

A survey on the production practices of confined cow/calf operations

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Introduction

Over the past 5-10 years, there has been increasing interest in the establishment of confined cow-calf operations in the Midwestern Corn Belt. There are multiple reasons for this expansion but they tend to center around land cost and availability. In this region, the use of land for grazing competes with crop enterprises and many operations find themselves priced out of adding acres for the cow herd. In many parts of the state land is not available to rent for a traditional cow-calf operation so confinement is being utilized to expand the existing herd or establish a new enterprise to support the next generation coming home to farm. As with all new production systems, there is a learning curve that needs to be mastered for producers, veterinarians and extension specialists. Therefore, the preliminary results of a survey of confined cow-calf operations will be reported here.

Survey methodology

The survey effort was supported by a grant from Boehringer Ingelheim Animal Health. Questions were written to cover such areas as nutritional management, animal health, and production management. ISU personnel reviewed question construction and type, prior to final survey design. A commercial survey tool (qualtricsSM) was utilized to allow producers to take the survey online. The survey was advertised through the extension service of Midwestern states and placed on the Iowa Beef Center website. We were also able to collect contact information of confined cow-calf producers from veterinary practitioners, extension personnel, and other producers. These individuals were contacted via phone to see if they would be willing to take the survey. If requested, a paper copy was sent to producers that preferred to respond in writing.

Results

A total of 34 producers filled out the survey, either online or written. Nine of the surveys were eliminated since the producer's description of their herd did not fit our definition of a confined cow-calf operation. Of the remaining 25 operations, most were either confined year round in a building or a drylot. These operations most commonly utilized a "tarp" covered building or an "Iowa Barn" system that allowed for outside access for the cattle. The rest used some form of limited grazing either during the summer or cornstalks in the fall.

Other results

1. The top five calf health concerns included: Calf scours, pneumonia, coccidiosis ("cocci"), "pink-eye", and bloat. Calf scours was an overwhelming choice as the primary concern for calf health. This would be similar to traditional production systems using pasture based grazing.
2. The top five breeding female health concerns included: Reproductive failure, lameness of the foot, respiratory disease (pneumonia), upper leg lameness, and mastitis. While reproductive failure and foot lameness would be a primary concern for grazing operations, the final three would appear to be a function of the herd being confined in a relatively small space.
3. Vaccination practices in confined cow-calf operations are very similar to traditional grazing herds (both calves and the breeding herd). This is most likely due to producers and their veterinarians using their past experience to build these protocols that have been based traditionally on grazing herds. Also with the popularity of the "Green" and "Gold" tag program in the state, calves will be vaccinated to meet those requirements regardless of how they are raised. It was interesting to note that intranasal vaccines were used by over 50% of the operations that responded to this survey.
4. Producers reported that they most commonly scrape manure from in front of the bunk line 2-3 times per

week during calving. The second most common answer was “every week”. Producers also reported adding bedding to the unit 2-3 times per week as well – with “weekly” being the second most common answer.

5. Current recommendations for space allowance for confined cow-calf operations (in a building) typically run from 90-120 ft² per head. We asked the producers taking the survey to estimate their space allowances for different times of the year. During the breeding season, space allowance ranged from 88-300 ft² per head. After calf weaning and during late gestation (precalving), square footage ranged from 44-300. During the calving season, producers estimated that they allowed 100-800 ft² per head. This wide range is undoubtedly influenced by the presence of confinement in a building (low end of range) versus a drylot setting (high end of range).
6. Differences in bunk space allowance were also seen among the respondents, but there was not as much variation between operations. During calving bunk space ranged from 22.5-36 inches per cow. This range fits nicely within the current recommendations for confined operations. Most operations kept this measure at a constant allowance year round, but some decreased it after the calves were weaned. This decrease in bunk space after weaning may be due to bunching the cows closer together to create open pen space for the weaned calves.
7. The adoption of reproductive technology is very high in these confined operations compared to more extensive grazing herds. Confined operations readily utilize estrus synchronization, artificial insemination, and embryo transfer (ET). Several of the respondents contract out their cow herd as ET recipients for multiple seedstock producers. Having the breeding herd in close proximity to the working facility allows for the utilization of these technologies.

Summary

This survey represents our first attempt to better understand how producers manage confined cow-calf units. Even within our definition of a confined operation, there appears to be significant variation in how these herds are managed. Best management practices for confined units are still evolving and are not fully understood. Hopefully, the type of information gathered with this survey tool will give the industry a clearer understanding and direction as to the best way to conduct needed research and provide extension programming.