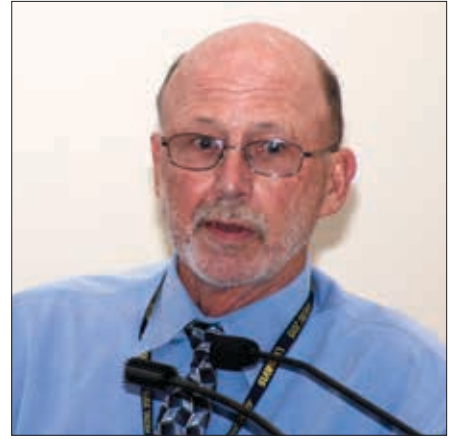




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► ET practitioner Larry Lanzon advised producers to have a candid discussion with their chosen practitioner before implementing an ET program for the first time.

Embryo Transfer: You Can Do It

ET specialist shares what producers can expect and tips for success when using embryo transfer.

Story & photo by **Troy Smith**, field editor

Utilization of embryo transfer (ET) by the beef cattle industry was the topic addressed during the Applied Reproductive Strategies in Beef Cattle (ARSBC) symposium in Davis, Calif., by veterinarian Larry Lanzon. Based at Turlock, Calif., and specializing in ET services, Lanzon said the technology has often been described as a means of propagating the very best females, using the influence of the very best bulls, to achieve rapid genetic progress.

“The economic impact of gaining multiple offspring from superior females in one calving season is most obvious,” stated Lanzon. “The result is more marketable progeny, faster and for less money.”

Before implementing an ET program for the first time, Lanzon advised producers to have a candid discussion with their chosen practitioner. In his experience, newcomers to ET often have unrealistic expectations based on an acquaintance’s reports of obtaining a large number of top-quality embryos from very few flushes. As a realistic example, based on data collected from 2,048 recoveries, Lanzon said the average superovulation resulted in 11.5 embryos of which 6.2 were of transfer or freeze quality. Producers should be aware that 25% of all superovulations yield 0 embryos that can be transferred or frozen.

Lanzon described the sequential steps for ET, which begin with selection of donor and

recipient females. A physical examination of the donor should include ultrasonographic evaluation of her reproductive tract. Lanzon said a donor candidate should be scrutinized for past incidence of dystocia, retained placenta, cesarean section, anestrus or other reproductive disorders that may have a negative impact on embryo production. All prebreeding vaccinations should be completed at least 30 days prior to embryo transfer.

Lanzon recommended recipient female selection on the basis of soundness, production and reproduction history, health and mothering ability. Recipient vaccination programs should match that of donors.

Lanzon has been engaged in conventional embryo transfer since 1980 and, for the last three years, has also performed ovum pick up and *in vitro* fertilization. He calls the latter process of recovering donor oocytes for fertilization in the laboratory tedious, labor-intensive and expensive. Lanzon says it will likely be replaced by stem cell oocyte production, which involves *in vitro* production of oocytes from isolate cultured ovarian germ cells. Though still under development, Lanzon said the new technology holds the promise of improved results with less invasiveness, which improves animal welfare at the same time it enhances animal reproduction.

Lanzon spoke during Monday’s ARSBC session focused on field experiences. Visit the Newsroom at www.appliedreprostrategies.com to view his PowerPoint, read the proceedings or listen to his presentation.



Editor’s Note: *Troy Smith is a freelance writer and cattleman from Sargent, Neb. Comprehensive coverage of the symposium is available online at www.appliedreprostrategies.com. Compiled by the Angus Journal editorial team, the site is made possible through sponsorship by the Beef Reproduction Task Force.*