

CALVING EASE

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Dehorning Calves

Summary:

- **Earlier is better than later. Three to four weeks is a good time.**
- **More restraint is better than less restraint. Consider a local anesthetic.**
- **Less stress is better than more stress. Isolate dehorning from other stresses.**

During the past year I have been collecting observations about this dehorning process that may help us make this job a little less odious for us and less stressful for the calves.

Earlier is better than later

Many dairy replacement heifer calves are dehorned between six and ten weeks of age. In contrast, a few operations dehorn between three and four weeks of age.

Three weeks is beyond the most vulnerable age when calves are making the transition from passive immunity from colostrum to their own protective antibodies. And, four weeks is early enough to minimize the amount of tissue damage necessary to prevent horn development.

At this age range the amount of tissue removal when surgically dehorning is limited to the horn bud. A small gouge tool is normally all that is necessary. When using caustic paste, only a small area is needed to effectively destroy the growth area. Heat cauterization can be effective with only a narrow band of cauterized tissue. Earlier dehorning adds up to less stress for the calf both at dehorning and in the immediate period after the procedure.

And, handling one hundred to one hundred twenty-pound calves is considerably less destructive on the caretaker staff than waiting until the heifers are two to three hundred pounds.

More restraint works better than less restraint

The best kind of restraint is that which prevents injury to either the calf or the caretaker. Our veterinary technician, Diane Deleo, and I have talked about various restraint methods. We both have used halters. Their effectiveness is limited by the opportunities to tie up the calf. Although, in a few instances cross tying the calf with two halters has worked.

Muzzle restraint units with the restraint that goes behind the ears works well when it can be attached securely to a stable plank. Where available, the combination of a headlock and halter keeps the calf in one place with her head turned one direction and then the other. We have a picture of Mammoser Farm's portable headlock at our website www.atticacows.com in the Calf Facts section.

Not nearly as much physical restraint is needed if a local anesthetic (for example, lidocaine) is used to numb the horn bud (cornual nerve) area before dehorning. When several calves are dehorned at one time, our practice is for the person doing the dehorning to give the anesthetic to about five calves in sequence. Then, in the same order they receive the anesthetic, the calves are dehorned. As each calf is dehorned, the person goes to the next non-injected calf, restrains her and gives the anesthetic. Then, dehorn the next calf. This back-and-forth procedure gives about the right amount of time for the calves to "numb up" enough to be docile while dehorning.

Using a systemic pain killer (for example, Banamine) at dehorning has not been shown to influence behavior such as eating either milk or grain subsequent to the procedure.

Fewer stresses are better than more stresses

Unfortunately, sometimes dehorning takes place at the convenience of the staff. For example, when animals are being moved from individual pens to group housing. Adding one more stress to those already present is not a good management practice.

It is a best management practice to avoid any changes in a calf's routine just before and for a week after she is dehorned. As we learn more about the effects of stress on a calf's immune competence, we know that there are lingering consequences of stress events. Even seven to ten days after a stress (dehorning, change in feed, change in housing, being loaded and unloaded from a livestock trailer, injection of a vaccine) we can measure lowered levels of her immune defenses. Thus, the calf is especially vulnerable to respiratory illness in this period.

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