

# Empowering Small Farmers: Affordable AI School

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## Introduction

Over the past decade, the price of herd bulls has surged by 65%, posing a significant challenge to small-scale producers (1). With tight margins, opting for lower-priced bulls may compromise calf performance in numerous ways, but artificial insemination offers a cost-effective option for beef producers to access exception genetics without purchasing a higher priced bull (2).

## Need/Goal

Provide a cost-effective artificial insemination class to teach small producers how to artificially inseminate their own cattle and increase cattle genetics without the added cost of owning a bull.

## Programming Planning and Implementation

- Single day class for participants at the Paris Stockyard
- Class Schedule
  - Classroom setting during the morning learning the basics and implementation of AI and synchronization
  - Hands on learning of artificial insemination on reproductive tracts and live cattle. Additional education on at home cattle pregnancy tests.
- Class taught by Dr. Les Anderson, UK Beef Reproduction Specialist



*Figure 1 and Figure 2 show a demonstration from Dr. Les Anderson on the process of artificial insemination. Figure 2 shows the reproductive tract which participants could practice on before working with a live cow.*



*Figure 3, Figure 4, and Figure 5 participants are practicing artificial insemination on a cow under the watchful eye of Dr. Les Anderson*

## Class Materials Needed:

- Handouts about artificial insemination and synchronization protocols
- Artificial insemination start up materials
- Rented cattle for use of participants
- Reproductive tracts for practice
- Food and drink

## Summary

- 17 participants from four different counties attended the class
  - Ages ranging from sixteen to mid-60's
  - Beef and Dairy Farmers
  - Most under a 50 cow herd
- Final Cost for each participant was \$100
- Each participant took home the following tools to start artificial insemination on their cattle herd:
  - Straw Tweezers
  - Disposable OB Sleeves
  - Straw Cutter
  - A Gallon of OB Lube
  - Disposable AI Gun Sheaths
- 14 participants planned to implement at least one of the techniques taught at the school within the next year

## Citations

1. Walker, J., Perry, G., and Rich, J. 2019. Implementing Profitable Reproductive Technologies. The Range Beef Cow Symposium XXVI.
  2. Johnson, S.K., and R.D. Jones. 2008. A Stochastic Model to Compare Breeding System Costs for Synchronization of Estrus and Artificial Insemination to Natural Service. Prof. Anim. Sci. 24:588-595
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