

FIELD & FEEDLOT



ISU EXTENSION—NORTHWEST REGIONS

MAY 2011 ISSUE

Extension Web Sites

Ag Decision Maker

<http://www.extension.iastate.edu/agdm/>

Beef Center

<http://www.iowabeefcenter.org/>

Manure Management

<http://www.agronext.iastate.edu/immag/>

Pork Center

<http://www.ipic.iastate.edu/>

ISU Extension Dairy Team

<http://www.extension.iastate.edu/DairyTeam/>

Regional Conference Addresses Decisions for Today's Pork Producer

By Dave Stender, ISU Extension Swine Program Specialist

Nearly 150 pork producers and other industry representatives attended educational conferences across Iowa March 8-11.

The Iowa Pork Producers Association hosts these conferences each year in conjunction with the Iowa Pork Industry Center and Iowa State University (ISU) Extension. Sessions were hosted in Sheldon, Carroll, Nashua and Ainsworth.

The Ainsworth session was recorded and is available for online viewing. PowerPoint presentations and recorded session links are available online at www.iowapork.org under the "For Producers," "Seminars/Conferences" tab.

Benchmarking Sows and the Post-Weaned Pig Ron Ketchem, Swine Management Services, LLC

Ron Ketchem shared database information for benchmarking pork production and associated production costs across all production phases. He offered real data to help producers determine how they compare to others and develop some potential strategies to improve efficiencies on their farms.

Ketchem shared benchmarking data from farms in their data set. Pigs weaned per year for each mated female varies from just more than 20 in the bottom 25 percent to more than 28 in the top 10 percent. In addition, farrowing rates vary from 79.5 percent to 89.2 percent across these same groups.

"There is kind of a rule of thumb you can look at on farrowing rate. For each four percent change in farrowing rate, you will produce

1.35 more pigs-per-sow-per-year," Ketchem said. "So farrowing rate is a pretty big driver."

Ketchem noted that he has seen body condition scores slip on pigs coming out of the farrowing house.

"Sows need to eat more feed in the farrowing house when they are nursing more pigs and lactating longer," Ketchem said.

He offered some ideas to save more pigs at birth, including more tending at farrowing and drying piglets at birth.

"The top two farms in the database dried pretty much every pig that comes out," Ketchem said. "A lot of these units are extending the farrowing hours. In a lot of cases, we have not added any more labor, we have just redistributed the labor time. If you look at costs, each additional pig weaned can save about \$1.10 on expenses across the whole litter."

He recommended evaluating euthanasia protocols for light-weight pigs at birth.

"I've been a long-time proponent that we need to euthanize small pigs," Ketchem said. He added that 76 percent of pigs less than 1.5 lbs. were mortalities in the farrowing house. The odds of a pig less than 1.5 lbs. at birth making a market hog was less than five percent.

For more information from Swine Management Services, or to participate in their data set, please visit www.swinems.com, www.swinetrack.com, or call (402) 720-6600.

PRRS Control Strategies and Regional Projects

Dr. James McKean, ISU Extension Swine Veterinarian

Dr. James McKean discussed PRRS control while offering some food for thought as producers implement biosecurity in their operations and consider options to control the disease. He shared information from a regional PRRS eradication project in Iowa County and other regional projects being modeled across the country.

McKean explained the goals of these projects are to better understand PRRS and its movement to reduce prevalence in herds across the U.S., noting that there certainly are challenges with the disease.

“We know how to eliminate PRRS from herds without substantially decreasing production. What we haven’t figured out is how to keep you negative once we get there,” McKean said. “If we do these steps right, we will reduce the prevalence of PRRS in the subject area.”

McKean noted that pig movement is one of the largest challenges when evaluating the potential for PRRS eradication.

“We need to figure out what the risk of animal movement is,” McKean said. “If we can learn how to evaluate risk of pigs moving, then we can make more intelligent decisions about how you should allow them into areas, but we are not going to stop pigs from moving for any length of time in this program.”

Different weather patterns and scenarios will impact PRRS livability, McKean said. Sunlight and drying reduce livability. Cold weather and moisture increase its livability.

He urged producers to implement a biosecurity plan for their operations and stick to the protocol.

“If you are not doing this every day and your people aren’t doing this every day, you don’t have biosecurity,” McKean said. “Biosecurity has to be something that you do the same way every day.”

Aerosol transmission may be a concern, but as pig density goes down, it becomes less of a concern, McKean said. Carefully monitoring truckers’ boots, trailers, clothing of all involved, visitors, equipment coming into the barn, as well as clean hands, coveralls and boots are good places to start, he added. After all these things are in line and producers assess their risk profile, then they can look to air filtration.

Pig Production After Removal of Growth Promotion Drugs Dr. James McKean, ISU Extension Swine Veterinarian

Dr. McKean also talked about antibiotic use and current discussions in the media and Legislature, including draft guidance 209 and the Preservation of Antibiotics for Medical Treatment Act (PAMTA) to limit antibiotic use in livestock production. Draft guidance 209 is an outline of FDA public health concerns with recommendations, not legally binding, for judicious antibiotic use in food-producing animals. PAMTA is a legislative initiative that would phase out non-therapeutic use of medically important drugs in farm animals in the U.S.

