CULLING THE COW HERD

Stephen Boyles
OSU Extension Beef Specialist

Culling is one of the tools for increasing the efficiency of a cow herd. But on what criteria should a producer base their culling decisions? The following are guidelines for culling.

1. Open/nonfunctional cows
2. Late Calvers
3. Old Cows
4. Based on Herd Performance Records
5. Disposition

Open cows are the greatest contributors to low weaning percentages (see table). The first cut will be to eliminate open cows and those that lost calves due to excessive calving difficulty. On the average, a cow that does not breed one time will lose fifteen to twenty percent of her lifetime production potential. It will take the net return from two to three productive cows to pay for the maintenance of the open cow. Structurally unsound cows (incorrect feet or udders, cancer eye) and emaciated cows are also culling candidates.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Cows</td>
<td>16.6</td>
</tr>
<tr>
<td>Calf losses at birth</td>
<td>6.4</td>
</tr>
<tr>
<td>Calf losses, birth to weaning</td>
<td>4.1</td>
</tr>
<tr>
<td>Calf losses, during gestation</td>
<td>2.4</td>
</tr>
<tr>
<td>Net calf crop weaned</td>
<td>70.5</td>
</tr>
</tbody>
</table>

Factors that contribute to a reduction in calf crop percentage weaned of cows exposed.

Late calvers are the second potential cut. You will need to look at your calving distribution and find those cows that calved during the third, fourth, or later calving cycles. It has been suggested that perhaps moving these animals to a fall calving herd is an alternative. This should only be done with younger cows that do not have an obvious reason for being late calvers. There are a couple of reasons for being a late calver that may not be the fault of the cow. One reason is an inadequate nutrition program during her heifer development stage. The second reason is breeding heifers at the same time as the cow herd instead of doing the recommended practice of breeding those two to three weeks prior to the rest of the cow herd.

Late calvers are more likely to be ready for breeding during the hotter times of the following summer. Heat stressed bulls will have decreased fertility at the time the late calving cows are starting to cycle. For example, a cow that calves on March 15 was bred approximately on June 5. A cow that misses a breeding cycle or two and calved on April 25 had to get bred by a bull on July 15.
A potential third reason for culling is age. You don't automatically cull cows a ten years of age. However look at her and ask yourself, "Can this cow compete and make it through another winter?" Cows need to be shipped out when they still have salvage value and a dead cow does you no good. If she can produce, a commercial cattle producer should probably keep her in the herd. A cow with few teeth isn't necessarily an automatic cull if she's in excellent body condition.

The fourth reason is for genetic progress reasons. Based on the records and performance data of your herd, cull cows most likely to produce poor quality calves with lower average weaning weights. Exercise caution when using the genetic adjustments (adjusted 205-day weaning weight) since young, late-born calves often receive the most advantage from the adjustments. This can have a detrimental effect on the commercial producer who is selling pounds at weaning. In this case, give preference to evaluating performance based upon actual weaning weights within sex and age group of the cows (with two- and three-year-olds' offspring being compared separately from those of the mature cows). Certainly a fifth reason to cull an animal is disposition.

Culling is a better tool for eliminating dysfunctional cows than for building genetic improvement. The vast majority of the genetic capability of a cow herd comes from the last three bulls you have used.

Some individuals have recommended replacing about 15 percent of a herd annually. The decision to cull cows over time will change one year to the next, depending feed supplies, the need for cash flow, current cattle prices, where we are in the cattle price cycle.

Basing culling decisions on perceived cow efficiency is questionable. Weaning weight as a percentage of body weight is a poor measure of efficiency because it can unfairly favor smaller cows.

For example, a 1,100-pound cow weans a calf 60 percent of her body weight, resulting in a 660-pound calf. A 1,400-pound cow weans a calf 55 percent of her body weight, resulting in 770-pound calf. In this situation, even though the larger cow may not be as efficient in weaning calf weight in accordance to her body weight, the larger cow still weaned a calf 110 pounds heavier than the smaller cow's calf.

Maintaining larger-framed cows to a certain extent will depend on feed and forage resources. Even if a cow's body size were doubled, her energy requirement would only increase about 35 percent.

Thus, in many case culling a large cow based on a worry she's converting input cost less efficiently than other cows should be pre-emted for culling on the basis of more important reasons, such as openness or health.