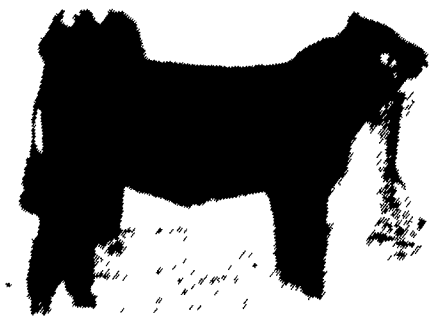
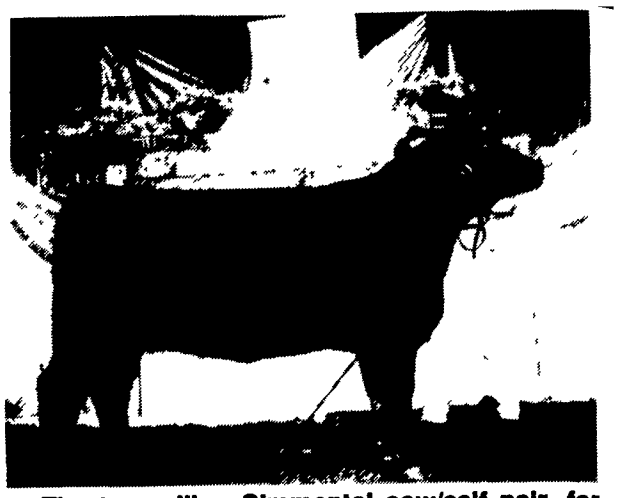


Top-selling Simmental bull at $5,000 went for Harvest Zing-A-Long owned by Lee and Linda Snyder of Harvest Plantation, Franklin.

The top-selling Simmental bred heifer, for $3,200, went for PS Toscas Best, owned by Raymond Stough, Winter Spring Farm, Spring Grove.



The top-selling Simmental cow/calf pair, for $3,300, went to MCB Ebony Eyes, owned by Matthew Miller and Bill Shoemaker, maple Cove Breeders, Manns Choice.

Simmentals Have Record Sale

WAYNESBURG (Greene Co.) — A record sale was posted at the Pennsylvania Simmental Association Fall Classic Sale here Oct. 24.

The top-selling bull brought $5,000. The top-selling bred and open heifers brought $3,200 and $2,900, respectively. The top-selling cow/calf pair brought $3,300.

The sale was a great success, according to the organizers. The sale average, excluding steers, was $1,218.12 a head.

"It proves that people have seen the effects Simmental genetics have had on their herds," said William Shoemaker, vice president of the association. "They are willing to purchase quality Simmental cattle to improve their existing herds at a time when beef prices are relatively low."

Top-selling bull at $5,000 went for Harvest Zing-A-Long owned by Lee and Linda Snyder of Harvest Plantation, Franklin.

The top-selling bred heifer, for $3,200, went for PS Toscas Best, owned by Raymond Stough, Winter Spring Farm, Spring Grove.

The top-selling open heifer, for $2,900, went for FS Show Down, owned by Fiebiger's Simmental, Jim Fiebiger Simmentals, Conover, Ohio. The top-selling cow/calf pair, for $3,300, went to MCB Ebony Eyes, owned by Matthew Miller and Bill Shoemaker, maple Cove Breeders, Manns Choice.

Ultrasound Making Waves in Ohio Pork Production

COLUMBUS, Ohio — Ultrasound machines could benefit pork producers and packers by predicting fat-free lean pork content in live pigs and carcasses, said Ohio State University Extension swine genetics specialist Steve Moeller.

"Lean content in hogs is how the producer is paid today," Moeller said. "The amount of fat-free lean pork in a pig determines the price a producer received at the market."

Using ultrasound to accurately measure fat-free lean content in live pigs and would help producers decide what pigs to keep as breeding animals. Previously, fat-free lean content could only be determined by measuring a pig's carcass after it had been killed

Packers could use ultrasound lean predictions to help determine the value of carcasses, so producers would be paid based on the weight and value of their product.

Moeller and researchers from Purdue University studied two types of ultrasound machines, A-mode and real-time, to see which one gave the most accurate predictions of fat-free lean content on live pigs and carcasses Results of their work were presented by Ohio State University graduate student Rebecca Emnett July 28 at the American Society of Animal Science and American Dairy Science Association annual meeting in Denver, Colo

"We found the real-time machine is a better predictor of lean content than the A-mode because it predicted more accurately and with less variation between the live pigs and carcass," Moeller said. "And, both machines were better at predicting fat-free lean on a live animal than on a carcass, which is good information for the industry to know."

While carcass measurement was shown to still give the best results, the real-time machine gave a good estimate, he said. Standard carcass testing measured fat-free lean content in pigs with 87 percent to 91 percent accuracy, while real-time was 86 percent accurate on live pigs and 85 percent accurate on carcasses. A-mode machines were only 68 percent accurate on live pigs and 60 percent on carcasses.

"The use of real-time ultrasound in a genetic selection program for lean content is very good when used on live pigs," Moeller said. "This could allow producers to enhance the efficiency of lean production through ultrasonic evaluation in a selection program."

While less accurate, the benefits of an A-mode ultrasound are that it is more portable and much less expensive — $2,000 versus $12,000 — than a real-time machine.

