Determining open cows early allows cattlemen to select the best strategies that target the highest potential revenue.

Culling Decisions

Rebreed open cows to add value to your herd.

by ***Julie Walker,*** *SDSU Extension beef specialist, courtesy of* iGrow.org

Processing of fall-weaned calves and pregnancy determination will soon be here, and management of open cows is critical to the financial bottom line of a cow-calf operation. It is estimated that 15 to 20% of cow-calf enterprise revenue comes from cull cows. Determining open cows early allows producers to select the best strategies that target the highest potential revenue.

The first question is often, "Why should I pregnancy test?" Professor and South Dakota State University (SDSU) Extension Beef Reproductive Management Specialist George Perry highlighted the expenses to run an open cow through the winter months with no calf for revenue.

In his example, maintaining cows, bred or open, during the winter costs approximately $1.30 per day. This would result in roughly $270 per cow for wintering costs. For a herd of 100 cows where seven are left open, it results in $1,890 left on the table. His article points out the importance of pregnancy determination to reduce costs.

SDSU Extension Livestock Business Management Field Specialist Heather Gessner addressed the strategy of feeding cull cows for weight gain prior to selling them. The seasonal cull cow price pattern is lowest at weaning time (October, November and December) and highest from March through August.

> *"Is the cost of gain less than the additional revenue at the end of the feeding period?"*

Instead of selling cull cows during the lowest price period, adding weight and marketing them at a higher price can be profitable depending on the costs associated with feeding them. The question becomes, "Is the cost of gain less than the additional revenue at the end of the feeding period?" Gessner's iGrow article walks you through the math.

Rebreeding open cows

This iGrow article will focus on rebreeding open cows before taking them to the sale barn. Bred cows "normally" bring more money than cull cows. These newly bred cows would target fall-calving cow herds. Rebreeding your cows before taking them to market could add value.

If higher than normal open rates occur, make sure you work with your veterinarian to determine the potential cause. Breeding-long season pregnancy rates are usually in the range of 94 to 98%.

Pregnancy rate is calculated by the total number pregnant during the breeding season/ number of females exposed to breeding (expressed as a percent).

“Normal” pregnancy rates are influenced by several factors such as: 1) length of breeding season, 2) body condition score of cows, 3) bull to cow ratios and 4) health status of bull(s) as well as other factors. Remember to compare the pregnancy rate only within your own herd.

Questions to consider

When determining if rebreeding open cows is the right option for your operation, there are a few questions to consider. Are bulls available for a second breeding season? Using bulls for a second breeding season is often accomplished when producers have both a spring- and fall-calving herd.

What is the cost of retaining these open cows through a second breeding season? Using the $1.30 cost per day should include most expenses such as feed, labor, interest and utilities. What is the potential income from the bred cow?

Remember not all open cows would fit this program; evaluate each cow to determine if she should remain in any producer’s program. Cull cows often include more than open cows such as those with one or more of the following issues: 1) poor performance, 2) bad udder, 3) negative temperament, 4) bad eyes, 5) advanced age, 6) questionable structural soundness and 7) health concerns.

A simple cost analysis of this system would be bred-cow value minus open-cow value. If the difference is higher than the cost of breeding/feeding/etc., it is a profitable system.

However, if the difference is lower, this may not be the year to utilize this management system.

Retaining cows for 90 days at $1.30 per day would require the bred cow value to be $117 higher than the open cow value. If you retained the open cows for rebreeding for 120 days, the difference would need to be $156. This calculation does not include the cost for bull use.

Rebreeding open cows will change the value compared to open cows; however, you need to determine if this change is positive. **HW**

Cull cows — profit center or economic drain?

Every best-management-practices book related to beef cattle production calls for pregnancy checking the herd to identify open cows as early in the season as possible.

Open cows in the herd have a negative impact on profit, as they are consuming expensive inputs like feed, AUMs (animal unit months) and labor without contributing back to the operation. The reasons cows do not breed back are many and varied and something cattle producers need to be monitoring.

Many times spring-calving cows are not identified as open until late fall or early winter, as this is the time when cows are typically brought in off summer grazing areas and calves are weaned. A downside with this plan is that most other cattle producers are working on the same timeline; thus, many open cows hit the market at the same time, resulting in a seasonal price decline during the fall.

