

Beef Cow Herd Replacement Requirements Calculator

This decision aid addresses the questions of how many calving replacement females need to be added to the herd annually? Then the number of females exposed needed to produce the raised replacement required is calculated.

The number calving's expected in a cow's life, (longevity), age the replacement entering the herd and culling rate need to be estimated. This can give a starting number for estimating replacement needs. Having cow herd historical ID birth year records certainly addresses these questions. The decision aid calculates a percent and then the user can enter a value they want to use. Herd cow losses other than for age raise annual replacement needs. For example, culling open cows raises the number of replacements required to maintain herd size.

The decision aids then address the adjustments made from the time the weaned calf is chosen for a potential replacement until she calves with a live calf. This includes death and culling losses as well and the breeding system used and the expected reproduction performance results.

Two breeding systems are included for calculations. Conventional artificial insemination (AI) with follow-up natural service or cleanup bulls. A sexed semen (AI) breeding system as by gender section reduces the number of exposed females required to produce the necessary replacements. With the use of clean-up bulls the overall pregnancy and pregnancy and calving losses are assumed to be the same by breeding system.

Death and culling losses in the production cycle raise the replacement needs.

A separate sheet is included to do the calculations associated with the sexed semen reproduction calculation.

Natural service would give the similar results as the combination of conventional AI and cleanup bulls.

In summary this decision aid calculates the number of beef cattle herd replacements required and the number of exposed females necessary to produce the required raised calving replacements going into the cow herd.

This decision aid facilitates the use of "what if" evaluation of key performance measures.