"A large investment in advanced technology has been proven more accurate, but producer have to make a decision of what type of data they want and at what cost," he said. "And until recently, real-time machines were large and difficult to maneuver in swine facilities, but units now can be worn similar to a backpack and are easier to move."

For producers who think both machines are too expensive to buy, there are about 25 certified ultrasound technicians in the United States, including one in Ohio, who travel the country and can provide an ultrasound service at a relatively low cost of $3 to $5 per pig, Moeller said.

"The cost of the service is often based on the number of pigs measured, so if a large volume are tested the cost could be less," he said.

Secret Of Prolific Chinese Pigs May Increase American Litter Sizes

DES MOINES, Iowa — Iowa State University animal scientists believe they have unlocked the secret to Chinese pigs' large litters, and they say the information can be used to dramatically increase litter size of American pigs.

"We have tremendous potential to increase litter size by up to three pigs," said Steve Ford, a professor of animal science. Increasing litters by one pig has been estimated to be worth nearly $2 billion to the swine industry.

Ford and graduate research assistants Matt Wilson and Nina Biensen outlined their research at the Midwestern sectional meetings of the American Society of Animal Science and American Dairy Science Association, March 16-18, in Des Moines.

For 10 years, Ford and other ISU researchers have studied the prolific Chinese Meishan pig. The Meishan give birth to 12 to 14 pigs, compared to 9 to 10 pigs for American breeds. In Iowa, the average litter size is 9.7 pigs.

The researchers compared the reproductive systems of the Meishan with the American Yorkshire breed. They discovered the placenta surrounding each growing piglet in the Meishan's uterus was smaller than the placenta in the Yorkshire uterus. The placenta plays a key role in the exchange of nutrients and waste products into and out of the uterus, and attaches each piglet to the uterine wall.

"What we and the Chinese have unknowingly been doing is breeding for different placental sizes," Ford said. "While we have tended to select for piglets with high birth weight and growth potential, the Chinese have long selected on number of piglets born. A smaller placenta is more efficient, occupying less of the limited uterine space. Basically, you get more peas in a pod."

The researchers could identify the most efficient placenta by calculating the ratio of piglet weight to placental weight. The greater the ration, the more efficient the placenta. "Surprisingly, we found three- to four-fold differences in this ratio within a litter," Ford said. "There were big piglets attached to small placenta, small piglets attached to large placenta and lots in-between."

To find that ratio, the researchers need some thread, a few clips and patience. As a sow gives birth, the researchers catch each piglet as it's born. They clip the umbilical cord in two places and attach matching tags to either end of the clips. The cord is cut between the tags, and the placental end of the cord retracts in to the birth canal. When the afterbirgh is expelled, the researchers can compare a piglet's weight to its tagged placenta.

The researchers wanted to determine whether American pigs have the genetic capability to produce large litters from small placenta. They bred Yorkshire males and females born with large placentas together, and did the same to those born with small placentas.

"In their first litters, the small-placenta pigs gave birth to three more pigs than those in the large-placenta crosses," Ford said. "Piglets born to the small-placenta crosses also had small placentas. We repeated the trial, with the same results. The results suggest we — or anyone — can select for litter size. It's very low-tech."

The researchers are now developing two distinct swine herds — one with small placentas and large litters, and the other with large placentas and small litters. "Our goal is to get two populations producing producing uniform litter numbers," Ford said. "Once we achieve uniformity, we can work on selecting for small, efficient placentas that grow large, robust piglets."

They wil study evidence that the small placenta is a maternal trait. If so, a small-placenta sow could be bred to any superior boar to achieve larger litters. They also will study whether there are placental-size differences among American breeds.

The Iowa Agriculture and Home Economics Experiment Station funded the research.

F.O. 4 October Milk $17.04

ALEXANDRIA, Va. — Middle Atlantic Order Acting Market Administrator David Z. Walker recently announced an October 1998 weighted average milk price of $17.04 per hundredweight

The weighted average differential was 92 cents per hundredweight and the producer nonfat milk solids (NFMS) price was 72 cents per pound. The weighted average price was up 27 cents from September and was $2.94 higher than a year earlier.

The producer NFMS price was down 11 cents from last October. The nonfat milk solids price, applicable to handler payments, was 72.55 cents per pound for the month, down 10.90 cents from last year.

The gross value of October producer milk, adjusted to 3.5 percent butterfat was $83.3 million, compared to $67.9 million a year ago.

Mr. Walker said that producer receipts totaled 492.8 million pounds during October, an increase of 7.2 million pounds from last October and the average daily delivery of 3,408 pounds per producer was unchanged from a year earlier.

A total of 4,664 producers supplied Order 4 handlers during the month, an increase of 67 from a year ago.

Class I producer milk totaled 248.6 million pounds and was down 10.6 million pounds, or 4.1 percent from last October. Class I milk accounted for 50.44 percent of total producer milk receipts during the month, compared with 53.37 percent in October 1997.

The average NFMS test of producer milk was 8.73 percent, down from 8.74 percent the previous year. The average butterfat test of producer milk was 3.74 percent, up from 3.69 percent in October 1997.

Middle Atlantic Order pool handlers reported Class I in-area milk sales of 197.6 million pounds during October, a decrease of 1.2 percent from a year earlier, after adjustment to eliminate variation due to calendar composition.