Ultra-Sound Technology being used by Oregon State Swine Producers in Selecting Replacement Breeding Animals

The Situation
Swine producers in Oregon, like swine producers nationwide, are faced with the need to continually improve production efficiency as well as product quality. Alterations and direction in production to meet required changes in consumer preferences and market fluctuations, is not an immediate roll over; it takes time and can be costly to the producer. Being faced with these as well as other challenges, has resulted in a decline in swine producers in Oregon.

The Oregon State Swine Producer’s organization, in cooperation with Oregon State University Livestock Extension Specialists, sought help in developing a program that would assist producers in selecting replacement animals purchased at the Oregon State Swine show and sale.

Our Response
The University of Idaho Cooperative Extension System has been using ultra-sound in the 4-H Program as a means of education for not only youth, but adults as well. Ultra-sound technology was introduced as a means of enhancing our ability to evaluate live animals at county fairs, and was intended to be a method to encourage the use of the technology as a tool to identify superior animals. Specifically, in the production of pork, superior animals are those with back fat less than 0.8” and loin areas that exceed industry standards in relation to size and breed. Animal selection enhances the quality of the product being marketed.

For the past six years, at the request of Oregon State University Extension Educators, University of Idaho Extension Educator technicians have traveled to Salem Oregon to ultra-sound breeding swine that are being shown and offered at auction at the Oregon State Fair. Providing live animal data was only one of our objectives, others being the education of swine producers, 4-H youth, and to educate and improve public perception of the swine industry in the State of Oregon.

Program Outcomes
A few producers faced our first year of ultrasound demonstration with skepticism; however, the use of ultrasound technology has allowed swine producers in Oregon to select better breeding animals that meet their herd needs. With this positive impact, we have shown improved stock in the form of a larger loin eye area (up to averages of 9.0” +), and back fat thickness much less than 0.5”. The final result is an improved yield of lean edible meat in marketable offspring.

Ultra-sound data is given to potential breeding swine buyers prior to the auction, thus assisting them in making wise purchases. The information has proven to be so beneficial that one hundred percent of the animals marketed are accompanied by ultra-sound data. Sellers report that the market value of the...
animals sold has increased twenty percent since ultra-sound data has been incorporated into the sale proceedings.

**The Future**

Program improvements and updating ultrasound technology and equipment will enhance the technicians’ ability to use the equipment to more accurately and quickly predict the amount of back fat and muscle that an individual animal has. Increased size and mobility of the monitors will be added to the equipment for larger audiences to observe actual operation of the equipment and measurements, thus expanding the educational value of ultra-sound technology.

**For More Information**

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