**How can A.I. help me?**

**Improved Genetics**
Using semen from proven A.I. sires allows for more rapid genetic improvement by accessing bulls that would be too expensive to obtain otherwise. For instance, semen from a bull that is worth $65,000 live might be purchased for $20 per straw.

**Biosecurity**
Artificial insemination is ideal for closed herds that need fresh genetics without purchasing sires. Frozen semen from reputable companies is subject to strict health and disease prevention standards.

**Enhanced Fertility**
Managing cattle for optimum A.I. performance concentrates the calving season so that the calf crop is more uniform, older and heavier at weaning and overall more valuable.

**More Profit**
Several economic studies have proven that A.I. with estrous synchronization generates more profit for purebred and commercial cattle production.

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**Cost**
- The artificial insemination training costs $450 per attendee.
- A nonrefundable deposit of $225 is required to be enrolled.
- Application to the waiting list is free (see the application on the inside of this brochure).
- The fee includes written training materials, instruction and lunch both days.
- Equipment and semen will be available for purchase during the training.

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**Artificial Insemination Certification**
A partnership of the Middle Tennessee AgResearch and Education Center, the University of Tennessee Department of Animal Science, and Southeast Select Sires to add value to cattle production through improved reproductive management.

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Middle Tennessee AgResearch and Education Center
P.O. Box 160
1000 Main Entrance Drive
Spring Hill, TN 37174
http://middle.tennessee.edu

13-0230 05/13
Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating. UT Extension provides equal opportunities in programs and employment.
**Day One**

8:30 a.m. **Registration, Introduction and Explanation of the Course Objectives**

9 a.m. **Reproductive Anatomy and Physiology**
This section will cover the key components of the female reproductive tract and hormones involved in regulation of their function. Time will also be spent on male reproductive anatomy and hormones to help understand bull fertility.

10 a.m. **Artificial Insemination Technique**
A thorough explanation of how to palpate the female reproductive tract, pass the cervix and position the insemination rod for optimum fertility.

11 a.m. **Artificial Insemination Equipment**
Explanation of, and price list for, the equipment involved in storing and thawing semen and inseminating cows. Special attention will be paid to advancements in technology.

11:30 a.m. **Lunch (Provided)**

12:30 p.m. **Reproductive Tracts and Semen Handling**
The class will be split and one section will practice A.I. technique on excised cow or heifer reproductive tracts. The other section will practice handling and thawing semen and inseminating cows. Special attention will be paid to advancements in technology.

1:30 p.m. **Reproductive Tracts and Semen Handling**

2:30 p.m. **First Session Practicing With Cows**
Stanchions are on site to restrain 12 cows for practicing A.I. technique. Several instructors will be available to walk you through the process and provide coaching.

4:30 p.m. **Tour Southeast Select Sires Headquarters**
Southeast Select Sires distribution warehouse and offices are located just a few miles away. The tour will allow you to see how distribution is managed and ask questions about the process.

6 p.m. **Dismiss for the evening (Supper on your own)**

**Day Two**

8 a.m. **Heat Detection (Coffee and donuts)**
The science and “art” of proper heat detection and heat detection aids.

8:30 a.m. **Estrous Synchronization Protocols and Pregnancy Diagnosis**
This section will explain the most current synchronization protocols, highlighting their individual benefits or drawbacks. Discussion will also focus on different pharmaceuticals and the history of their use in reproductive management. Different methods of pregnancy diagnosis will be explained and their use demonstrated.

9:30 a.m. **Developing Heifers and Reproductive Health**
Discussion of the role nutrition plays in fertility and success to A.I. in heifers (how to make good cows). A description of the most relevant reproductive diseases, how they affect fertility and how to prevent them.

10 a.m. **Second Session Practicing With Cows**

11:30 a.m. **Lunch (Provided)**

1 p.m. **Written Exam With Discussion/Equipment Orders**
A brief written exam will be given and reviewed to continue the learning process. Time will also be allotted to place equipment and semen orders.

2 p.m. **Third and Final Session Practicing With Cows**
Students will be asked to demonstrate that they understand the methods of thawing semen and inseminating cows. An instructor will work with each student until he or she is comfortable with the entire process.

4 p.m. **Evaluations and Award Certificates**
Evaluations will be available to provide feedback for improving the course. Certificates will be awarded as the evaluations are turned in.

4:30 P.M. **Dismiss**