

Water Quality Feedlot Field Day

The Situation

In the eastern third of Kansas there are a number of CAFO's (confined animal feeding operations) that fit the environmental threshold of between 300 and 999 animal units. At this size the CAFO (feedlot) is not required to capture all drainage from the lot and place it into a lagoon. At the 300 to 999 size they are allowed to "buffer" the drainage from the feedlot pens with well managed grass buffers, designed to slow water run-off from the pens and allow it to infiltrate into the soil where microbial action will digest bacteria and the phosphorus and nitrogen nutrients will be utilized by the dense grass of the buffer. Adequate buffers down slope of cattle feeding pens ensure clean water reaches the stream.

Cleaning of the pens on a regular basis is where water quality begins, and the cleanliness has added benefits by reducing fly numbers, less mud and more comfortable conditions for the cattle.

What We Did

We planned and conducted a Feedlot Field Day on October 3, 2017 at a well-managed feedlot focusing on proper feeding pen placement, schedule of pen cleaning, and management of grass buffers downslope of the pens. The feedlot we held the field day at was a perfect example of well-designed pens, well maintained buffers and frequently cleaned pens.

Additional topics for the day included non-confined feeding using either grass traps or cover crops and well as available USDA programs that assist cattle feeders. Alternative watering systems were also discussed.

Safe and low stress cattle handling was also emphasized and the use of a Bud Box was demonstrated.



Outcomes

Over fifty people attended, and the farmers/ranchers reported a measurable increase in knowledge of the day's topics, including conservation, alternative watering systems, cover crops, site selection, managing runoff, and cattle handling facilities and techniques. 83% of participants planned on sharing their new knowledge with other producers.

Success Story

The discussions had a direct impact on producers' arrangements for their operations. As a result of what they learned, some producers have made plans to develop alternative watering systems to allow grazing of cover crops, according to Herschel George, K-State watershed specialist. Another cattle producer who, prior to the field day event, was considering building a small feedlot now plans to have his cattle graze cover crops and grass traps and leave his cattle non-confined.

The field day event allowed producers and watershed specialists to discuss the best methods to select pasture size, stocking rate, feed bunk placement and grass buffer areas for non-confined feeding – an alternative to the traditional feedlot feeding pen. Experts agree that rainfall, soils, and topography of the pasture area must be considered when implementing non-confined feeding. Non-confined feeding uses grass traps or crop stubble to hold the cattle, with over 90 percent of the cattle ration being furnished in the bunk.

A survey taken by the participants shows that attendees plan to increase cover crop use, better control feeding pen runoff, scrape pens and haul manure more frequently, and some lots will be relocated or redesigned. Handling facilities with the use of a Bud Box to improve the movement of cattle through processing facilities was another area participants targeted for improvement

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