

“UGA 90-day Calving Season Calculator”

Spreadsheet Parameters

Weaning date is based on 205-day weaning

Gestation is based on 283-days

Breeding season is set to define year-round breeding to 90-days

Management steps to consider

Beef cattle management practices vary from one operation to another. Some of these practices are simple, easy to use and incorporate; while others may be intensive, aggressive and more difficult to implement. This interactive-spreadsheet is designed to offer suggested dates that could be used to convert from a year-round to a defined, controlled breeding season over a three year period. Using a multiple year program will enable producers to reduce the number of cull cattle each year. The following suggestions are provided in order to successfully complete this transition in three years.

Bull Pen

Build a strong, well supported pen to maintain bulls when they are not actively breeding cattle.

Market-End-Point

Determine the market end-point of the calf crop. Knowing when calves will be marketed is useful when determining weaning dates. Factors such as forage availability, temperature, market trends and labor are just a few of the considerations that must be evaluated to determine the market-end-point.

Example shown in Figure 1: If calves are marketed on August 15 and have to be preconditioned for 45-days prior to being sold, they would need to be weaned on July 1st.

Determine Weaning Date

Since calves need to be weaned on July 1, a gestation table may be used to determine the last day a calf can be born and reach weaning at the appropriate age.

Example: This example uses the 205-day weaning date, so the last day a calf should be born is December 8 (leap-year will alter this date).

Breeding Season Length

A three month or 90-day breeding season is used in this example.

Example: With the examples above, a gestation table can be used to determine the last day for breeding for a calf to be born on December 8. Using this table, the desired three month breeding season would occur from November 30 to February 28.

Replacement Heifer Management

Careful consideration regarding replacement heifer management may effect the long-term profitability of a herd. Research has demonstrated that heifers should reach body weights of 55 to 65% of their mature weights at breeding and approximately 85% of their mature weights when they deliver their first calf. Managing heifers separate from mature cattle may be useful in providing the proper amount and nutritional requirement to these cattle.

The nutritional and physiological differences that heifers undergo suggest that beginning their breeding season earlier than the defined breeding season may be beneficial. First-calf heifers typically have an extended post-partum interval after parturition, and this extra time may help to align them with the defined breeding season. Bulls may be placed with replacement heifers 3 to 4 weeks prior to the beginning of the controlled breeding season to compensate for these differences. Limiting the breeding season to 45-days for replacement heifers will reduce the number of heifers that breed outside of the defined breeding season in subsequent years.

Replacement heifer management may seem difficult since many of the cows in the herd will not have calves that will be ready for breeding during this time frame. Purchasing replacement heifers that fit the breeding season may be an option to consider until the mature cow breeding season is complete during the final year. This program is designed to consolidate breeding into a three month period. If replacement heifers do not enter the herd and bred during the desired breeding season, they may be culled soon afterwards for failing to breed.

Culling

Culling is a major factor of a defined, controlled breeding season. Using the three year approach may help to prevent excessive culling from occurring in a single year.

- a. During the first two pregnancy checks, all cattle that are not pregnant and dry or not pregnant and have calves that are 5 months of age or older should be culled.
- b. During the subsequent pregnancy checks all non-pregnant cattle identified should be culled.
- c. If breeding records are available, evaluate the number of cattle that will need to be culled each year using the dates suggested by this program. If culling is excessive, an alternative market end-point may need to be considered.

Disclaimer: The UGA 90-day Calving Season Calculator was designed using the information from “A Controlled, Seasonal Cattle Breeding Program” by Clyde M. Triplett. Information contained within this spreadsheet should be used along with existing proven management practices. All dates determined by this program are intended to be used as suggestions. Users must determine if these dates can be incorporated with current management procedures effectively and feasibly.

Figure 1. July 1 weaning date

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Version 2.0

Mature Cow Herd

Date you want to wean calves (mm/dd/yy) 7/1/05
Today's date (mm/dd/yy) 1/7/2005

Culling practices outlined in the
Users Guide must be followed
in order to make this transition.

BREEDING

Start

Date to take bull out 1st time 2/28/05
Date to pregnancy check 1st time 4/29/05

1st Year

Start Breeding 9/1/05
Take bull out of cow herd 2/28/06
Pregnancy check 4/29/06

2nd Year

Start Breeding 10/16/06
Take bull out of cow herd 2/28/07
Pregnancy check 4/29/07

3rd Year

Start Breeding 11/30/07
Take bull out of cow herd 2/28/08
Pregnancy check 4/28/08

CALVING

Start

Year-round calving, dates variable

1st Year

180-day calving season begins 6/11/06
180-day calving season ends 12/8/06

2nd Year

135-day calving season begins 7/26/07
135-day calving season ends 12/8/07

3rd Year

90-day calving season begins 9/8/08
90-day calving season ends 12/7/08

Select if breeding replacement heifers

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