

Vet's Corner: Too many stepped on teats!!

Last year, our practice received three complaints of “too many stepped on teats”. The farms had converted from worn-out tie-stall barns to free-stall housing and reducing teat injuries as one of the stated purposes of the changes. A barn designed for comfort such as the W. H. Miner Institute barn will reduce teat and leg injuries, so why were these new free-stall barns having stepped on teats?

When walking the cows, they seemed calm and not given to flight and violent rising. It was not suspected that the workers were treating the cattle roughly. Overcrowding was not an issue; in new barns with all stalls in excellent repair, we accept a 110% stocking rate.

The first tip-off of the cause of stepped on teats was that the cows' flanks were very clean and over 50% had no hair on their hocks. Clean flanks are a good thing. But clean flanks and little bedding under cows are not. In an effort to reduce cost, bedding was brought into the barn every 10 days and used too sparingly. **Saving bedding is one of the selling points of installing mattresses but it does not mean that no bedding is needed.** Bedding acts a lubricant between the pressure point of the hock and mattress during the normal rising process. Over 50% of the hocks had no hair, which indicated too little lubrication was provided.

Other possible causes of the hock lesions can be a too short resting area in the stall or inadequate bob zone. Large cows in these herds weight 1400 lbs; length from the curb to the bottom of the brisket board measured 65-66 inches, so the resting area was adequate. The bottom divider pipe was only 11 inches from the floor, so sideways lunge was not being obstructed. Stall size was not the problem.

Observation of the standing behavior gave the final reason for improper stall use. **9 out of 10 cows should stand with all four feet in the stalls.** In these barns, we counted several “perching” cows. A perching cow has her hind feet down on the floor, not up on the comfortable mat. The cow's leg is not made to stand in this extended fashion, the stretch puts unnatural stress on the Achilles tendon and stifle joint and will shorten the cows' lifetimes. The cause of perching is that the neck rail is placed too far back in the stall and the large cow's body simply cannot fit into the stall. With the goal of saving bedding and keeping the flanks clean, the builder placed the neck rails six inches behind the brisket board. The improper location of the neck rail caused the larger cows to get up in an awkward manner that was contributing to the stepped on teats. **The proper location of the neck rail is directly over the brisket board.** In two herds, the neck rail was moved ahead and perching and stepped on teats were reduced.

Workers now bring in bedding twice a week and scrap more manure from the stalls. They prefer this activity to milking and treating mastitis in cows with stepped on teats.

In the two herds that moved the neck rails, the discussion progressed to creation of a heifer group. There is a six inch difference in the recommended resting area for a 1200# heifer compared to a 1400# mature cow, so the heifers were responsible for putting most of the manure in stalls. By creating a heifer group, stall sizes could be adjusted to accommodate specific animal needs more accurately.

Final short-time horizon recommendations to reduce stepped on teats were:

- 1. Use adequate bedding for lubrication between hock and mattress.**
- 2. Move neck rail forward to a position directly on the brisket board.**

Kent E. Henderson, DVM

Northwest Veterinary Associates, Inc.

cowdoc@adelphia.net