

We had to take better care of our close-ups

by Hoard's Dairyman magazine and farm staff

STAGE one of our expansion completed in June 2007 was a new milking center with a double-10 herringbone and a free stall barn. Phase two was going to include new special needs' facilities, as well as a second free stall barn. Because of problems we have had with our manure storage, we put those projects on hold. That meant handling too many close-up cows in century-old hay and horse barns, with outside feeding.

We've published countless articles and heard dozens of presentations on the importance of having adequate bunk and resting space for close-ups, along with good ventilation . . . and everything clean and dry. We don't know what made us think we were different. As hard as we tried, we could not care for our close-ups as well as we should have, and we had the expected fresh cow problems.

The management team (see February 10, 2010, issue, page 108) concluded we could not wait for the manure storage issues to get fixed. We had to do something.

We converted our 63- by 180-foot, 90-head, free stall heifer barn built in 1976 to a bedded pack for close-ups. Many of our heifers already were being raised at another facility; plus the building would accommodate up to 70 close-ups with 100 square feet of actual bedded pack space per cow. Besides the pack area, there is nearly an equal amount of feed alley; plus there are concreted, outside runs. Even at full capacity there will be 28 inches of flat manger space per cow.

At present, both cows and first-calf heifers tend to be in the building

about four to six weeks. When we continue our long-range plan, we can add more space for milking cows first.

One thing nice about changing close-up care is that it doesn't take long to see some impact. While this can only be called anecdotal evidence, we can compare our fresh cow situation during the four months (95 calvings) since we've been using the remodeled building to the prior six months (179 calvings). We realize there could be some seasonal effects at work, too.

Have fewer problems

We have seen a 60 percent reduction in incidence of retains and metritis. We are approaching our goal of having fewer than 10 percent retains (24 hours) among cows with single-ton births and fewer than 10 percent metritis. We have seen 44 percent less clinical mastitis and 44 percent less ketosis. We still seem to be running about 10 percent DAs, although we're optimistic that rate will drop to our goal of less than 6 percent over time.

It looks like our stillbirth rate is dropping well below our goal of 8 percent (heifer and bulls combined). The new close-up area is much more visible and accessible for farm employees. Also, we now have a couple of calving pens that cows can be moved into when they start to show. In our makeshift close-up areas, there was no place to move cows to when they started to calve.

One change we might make is to divide the building into two sections. The calving pens are at one end, and, invariably, cows seem to want to calve in the other end of the building. With

a divider, those closest to their due dates could be kept in the end closest to the calving pens. It is disruptive for all cows and difficult for one person to move a cow the length of the building to be put in a calving pen.

Our bedding pack is a layer of (recycled) sand from our manure system's sand trap topped with straw. The plan is to remove the pack and rebed about every month or two.

It didn't take long for us to see fewer fresh cow problems when we began using the remodeled barn. But there still was room for improvement.

We were mixing some fairly long-stemmed grassy hay in the TMR for those cows. We were seeing some sorting, so we were not providing the consistent, 24/7 ration that our advisors keep bugging us about.

We brought in a tube grinder from a neighboring dairy and had the hay chopped. Before the chopping, 38 percent of the TMR remained on the top screen of a Penn State shaker. The middle screen had 36 percent, and the pan had 26 percent. After processing the hay, the top screen held 35 percent of the TMR. The middle screen held 29 percent and the pan 36 percent.

Besides the dry hay (7 pounds per cow), the close-up ration includes corn silage (25 pounds), wet brewers grains (20 pounds), hay silage (10 pounds), soybean meal (0.44 pound), blood meal (0.2 pound), and a variety of minerals, vitamins, and other additives.

Spec-wise, the ration is: 0.66 mcals net-energy-lactation, 14.5 percent protein, 44.1 percent NDF (36 percent from forage), 15.1 percent starch, and 32.7 percent NFC. 🐄



THIS 30-YEAR-OLD HEIFER BARN, 63 by 180 feet, was converted into a bedded pack, close-up facility by removing the free stalls.



CLOSE-UPS WILL HAVE at least 100 square feet of bedded pack each, plus no less than 28 inches of bunk space per cow. The building's ventilation was improved by replacing north wall siding with curtains and adding fans. It remains open to the south. There are two calving pens with a head gate, plus a small, warm room with hot water and a freezer for storing colostrum.