

ABSTRACTS
*** Author Presenting Paper**

106 Reproductive management of the 40,000 pound dairy herd. J.S. Stevenson, *Kansas State University, Manhattan.*

Challenges facing high milk-producing cows limit their reproductive efficiency. These include interrelationships among body condition, DM intake, transition from the dry period to lactation, onset of normal estrous cycles, detection of estrus, and embryonic survival. Attention is required to details associated with diet formulation, feed bunk management, cow comfort in free stalls, holding pen, and milking parlor during extremes of temperature and humidity, proper hoof care, milking management and mastitis prevention, control of ovulation and estrus, and early non-pregnancy diagnosis. Estrus will be detected by automation using pedometry, rump-mounted pressure-sensitive radiotelemetric devices, and in-line parlor milk progesterone tests. More highly fertile heifers will be inseminated with sexed semen or sexed embryos as a source of more replacement heifers. Strategies to impregnate high-producing cows will require more ovulation control before first and subsequent services without detection of estrus. Because of high rates of embryonic death, more pregnancies will be achieved by inseminating sexed embryos. Clones produced from adult "super" cows will be transferred to recipient cows. Intensive management of transition cows will occur by monitoring key metabolic markers using hand-held devices. These devices will allow early detection of illnesses that will be followed by proven interventions to alleviate some of their residual effects. Body condition will be monitored more closely to reduce dry cow and transition problems and prevent prolonged anestrus by maximizing early postpartum DM intakes. Cow comfort will be monitored more closely to minimize standing time for milking, maximize standing time for estrus and feed intake, and maximize resting time for rumination and more efficient milk synthesis. Many of the reproductive technologies used today will be refined and incorporated into the management of cows on fewer dairy farms with more cows per farm. Despite trends for longer lactations associated with bST and lesser pregnancy rates, renewed lactations following parturition will continue to be essential for longevity of cows in the herd.

Key Words: Reproductive Management, Dairy Cows