United States
Department of
Agriculture

Animal and
Plant Health
Inspection
Service

Veterinary
Services

Sparse Use of Reproductive Management Technology for Beef Heifers and Cows

National Animal Health Monitoring System

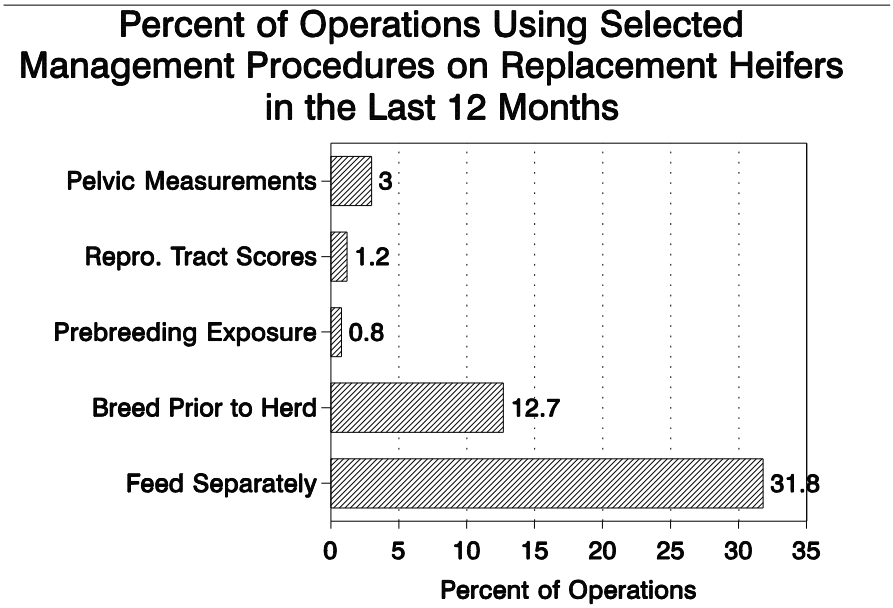
A range of technology is available to cow/calf producers to aid in reproductive management of females. Adoption of specific technologies for an operation depend on many factors including current level of performance, availability of facilities and labor, and economic return.

The USDA's National Animal Health Monitoring System (NAHMS) asked cow/calf producers about use of many of these options during the Beef Cow/Calf Health and Productivity Audit (CHAPA). NAHMS conducted the CHAPA on 799 operations located in 18 of the top beef states.[1] Those 18 states represented 70 percent of U.S. beef cow/calf operations.

- Some sources say that using pelvic measurements to index heifers for selection purposes can help to minimize dystocia, while other sources question the procedure's value. Three percent of producers report using this technique in their herds (Figure 1).
- Reproductive tract scoring can be used to select heifers that are reproductively ready for the breeding season and, thus, minimize carrying costs of heifers that will very likely fail to cycle and conceive early in the breeding season. Just over 1 percent of producers use this relatively new management tool.

It is encouraging to note that 31.8 percent of producers feed replacement heifers separately from the rest of the herd, providing an opportunity to meet their unique nutritional needs more effectively.

Figure 1



[1] Alabama, Arkansas, California, Colorado, Florida, Georgia, Iowa, Kansas, Kentucky, Mississippi, Missouri, Nebraska, New Mexico, Oklahoma, Tennessee, Texas, Virginia, and Wyoming.

Target population: beef cow/calf producers with 5 or more beef cows and with 50 percent or more of 1992 calves born from January through June.

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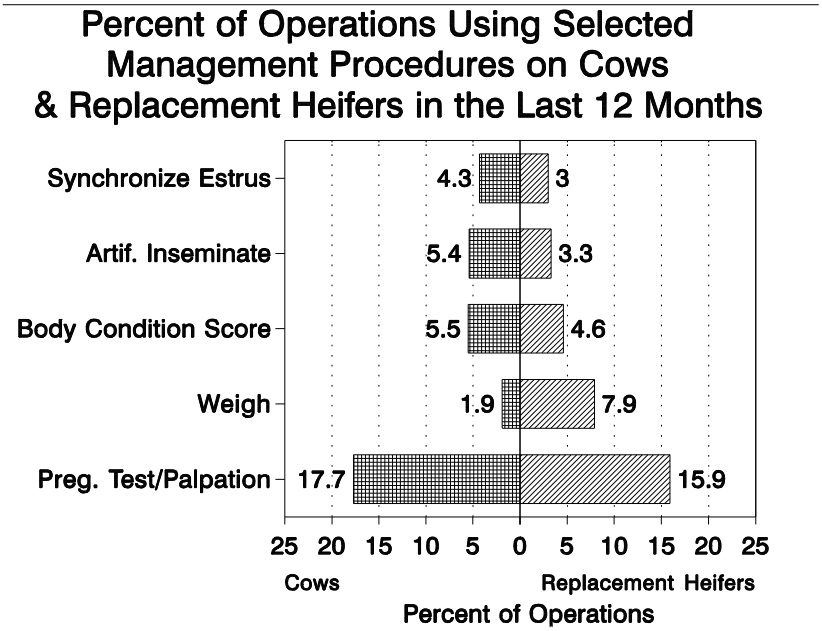
Figure 2



- Rectal palpation of females 45 or more days after the end of the breeding season can be used to predict the time of calving and eliminate late calvers and those that are nonpregnant from the herd, reducing feed costs. Nearly 16 percent of producers pregnancy test any heifers by palpation (Figure 2). Slightly more (17.7 percent) use the technique on the cow herd.

- Artificial insemination offers the producer the opportunity to incorporate top quality genetics into the herd without incurring the purchase and carrying cost for such a quality bull. In this way, large advances can be made in selected traits in a single generation rather than over several generations using lower quality bulls. About 3 percent of producers artificially inseminate any of their heifers, while 5.4 percent do so with some of their cows.

- Using estrus synchronization can add efficiency to artificial insemination programs and can be used to increase the number of calves born early in the calving season. Producers from 3 percent of all operations report synchronizing estrus on some of their heifers. A slightly higher percentage of producers (4.3 percent) report synchronization of some of their cows.

Also encouraging is that 12.7 percent of producers breed heifers at least 2 weeks prior to the rest of the herd. This practice allows heifers the extra time needed to resume cycling after calving prior to the onset of the cow herd breeding season.

Body condition scoring is an effective way of monitoring the gross nutritional status of the herd. Poor body condition at calving has been associated with delayed returns to cycling; thus, cows become pregnant later in the breeding season or not at all. Nearly 5 percent (4.6 percent) of producers report doing some body condition scoring of heifers. More producers (15.5 percent) evaluate body condition of the herd's cows.

Benefits to specific producers may be less than the cost of employing some of the reproductive management technologies mentioned here. However, there are no doubt situations where the use of one or more of these techniques could pay large dividends.

NAHMS collaborators included the National Agricultural Statistics Service (USDA) and State and Federal Veterinary Medical Officers. For more information, contact:

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