Livestock  By: Heather Foxworthy

It’s never too late for spring cleaning

After a winter that was hard on calving in 2019, many producers were wary this calving season making sure they spread bedding before potential storms to encourage cows and calves to bed down. While excess bedding, wasted feed, and manure are to be expected, letting these materials build-up and linger can have negative impacts on cattle in the future. The build-up of straw in bedding areas and hay in feeding locations should be removed to limit the amount of present bacteria that may cause illness for cattle congregating in those areas. Beyond an accumulation of hay and bedding in calving areas in pastures, pens for confined feeding should also be cleared of winter materials as they may have similar or worse conditions than calving areas.

Failing to maintain excess bedding, manure, and hay in calving areas may have a negative impact on forage that is unable to break through a mat of winter materials. Shortfalls in maintaining feedlot pens as well can result in issues that not only affect cattle health, but can also impact the construction of the pen. The conditions of confined cattle pens can lead to the development of uneven drainage patterns and pens may worsen over time. Once you’ve cleared pen materials, it is important to reestablish drainage patterns to improve future conditions. Once drainage is established, it is also important to create mounds to offer a dry and comfortable place for cattle to escape any mud.

To illustrate the danger that leaving an accumulation of hay, bedding, and manure can pose for both calving grounds and feedlot pens, a single pound of material found at a winter feeding site has approximately 4.5 million fecal coliform bacteria. In a scenario by Joel DeRouchey, Animal Science Extension Specialist, if we assume that 50 square feet is affected for each hay feeder and it includes a total of 10 tons of manure that’s approximately 90 billion fecal bacteria present. This problem is exacerbated when materials are allowed to build-up over an extended amount of time. The fecal bacteria present at these sites can remain alive in the wasted feed and manure for several months, especially in the heavily visited area around bale feeders. Due to the ability for the bacteria to survive periods of time, even adding cattle to a pen that has been empty may pose a threat. Exposure to the built-up materials may cause disease or health challenges especially to individuals who may be at risk for getting sick such as newly weaned calves.

Lameness, such as foot rot, can also be attributed to the build-up of manure and wasted feed in pens. A major contributing factor of developing hoof rot is the environmental conditions of the pen. An excess amount of manure is an ideal condition for bacteria to survive and multiply, thus creating more risk for animals developing foot rot or other illnesses. Regardless of the health challenges that animals may face, managing manure or feed waste is an important operational task that must be carried out to maximize animal comfort. The payback for regular cleaning includes an increase in animal performance, a difference that makes it worth it.

There are some options for clearing confined pens and calving areas and disposing of the materials. A scrape and spread method includes scraping the area and spreading the materials over a larger land area. Spreading the manure and wasted hay thinly exposes it to sunlight effectively drying the materials and killing fecal bacteria. The manure and other materials also serves as a good fertilizer source for forage or crop land. While this is considered the ideal method to dispose of pen materials, some producers do not have access to a manure spreader therefore preventing this method.

For those not interested in spreading the materials or unable to, alternate outlets for the waste materials would include composting and/or mounding. Since an ideal composting process requires a combination of nitrogen and carbon, the presence of manure and wasted hay/bedding makes pen waste an ideal material for compost by scraping a pen and piling its contents. The process of composting generates heat and effectively kills the fecal bacteria, lessening the risk of the materials causing disease or health challenges. Once the materials have been composted, it can either be removed and spread, or it can be graded and packed to serve as mounds for penned cattle.

It is realized that cleaning pens may not be top priority and pen use may not allow for cleaning. However, it is a necessary operational task and its recommended that pens should be cleaned as needed whenever possible. Spring is a great opportunity for cleaning pens and calving areas to prepare for weaning, backgrounding, and even the next calving season.

For more information or resources regarding managing waste in pens and calving areas, please call the Cheyenne County Extension Office (785)332-3171.

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