Is there a better option?

Some producers may retain open cows, feed them and then market at another time. Producers can estimate a future price for open cows by utilizing the United States Department of Agriculture (USDA) monthly Livestock, Dairy and Poultry Outlook (LDP) report, released the 15th of the each month. This report includes national quarterly price history and projections for cutter cows. As of the June 2016 LDP, projections for 2016-2017 are:

	II-2016	III-2016	IV-2016	I-2017
$/cwt	72-75	67-73	69-79	70-80

Utilizing these price projections combined with local market information, producers may not be able to add value to the cull cow by feeding, unless the animal is very thin and has the ability to gain weight or if the producer has access to cheap feedstuffs.

Producers must analyze their situation to make this determination. (More information on cull cow management can be found in the iGrow Beef Best Management Practices for Cow-Calf Production, *igrow.org*.)

Some reasons to consider feeding open cows may include:

- Take advantage of seasonal price patterns to avoid marketing at yearly lows, while improving quality grade and relative market price.
- The potential to add weight to an animal that may have come off grass in poor body condition. Adding pounds will increase the total weight available for sale, and adding weight will increase the white fat on the carcass, if the animal is fed a high-grain diet.
- Young cows that are open are candidates to be reexposed for fall calves. Marketing a group of young cows bred for fall calves may well be a profitable venture.
- Open heifers may qualify for fed-cattle prices after they have been fed and if their carcass maturity remains in the A or B level.

Adding weight and increasing value are both ways to bring additional profit to the operation. However, added weight and days on feed are not free. If you have a relatively inexpensive feed resource available (corn stalk grazing, low test weight corn, low cost forages, etc.), there may be opportunity for increased profits.

Example: Here are three options for a 1,200 lb. open cow.

Option A: sold in November

Option B: fed for 70 days, gaining roughly 2 lb. per day

Option C: fed for 70 days gaining 3 lb. per day.

The feeding period is Nov. 15 to Feb. 1. Prices are based on fourth quarter projections of $74/cwt and first quarter 2017 projections averaging $75/cwt.

	Option A	Option B	Option C
	1,200-lb. cow sold at pregnancy-check — November	On corn stalks with supplement	Ration and yardage: corn, silage, MDGS, cornstalks
Gain		70 days at 2 lb./day ROG	70 days at 3 lb./day ROG
Cost of gain		$1/hd/day feed and labor ($70)	$2/hd/day feed and labor ($140)
Sell at:	1,200 lb.	1,300 lb.	1,400 lb.
	$74/cwt	$75/cwt	$75/cwt
Income minus feed costs:	$888	$892	$910

The options in this example result in a $4 or $22 per head increase in income if the cow is fed for 70 days, with a 2 or 3 lb. per day gain. While there is added profit potential for feeding open cows in this scenario, the margin is tight. Small increases in feed costs or decreases in the market price will eliminate the profit potential. Because there are no price-risk management tools available for cows, completing an enterprise budget is the best tool to analyze the decision, and then you should implement the best option for your operation.

Additional considerations

Current feed supply inventory must be taken into consideration. Feedstuff needs for the remaining cow herd should be analyzed carefully to ensure your main herd can be appropriately fed throughout the winter and spring. If feed inventories are not sufficient to survive extreme cold snaps or an extended spring feeding period due to delayed spring turnout, the operation may be better off selling open cows. However, if the return from increasing the weight of the cows is sufficient enough to replace the used feed and maintain a profit, feeding them may be an option.

You can utilize the Excel based livestock budgets created by South Dakota State University Extension staff to determine which decision is right for you. The budgets are at *econ.sdstate.edu/econ/extension*.

If you are optimistic about heifer retention or herd expansion/rebuilding, you will want to watch the cow market closely to analyze how much beef production changes during the fourth quarter. **HW**

Editor’s note: *For more information, please contact SDSU Extension Cow-Calf Field Specialist Warren Rusche at the Watertown Regional Extension Center at 605-882-5140 or any SDSU Extension cow-calf field specialist or beef Extension specialist, or contact SDSU Extension Livestock Business Management Field Specialist Heather Gessner at the Sioux Falls Regional Extension Center 605-782-3290 or any SDSU livestock business management field specialist or any economics specialist.*