98% less, spent 78% less time walking, 23% more time eating and 24% more time resting. Post-weaning weight gain was not affected in this particular study. However, University of California researchers reported improved weight gain in fence-line weaned calves. At 2 weeks post-weaning calves in that study averaged 24 lbs. heavier and at 10 weeks were 26 lbs. heavier than any of the other three treatments which involved total separation from their mothers.

So what is low-stress weaning? It is probably anything that is an improvement over this: gathering cows and calves, sorting, and shipping calves that day (i.e. “weaned on the road”); or this: gathered, sorted, weaned and mothers driven off to a far pasture that day. Obviously either scenario is extremely stressful for both the calf and the cow. In contrast, the idea of low-stress weaning is to implement techniques where neither the cow nor calf really knows what is happening. This is done by allowing calves and their mothers to voluntarily remain in contact, but without suckling. The calf quickly gets used to eating on his own, and over a few days time, the calf will get used to not being with his mother. Usually within a few days to a week calves are completely weaned.

First, let’s discuss some things that can cause stress and quite often leads to sickness in calves. Dust, bawling and dehydration are three things that are all highly irritating to animals (and people too); and singly or in combination, they can all injure delicate membranes in the calves’ respiratory tract and may contribute to extra weight loss if calves are walking and bawling looking for their mothers.

Other circumstances that can cause undue stress at weaning occur when calves are worked or processed on the day they are weaned. Sometimes a full regimen of shots are given, horns may be tipped, branding may occur, and bull calves are sometimes castrated. These things are obviously necessary and a part of normal management, but they are best done at least 30 days prior to weaning, when calves are still with their mothers and nursing. Even if you routinely work calves at a younger age (which is the recommended practice), there may be some that get missed and need to be worked at a later date.

With low-stress weaning, a couple of methods can be employed to stop the suckling process while still allowing calves to have contact with their mothers. Probably the easiest and most common is *fence-line weaning*. Calves are simply placed in small pasture or trap adjacent to their mothers. If possible calves should have access to grazing. If grass is short, then plan on plenty of good quality hay. Calves as young as 3 months can be weaned this way, as their rumens

are fully developed and are able to digest roughage. You may want to include some type of supplement (concentrate or creep feed). Of course, access to clean water is also important.

Obviously the key to fence-line weaning is a good fence. Calves shouldn't be able to crawl under or between wires or nurse through the fence. Net wire is preferable but even an offset hot wire can help a questionable barb-wire fence become functional. In this situation calves remain in visual and vocal contact with their mothers, and if they are on pasture, dust is minimized. Also they don't walk or bawl nearly as much. If you don't have pastures or traps available, fence line weaning can also be used with corral fences. It is probably preferable to pen and feed the cows and place the calves on the outside. This minimizes dust for calves and gives them an opportunity to graze and get used to ranging out and being away from their mothers.

Another key element in low-stress weaning and fenceline weaning is in the physical management of the cows and calves the day of weaning. There should not be any other management practices carried out on the day of separation. Any vaccinations should be done prior to separation day and any management needed for the cows should be done either prior to weaning or at least two to three weeks after weaning. The only thing that should be done the day of separation is the actual separation of dam from calf.

The best way to do that is to ease the herd into the pasture where the calves will be kept for the weaning period and allow the cows to leave or easily push the cows back out of the weaning area into an adjacent area. This entire process needs to be as quiet as possible.

Another method of low-stress weaning is to actually keep cows and calves together in the same pasture, but to place weaning nose ring flaps in the calf's nose. The design of the flaps allow the calf to graze but not suckle. After a week or two the cow dries up and the calf is weaned and ranging away from his mother all on his own. Realize that this method does require a few extras like purchase of nose flaps. Calves must be worked through the chute twice: one to install the rings and again to remove them. Occasionally a calf may lose his nose flap before he is weaned.