

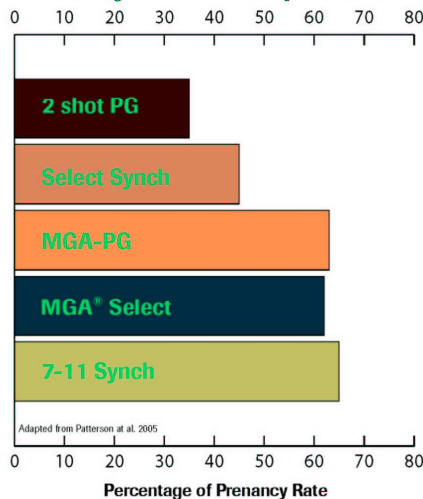
# Reproductive Management in Beef Cattle

*Dr. Patterson, Professor of Animal Science  
University of Missouri*

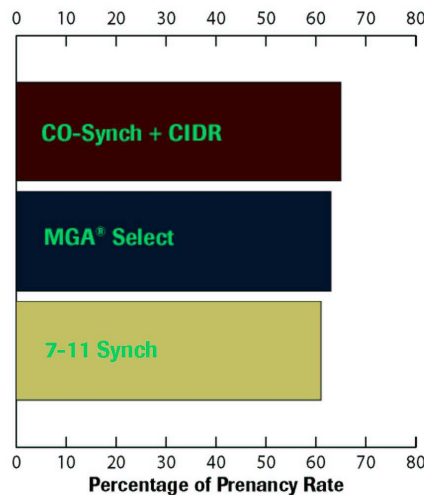
The potential for genetic improvement in beef herds in the U.S. through advances in biotechnology has never been greater. Recent improvements in our understanding of methods of inducing and synchronizing estrus and ovulation in postpartum beef cows and replacement beef heifers creates the opportunity to significantly expand the use of AI in both purebred and commercial herds.

The tables below provide a comparison of estrus synchronization protocols and resulting pregnancy rates in postpartum beef cows on the basis of AI performed after detected estrus or at predetermined fixed times with no estrus detection. Clearly, technology now exists to successfully inseminate beef cows at predetermined fixed times with resulting high pregnancy rates, comparable to those achieved with heat detection.

**Pregnancy rates in postpartum beef cows after treatment with various estrus synchronization protocols.**



**A.I. performed at predetermined fixed times with no estrus detection**



The significance of these recent improvements in reproductive management requires expanded working relationships among the production sector, industry, and academia to successfully impact use of AI among beef cattle producers in the U.S. These respective groups came together one year ago with the collective mission: "To optimize the productivity and improve the profitability of cow-calf operations by facilitating the adoption of cost-effective, applied reproductive technologies."

The primary goal set forth by these various groups is: "To educate beef cattle producers on sustainable reproductive management systems to maintain U.S. leadership and competitiveness in the world beef market." This goal will be accomplished with the support of the Reproductive

Leadership Team whose efforts will be dedicated to:

- Promotion of wider adoption of reproductive technologies among cow-calf producers.
- Education of cow-calf producers in management considerations that will increase the likelihood of successful A.I. breeding.

- Education of producers in marketing options to capture benefits that result from use of improved reproductive technologies.