

Artificial Insemination in Swine Workshop

December 6-7, 2007

Southern Research and Outreach Center – Waseca, MN



Successful management of the breeding herd begins with successful breeding practices. A variety of human and environmental factors, in addition to the sow's own genetic potential, affect the efficiency with which sows are bred, and also affect subsequent farrowing success and litter size. Artificial insemination is used in nearly all modern swine breeding herds, compared to hand or pen mating systems. Artificial insemination offers economic advantages, while improving genetic makeup of offspring, when used correctly. New information on methodology and updates in technology continue to improve the efficiency of its use.

This two-day intensive workshop is designed to give participants an increased understanding of the factors involved to successfully breed females using modern artificial insemination techniques. The course is appropriate for people with a limited knowledge of breeding swine as well as veterans wishing to review the basics and stay abreast on recent developments. Topics that will be covered in the workshop include:

Anatomy and Physiology: Hormonal patterns; regulation of ovulation and pregnancy; important characteristics of the gilt/sow reproductive tract

Heat Detection and Breeding: Timing of insemination; steps to improve ability to detect estrus; importance in overall breeding herd efficiency; fertility factors; number of services; catheters

Intrauterine Insemination: Demonstration of new technique; explanation of differences to conventional AI

Sow Nutrition: Feeding the sow for productivity and longevity; sow vs. gilt nutrition; effect on puberty and litter performance; feeding to achieve desired body condition; use of fiber

Semen: Handling; storage; extension; shelf life

Reproductive Problem Solving: Opportunity for further discussion of specific on-farm reproductive issues

Classroom instruction is provided on the first day of the program, lasting from noon – 9 pm. A hands-on session, conducted at swine research facilities, is conducted the second day of the program from 8 am to noon. The hands-on session incorporates numerous activities relating to material covered in the classroom portion of the course in order to maximize student learning and understanding. In addition, class participants will be automatically certified or recertified under the Pork Quality Assurance (PQA) program by completing the course.

University of Minnesota faculty and educators and swine industry experts provide instruction for the course. Cost of the program is \$100 per person, and includes learning materials, lunches, breaks, instructor fees, and biosecurity clothing for hands-on training sessions. For more information, contact Dr. Mark Whitney, swine extension educator, at (507) 389-5541. Individuals wishing to register for the workshop should contact the Minnesota Pork Board at (507) 345-8814.

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