

WILEY L. BEAN SWINE DEMONSTRATION UNIT

Mark Crenshaw

Associate Specialist, Animal & Dairy Science

The Wiley L. Bean Swine Demonstration Unit was established in 1985 as a joint program between Mississippi State University Extension Service and Tennessee Valley Authority Agriculture Institute. The program was established to serve as an educational resource to area swine producers in Northeast Mississippi. Throughout the first ten years of this program educational programs focused on feeder pig production, swine facilities, equipment, technologies and management procedures. In 1995, a genetic improvement program was developed to provide area producers with a source of replacement gilts and recommendations for a breeding program that would provide the foundation for a producer network. Emphases on this program have been the primary focus of educational programming at the Wiley L. Bean Swine Demonstration Unit since 1995.

Genetic Program: Gilts (Hampshire x Landrace) produced at the Wiley L. Bean Swine Demonstration Unit are available to producers as replacement gilts. Following a breeding program as outlined by the Extension Service, these gilts are bred to a maternal line Yorkshire Boar. Producers have the option of providing their own maternal York boar or by artificial insemination using fresh semen from maternal line Yorkshire boars collected and extended by the staff at the swine unit. Also producers receive training and assistance with artificial insemination techniques at the Wiley L. Bean Swine Unit.

Following the genetic program design, producers keep replacement gilts from the mating of the maternal line York Boar and F-1 (Hamp x Landrace) gilts and mate these gilts (York x Hamp/Land) to a terminal line boar. Pigs produced from this mating are shipped to market. About 25% of the total pigs marketed (482 pigs) in 2001 were sold as replacement gilts (109 gilts) to local swine producers.

Producers participating in the genetic program have market pigs that are genetically similar so the smaller production units can “pool” the pigs and market them in-groups large enough to take advantage of carcass merit buying programs. Formation of producer marketing groups can progress into networks of purchasing feed, equipment, and supplies with the Swine Demonstration Unit serving as the nucleus of the program.

In 1997, the swine industry experienced below breakeven market prices with record low prices continuing into 1999. This slowed progress of program participation and development at the Wiley L. Bean Swine Demonstration Unit. However cash hog prices rebounded in 2000 and continued through 2001 allowing producers to re-capture some of the equity lost in previous years. With an increase in cash hog prices, participation in the genetic program also increased.

Environmental issues: Changes in environmental regulations have placed pressure on previously established swine operations with compliance of the new standards for permit renewal. Many swine operations utilize some type of a lagoon system for waste disposal. Normal lagoon management requires agitation and pumping of the solids once buildup occurs. While there are many products on the market today that claim to eliminate solid buildup, the effectiveness of these products is still undetermined. The Wiley L. Bean Swine Demonstration Unit selected a lagoon additive, which claims to reduce solid buildup, and began using the product according to company directions. Prestage Farms is assisting with this demonstration by providing equipment designed to measure sludge buildup. This demonstration is on going and results will be used to verify the effectiveness sludge breakdown in an aging lagoon.

Composting: Mortality disposal is another environmental concern for swine producers. Composting appears to be the most favorable long-term solution. Incineration may be the best short-term solution for large production units but permits for this method have met resistance with DEQ and the Public. Small family farms must determine an approved method other than burial for disposal of mortality that is cost effective. Composting of mortality on family farms appears to be the most acceptable and cost effective long-term method for mortality disposal. Information concerning on farm composting can be obtained from the swine unit.

Computer Record Program (PORKS II): A commercially available production record program was purchased by the MS Pork Producers Association and donated to the Wiley L. Bean Swine Demonstration Unit to demonstrate and evaluate for potential use on family farms. Existing family farm swine producers often lack the time to test various programs for use on their farms and seek information regarding the use of programs. Having a commercially available production program with real data from the Swine Unit will provide producers the opportunity to view actual production data and to demonstrate how this information can assist with management decisions.

Other Program Activities 2001: Staff and resources at the Wiley L. Bean Swine Demonstration Unit support other programs throughout the state. These include:

- School Tours for K - 3 students (431 Students)
- 4-H/FFAJudging Clinics (Northeast District, Tippah County, Union County, Itawamba Community College)
- 4-H/FFA Judging Contest (Northeast District, Marshall County)
- Swine Shows (Dixie National Junior Roundup, Dixie National Barrow Show, MS State Fair, Northeast MS Fair)
- Pizza Farm (Pig Demonstration and Presentation)
- MSU Livestock Management Class (conducted Baby Pig Management Lab)
- Super Bulldog Weekend (assisted MS Pork Producers Association with Pork Promotion)
- Greene County (4-H Swine Project)
- MS Pork Producers Association Annual Meeting Report
- Individual Producer Visits (61 Adults)
- Research Project:
 - Dr. Cushman's Vegetable Research
- Furnished pigs to support research projects for:
 - Dr. Peter Ryan
 - Dr. Scott Willard
 - Dr. Randy Buddington

Educational efforts at the Wiley L. Bean Swine Demonstration Unit will continue to provide assistance to area swine producers and the swine industry. By providing individuals with accurate information regarding swine production and the swine industry, informed decisions can be made by these individuals regarding the development and management of a swine enterprise.

Contact: Mark Crenshaw, Associate Specialist, Box 9815, Mississippi State MS, 39762, phone 662-325-3516, or e-mail markc@ext.msstate.edu.