

The past few weeks we have been discussing how calf crop percentage can be increased by altering the management of nutritional and reproductive aspects of the herd. Although we talked about how to increase calf crop percentage, we did not discuss what to do with the females that are found to be open at the end of each breeding season. Most beef herds will average 90-95% calf crop, regardless of repeated attempts at achieving 100%. Many ranchers believe the best thing to do with an open cow is to sell her as soon as possible so he/she is not feeding an unproductive cow through winter. However, a recent article published in *The Bovine Practitioner* suggests that this may not be the most profitable decision.

This article reflects the findings of a study performed that estimates the economic value of three different open-female management strategies among cow-calf herds in the United States. Each of the three management options were performed on herd sizes of 50 head, 300 head, and 600 head. This study assumed that all females calved in the spring and were pregnancy checked in October. In management Option A, females found to be open were immediately culled from the herd and were replaced with purchased pregnant females. Open females in Option B were maintained as such through winter and were rebred in June of year two with the remainder of the herd. If these original open females were found to be open a second time they were culled from the herd. The open females in Option C were also kept in the herd, but were bred in November immediately following pregnancy diagnosis in October in order to transfer them from the original spring-calving herd into a fall-calving herd. If these open females were found to be open a second time after rebreeding in November, they were culled from the herd.

The study found that Option A was not at all profitable in most of the cases, regardless of herd size. It was also found that the likelihood of having a profitable outcome in the first year after implementing Option A was less than 5%. In fact, Option A was found to be the most expensive of the three open-female management options studied. Some may argue that simply raising replacements rather than purchasing them would result in a higher opportunity for profitability in Option A, but this is not always the case. Despite past recommendations for open female management, recent studies suggest that culling open females and replacing them with home-raised or purchased heifers may not maximize long-term economic value for the producer. Of course, it is important to note that as the market price for pregnant replacements decreases, the relative value of Option A will rise.

Though surprising to some producers, Option B was found to have a higher value than Option A. The likelihood of this management practice being profitable in the first year after implementation was also less than 5%. However, although Option B was not found to be profitable due to the time limitations of the model in this study, prior studies have shown that retaining open females may be a profitable option over a five-year time frame. It is also important to remember that the original open females in this practice will not produce a calf that is ready to sell until about two years after the initial pregnancy diagnosis.

As opposed to Options A and B, Option C was on average always a profitable route to take regardless of herd size. The probability of this management practice being profitable after the first year of implementation was about 90%. This practice is unique and valuable in that it provides multiple

benefits. It has the potential to allow producers to reduce production expense by keeping overall herd numbers while avoiding cost of replacement female purchase (as shown in Option A). It also dramatically reduces the amount of time required to produce a calf compared to keeping open females in the spring herd (as in Option B), which helps maintain cash-flow. However, as with Options A and B, Option C does have some limitations. Fall calving herds have higher demands for management compared to spring calving herds such as the requirement for more intense winter feeding programs. Additionally, maintaining a spring and a fall calving herd requires more time and individual herd health management programs including different seasons for breeding, pregnancy exams, and semen evaluation.

As a producer, it is important to think about management strategies ahead of time. Each cattle producer has specific goals that fit his or her operation, whether that be “to just have fun”, “to break even”, or “to be profitable”. Using the above information will help you make open-female management decisions that align with your goals for your operation. Thinking about your management strategy ahead of time will ensure that when the time comes to put your plan into action, you will be able to efficiently and in a timely manner.

If you have any questions regarding open-female management strategies, please contact us.