



# Sustained Cow Fertility Research Released

Fertility is certainly one of the key factors in determining profitability in cow herds by increasing production efficiency. In 2000 the American Hereford Association (AHA) instituted a mandatory Whole Herd Reporting Total Performance Reporting (TPR™) system, and many breeders had been collecting whole herd information prior to this time.

TPR has added strength and consistency to genetic evaluation and is the recommended system of the Beef Improvement Federation (BIF). As we continue to collect data at all levels of production, we are given the opportunity to develop traits that can directly affect the profitability of producers.

Recently, the AHA set out to conduct a research project with Mike MacNeil, research geneticist at the U.S. Department of Agriculture Agricultural Research Service (USDA-ARS) Fort Keogh Livestock and Range Research Laboratory, Miles City, Mont., to look at selection practices that could improve fertility of daughters of

Hereford sires. This research is only possible through the Whole Herd

Reporting of AHA breeders.

Sustained Cow Fertility (SCF) is the trait that is evaluated, and it is a sire model. Females were required to be in groups of at least three and calve within 60 days. Then reproductive success was

achieved by a calving interval of 425 days or less. You can read all about it in the online version

of the article written by MacNeil at <http://jas.fass.org/content/89/6/1712>.

SCF will be different from some other fertility traits such as stayability because a sire will get credit each time a daughter calves beginning at 2 years of age instead of waiting to see if a sire's daughters make it to 5 or 6 years of age. In addition, SCF will account for censored records. For example, if a female goes into an embryo transfer (ET) program or is sold to another registered breeder, then that female will not be considered a failure, but the record will be censored with no credit.



The heritability of SCF is less than .10. This is in line with research and literature. Obviously, as we continue to gather additional records through TPR, then this may increase. In addition, remember that the various research projects conducted at AHA over the past few years have shown fertility in a commercial cow herd can be significantly increased by heterosis.

You will be able to see the results of this evaluation on the AHA website, *Hereford.org*. The results can be presented on alternative scales, but for this research report, you will find it presented as a risk ratio (RR).

As you look through the sires, average will have a RR=1 with a sire with more fertile daughters having a RR less than 1 (i.e., they are sires of low risk daughters; daughters that are less likely to be open).

Because fertility has a tremendous bearing on economic importance in the beef cattle industry, the results of this evaluation along with Heifer Calving Rate (HCR) will be used to revise the Baldy Maternal Index (BMI\$) and Brahman Influence Index (BII\$).

## HRF donation

As a staff we are looking forward to "The Harvest" fund-raiser event for the Hereford Youth Foundation of America (HYFA) this month in Sonoma, Calif.

Lot 24 in the auction is a pheasant hunting trip donated by Rausch Herefords, Hoven, S.D. The Rausch family will provide the property and guide for three days and five hunters during the 2011 season. Normally the season is the fourth week of October through mid-December. This opportunity is priceless, and all proceeds will benefit the Hereford Research Foundation (HRF).

HRF was established in 2009 as a division of HYFA to support breed improvement projects outside the scope of the AHA budget. **HW**