

Yankton County Planning Commission
January 23, 2017

The planning meeting of the Yankton County Planning Commission was called to order by Vice Chairperson Jeff Gudahl at 7:00 p.m. on January 23, 2017.

Members present at call to order: Gudahl, Klimisch, Guthmiller, Becker, Welch, Bodenstedt, Kotalik, Kettering, Sylliaasen, Kretsinger, and Schultz.

Members absent: Williams and Pietila.

The scheduled speaker for this evening was unable to attend. Dr. Ken Mertens, DDV was gracious to speak about animal health, dairy veterinary practices and large scale production practices.

Dr. Mertens discussion was dairy focused. He talked about the impact feed rations have on dairy herd production. The herd cow comfort is important to meet the basic function of eating, milking and chewing cud while laying down.

In relation to cow herd comfort, nutrition is a very important aspect in milk production. Feed rations are carefully monitored and reviewed by veterinarians to meet all the growth needs of the herd. The herd is artificially inseminated (AI) to insure genetic improvements for the herd. The larger herd operations have improved pregnancy rates, improved record keeping, bred every twenty-one (21) days and capable of segregating special needs cows from the herd.

Dairy herd health is related to milk quality as measured by somatic cells in the milk. **The SCC is quantified as the number of cells per ml of milk.**

In general terms:

- An individual cow SCC of 100,000 or less indicates an 'uninfected' cow, where there are no significant production losses due to subclinical mastitis.
- A threshold SCC of 200,000 would determine whether a cow is infected with mastitis. Cows with a result of greater than 200,000 are highly likely to be infected on at least one quarter.
- Cows infected with significant pathogens have an SCC of 300,000 or greater.

In the past somatic cells were allowed to SCC of 1,000,000 in milk production. Improvements in dairy herd science and best management practices in agriculture has resulted in significant improvement in milk quality. Dairy cow lameness is caused by several factors including foot rot, ball of foot prolapse and sole foot prolapse. These issues can cause somatic cell increases, which is penalized by the processor. Antibiotics are utilized to medically treat the ailments, but recent best management practices have provided cow comfort mats, proper barn structure configuration and other practices to reduce cow stress. The cow herd animal husbandry is a major factor in profitable dairy operations.

The average size dairy herd is now 1200 cows for a new barn. Many operations from California are relocating to the Midwest because of urban pressure. The operations are under Concentrated Animal Feeding Operations and regulated to have no discharge from the facility. All the manure becomes fertilizer which is applied to the area fields under a Nutrient Management Plan.

The question and answer period discussed the nutrient management plan (manure) process to control phosphorus levels in area fields. The plan does control the amount of manure applied to area fields with soil testing and manure testing.

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The use of antibiotics was discussed with current use less than previous years. The consumer requests to reduce antibiotics and recognition by the dairy industry that best management practices are critical to reduce disease issues.

Dairy size can be larger than 1200 head with available farm production land to support the Nutrient Management Plan. Many factors are evaluated to determine dairy herd size.

Water usage is one gallon / 100 lbs. milk and water quality can affect animal nutrition, therefore affecting production.

Veterinary standards are implemented for nutrition and all antibiotics are regulated and require prescription. Many of these prescriptions are expensive and impact the profitability of the operations. Veterinary products such as formaldehyde are utilized to treat various herd ailments such as foot rot. Facilities need to acknowledge the environmental hazards present when depositing this product. The best management practices focus on improved animal husbandry to keep the animals content and productive which reduces disease in the herd.

The Planning Commission sincerely thanks Dr. Mertens for his time and knowledge for continuous education in agriculture production.

Action 12317A: Moved by Gudahl, seconded by Bodenstedt for adjournment.

By voice vote, all members present voted aye.

Motion carried.

The next meeting of the Yankton County Planning Commission will be held at 6:00 P.M., Tuesday, February 14, 2016.

Respectfully submitted:

Patrick Garrity AICP

Zoning Administrator