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Set Calves Up for Success

Preconditioning prepares calves to perform impeccably.

by Kasey Brown, associate editor

Based on his experience with the beef industry, school board member Dan Thomson has some ideas on how to change the efficiency of signing kindergartners up the first day of school.

There are two things that all kindergartners have to have to enter school: a record of immunizations and a social security card. There's no need for all that paperwork, he says. Let's do it like the beef industry and vaccinate on arrival.

For kindergarten roundup, let's save some time and money by dropping that program. The kids don't need to know their teacher, where the water fountain is, where to eat lunch or the bathroom location. Instead, he suggests a blacktop kindergarten roundup where the parents tell the students what they need to know on their way to school the first day.

The first day of school, there will be a group of adults at the front door of the school. As the flat-bed pickups, minivans and Suburbans pull up, the adults will run out, grab the kindergartner, run back in and shut the door quickly. That is called abrupt weaning. There will be some confusion with a lot of bawling inside the school and bawling outside by the mamas.

Don't worry, he says, the bawling will stop in about three to four days.

They will then take the group of kindergartners to the end of the hallway, he continues. There are three classrooms and 51 kindergartners. That will be 17 head on a three-way split. The kindergartners will be sorted one by one and vaccinated on arrival. Then they will be put into their assigned classroom, commingled with other stressed, unfamiliar students. The good news is they only expect about a 6% to 10% death loss.

The Jones Professor of Production Medicine and Epidemiology at the College of Veterinary Medicine at Kansas State University admits this scenario is a farce, but the sad reality is it often happens to calves when they aren't preconditioned. He urges cattlemen to do better.

"We have to prepare these calves for transfer and set them up for success," he says.

Why precondition?

Brandi Karisch, beef cattle specialist and associate extension and research professor at Mississippi State University, explains that preconditioned calves have good immunity, a good plane of nutrition, are trained to use the feedbunk and waterer, are adjusted to being in a new surrounding without mama, and have been weaned for a set amount of time before entering a new segment.

Preconditioning just makes sense, she says. It improves the quality of life for the cattle and has consistently improved the bottom-line for cattlemen. Price records — whether they are from video auctions, sale barns, consignment sales, etc. — are consistently higher for cattle marketed as preconditioned calves.

"I can't stress enough that if you're going to put the time and effort and the money into preconditioning those cattle, then you need to shout it from the rooftops so everybody knows that these cattle have been handled well," she urges.

Many preconditioning programs are available to cattlemen, and many have good name recognition, like VAC-45. Programs like these resonate and give a sign of quality.

Buyers are willing to pay more for preconditioned calves because they are not having to assume as much risk, she explains. Those calves can hit the ground running.

For example, bovine respiratory disease (BRD) is the leading cause of economic loss postweaning

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through lost weight, treatment costs and loss of potential gain, Karisch notes. Preconditioned calves are in a better position to fight off the disease with a stronger immune system and prior vaccinations.

Health

A big asset of preconditioned calves is their improved health status.

"What I really like about the beef industry is there is no one-size-fits-all approach to a health plan, but it should include vaccinations and deworming. Cattlemen should work closely with their veterinarian and even their buyer to determine their health protocols," Karisch notes.

She recommends giving common vaccinations for your specific area of the country, but keep in mind the calves' destination. If you are targeting a specific market, there could be health issues that are not as common in your own area, so plan ahead and prepare those cattle.

"Just because you gave the calf a shot does not mean that calf will be immune and not get sick. Vaccination doesn't always equal immunity. Make sure we give that vaccine at the best time (when they are not stressed) so that immune system is set up to respond to that vaccine. That's really important," she says.

There is research that shows if a vaccine is given at times of stress — like at arrival to a new experience — efficacy goes down. It takes a lot for that calf to build immunity if it is already dealing with a hard situation. You're not getting your best bang for your buck if you vaccinate during times of stress.

Nutrition

Nutrition is a critical part of preconditioning that often gets neglected, Karisch admits. The goal is for calves to move forward after weaning, not to backslide from the adjustment.

Regardless of the type of feed a calf will be eating after weaning, whether it be forage or grain, the producer's goal should be to stimulate intake to keep their immune system running on all cylinders.

This means a producer must be aware of the nutrient density of the new feed. Even in the lowest-stress environment for weaning, a calf will still experience some stress when stopping milk intake. When this happens, they will go off feed, so the feedstuff's nutrient density should be higher to compensate for less intake.

While she admits that using creep feed depends on the type of cattle and their environment — saying that it can be a good way to introduce feed — she absolutely recommends starting calves on a mineral program before they are weaned.

Calves also need to be trained to eat from a feedbunk and drink from a waterer. What seems to be common sense can be difficult for a calf that has only been nursing. Karisch suggests thinking in terms of cattle behavior. When calves are in a new pen, they are going to walk the perimeter. Don't put feed or water in the center of the pen. Put feed and water along the fenceline so the calves will see it.

Feedbunks need to be low enough that calves can easily reach them. Waterers should be large enough to give calves plenty of free access to drink. For instance, Karisch admits that ball waterers are great for cattlemen in areas that freeze. However, they do take time to learn, so she doesn't recommend starting calves with those.

Regardless of the type of weaning you employ, Karisch is adamant calves should be weaned a minimum of 30 days before being transferred to a new location, and preferably for 45-60 days.

The highest risk of BRD is within the first 21 days after weaning due to stress, she says. Calves get exposed to pathogens, get sick for five to seven days, and then it trails off by Day 21. If they are shoved into a new environment immediately after weaning, their immune system cannot put up enough of a response. Forty-five days decreases the risk of those calves getting sick.

She calls fenceline weaning — where cows and calves are in adjacent pens so they can see each other, but milk is unavailable — the gold standard, but grants that weaning is also not a one-size-fits-all situation. Many producers don't have the strong fences necessary for fenceline weaning. She suggests looking at what you have available to you and figuring out the least stressful way of separating the cows and calves.

Calves should be castrated at 3 months of age or younger, as recommended by Beef Quality Assurance (BQA) guidelines. The larger the calf, the longer it takes to recover from the trauma of castration and the more stress is put on the immune system. If the calf is castrated later in life, she recommends a longer preconditioning period to let that calf fully heal.

Above all, preconditioning takes planning.

"If you plan to wean Oct. 1, don't wait until Sept. 25 to plan your shots or your nutrition. Create a well-designed program ahead of time so you can reap the benefits later," Karisch concludes. ▌