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# Is each of your **COWS** Receiving Adequate Nutrition to Produce a Calf Every Year?

## Introduction

- Good reproduction rates are important to the financial success and profitability of a cow/calf operation.
- The goal is a cow should produce a calf every year.
- Cows that do not produce calves every year are using more feed and labor resources.

### Reproductive Cycle

- Average gestation period for cattle = 285 days.
- No. of days remaining after calving for cow to conceive = 365 days - 285 days = 80 days.
- The process by which the uterus returns to its pre-pregnant state is called involution, and it takes about 45 days.
- The postpartum interval, if conditions are ideal, for beef cows is between 50 and 60 days for an average of 55 days. First-calf heifers will be at least 10 days longer.

### Ways to Increase Conception Rates

- About 90 % of cattle in optimum body conditions will resume estrus cyclical activities 60 days post partum.
- Select heifers and cows with high reproductive efficiency.
- Have a good herd health program.
- Feed cattle minerals always

### Ways to Increase Reproductive Rates

- Use semen tested bulls.
- Be vigilant or use markers to detect heat.
- Consider pregnancy tests by palpation, ultrasound, and blood tests.
- Maintain good hygiene at calving.

### Preparing Heifers

- Poor nutrition delays puberty, reduces conception rates and increases pregnancy loss in heifers.
- Heifers raised on very high nutrition can lead to breeding problems (too fat).
- Heifers should weigh about 60-65 % of their expected mature weight at their first breeding.
- During gestation heifers need to gain a pound of live weight per day, and so they need supplemental feeding to ensure they are still growing during pregnancy.
- The fetus continues to grow particularly during the 3rd trimester of pregnancy.
- If the heifer is not fed to meet its requirements for growth and pregnancy, it may reduce its chance of rebreeding in the next breeding season.

### Preparing the Cow

- In general cows fed a high energy diet after calving conceive earlier than those with low energy intake.
- Low protein intake can lead to infertility.
- In general, cows should be fed to meet their nutrient requirements 22-55 days before parturition and 90 days after parturition.

### Use of Body Condition Score (BCS) to Feed Heifer and Cows

- Body condition scores are:
  - » 1 to 3 = thin;
  - » 4 = borderline;
  - » 5 to 7 = optimum;
  - » 8 to 9 = too fat.
- Research at UF reported as cattle BCS decreased from 5 to 4, pregnancy rate decreased by up to 30 percent.
- From BCS 4 to 3, there was another reduction of pregnancy by 30 percent.

### When to Evaluate Body Condition Score

- At breeding.
- At weaning - the advantage is that the time period from weaning to calving is the easiest and most economical time to add condition to cattle.
- 90 days prior to calving so that one has sufficient time to adjust the feed ration to ensure cows are at the adequate body condition at calving.

