

# SUSTAINED COW FERTILITY

## THE NEW FERTILITY TRAIT

Beef cows that have a greater chance of breeding each year improve herd profitability several ways. In addition to reducing the cost of developing replacement heifers, better cow fertility results in more, heavier weanling calves to market. Additionally, older cows tend to have less calving difficulty. Cow herds that are genetically more fertile will have more older cows. Even though cow fertility has low heritability, it has a large impact on profitability. Research has shown that small genetic improvement in cow herd fertility often has the greatest impact among all the traits under selection. When included in a selection index, cow fertility always has the most influence on index values.

**SUSTAINED COW FERTILITY (SCF)** is a prediction of a cow's ability to continue to calve from three years of age through twelve years of age, given she calved as a two year old.

- Calving observations from cows at age three and older are evaluated.
- Observations are recorded as 1 (successfully calved at a given age) or 0 (failed to calve), or can be recorded as unknown.
- When an observation is recorded as unknown, the female is not penalized.
- Unknown observations occur in several situations - ET flush cows, sold/transferred females, or females that die before they can calve or be considered open.
- Diligently recording and reporting culling reasons is essential - culling codes makes the SCF EPD one of the best tools for improved fertility.
- The analysis accounts for milk, total maternal, and calving ease
- For the SCF analysis cows are grouped into contemporary groups by herd within year and season of calving, which permits the analysis to separate the effects common to a set of cows from the genetic potential of each individual.
- The environment a cow was raised in and is bred in can have a permanent impact on her ability to breed, which is accounted for in the evaluation.

## HOW TO USE THE EPD

- The EPD is expressed as a deviation in the proportion of the ten possible calvings to twelve years old
- For example, the daughters of a bull with a +10 EPD would have the genetic potential to have one more calf by age twelve than the daughters from a bull with a 0 EPD. In other words, the daughters from the +10 EPD bull would have a 10% greater probability of having one more calf than the bull with a 0 EPD. This is equivalent to saying that the daughters are 10% more likely to remain in the herd to age 12.