He discussed history of the resistance issue dating back to the UK in 1969 and more recent limitations on antibiotic use in other countries. He cited increases in pig mortality, diarrhea, and clinical disease in younger animals as challenges that could present themselves with similar bans in the U.S.

“In 2000, (the Danish) removed all growth promotants from all ages and that didn’t work out so well,” McKean said.

McKean urged producers to consider impacts of limited antibiotic use in their operations, evaluate alternatives, act now, and plan ahead.

Spend some time with your veterinarian records and look at your herd health profile and know what diseases are most critical, as gut health, chronic respiratory disease, and other problems will get worse without the use of antibiotics, McKean said. Consider options after removal of post-wean feed additives, limited over-the-counter availability, and legal restrictions for all livestock uses, he added.

Evaluating an older weaning age, creating a warm and draft-free facility for improved pig comfort, considering enhanced biosecurity protocol to reduce disease entry, using all-in-all-out management, and reducing stress impacts on the immune system are all things to consider when evaluating pork production without antimicrobials, McKean said. Changes for vaccination capabilities, microbial controls, facilities, and treatment strategies also may be necessary considerations.

The Air in There ISU Extension Swine Specialists

Finally, Iowa State University Extension swine specialists discussed basic ventilation management and its impact on pig comfort and production efficiency. They shared information on extension programs to assist producers, including a new ventilation trailer, partially funded by IPPA, for educational training sessions.

Goals of the ISU ventilation workshops are to build producers’ understanding of ventilation settings to optimize pig and producer comfort and health, minimize environmental stressors, enhance performance and save energy.

Some of the most common pitfalls seen by specialists include trying to alter interior airflow patterns by adjusting exhaust fans, trying to control airflow rate by adjusting inlets, not monitoring or calibrating inlets appropriately, and incorrectly adjusting inlet openings.

Swine specialists also shared ISU-developed software known as Group Tracker to analyze group closeouts, production data, and assist in risk management decisions.

Producers are encouraged to contact their area ISU Extension swine specialist for more information on how to set up a ventilation workshop in their area or to best utilize the Group Tracker software.

For more information on the conferences or IPPA educational programs, please contact Tyler Bettin, IPPA producer education director, at (515) 225-7675 or tbettin@iowapork.org.

Feedlot Runoff Control Project Update—Using Feedlot Runoff Water to Irrigate Corn

By Kris Kohl – ISU Extension Ag Engineer Program Specialist

The ISU Beef Center has supported a mini grant to study using pumps that collect and distribute the settled runoff water from feedlots onto corn. The project has been installed on area feedlots, and the area cooperators are measuring the amount of electricity used to distribute the water on corn fields to irrigate them this year.



How is it done:

The ½ to 1 horsepower sewage pumps are able to pump a lot of water for very little electricity - 27,000 gallons for less than a dollar. One of the sites is the Armstrong Research Farm which has a 1 acre feedlot that could hold 200 head. We have installed a ½ HP pump that can pump 72,000 gallons per day. This pump can pump about 2.7 inches of runoff water each day from that lot.

After studying the rainfall records at the Armstrong Research Farm for the last 14 years, the following table was developed:

	1 day	2 day	3 day	5 day	7 day
Maximum	4.6	5	5.41	6.43	7.11
# of days exceeding our ½ hp pumping capacity of 2.7 inches per day	7	0	0	0	0

Rainfall in Inches

What did we find out:

Adding a small pump to the settling basin and a distribution system will prevent 99% of the runoff events. The cost of the pump and 300 ft. of wire and the flexible hose is less than \$2 a head. With the low cost of pumping the water and the high cost of corn, it might even increase our yields enough to pay for the system. We plan to move the distribution hose after each time it rains to prevent the soil from becoming saturated. The preliminary data looks very exciting at keeping our creeks clean and utilizing the feedlot runoff water to irrigate the corn fields.



How to find out more:

Field Days are planned for later this summer when we have more experience and have worked out the bugs but we have our fingers crossed. The Field Days will be listed in the July “Field and Feedlot” issue.

Iowa Pork Producers Reach Food Safety Program Milestone

By Tyler Bettin, Producer Education Director
Submitted By Dave Stender, ISU Extension Swine Program Specialist

(CLIVE, Iowa) — Iowa pork producers have reached a new milestone as 5,471 Iowa pork production sites have been assessed through the Pork Quality Assurance (PQA) Plus® program.

PQA Plus was launched in 2007 as a continuous improvement program that outlines good production practices in the areas of food safety and animal well-being. Individuals are first certified through an education program. Following certification, producers invite PQA Plus advisors to conduct an objective assessment of practices on the farm.

Nearly 14,000 Iowans are certified in the PQA Plus training program.

A random sample of assessed sites is selected each year for third-party verification of the program. Data from this verification will be used to help determine necessary areas for improvement and increased education for producers.

“PQA Plus certification and the site assessment process helps show customers we care about our animals and the safety of food we produce and aids in continuous improvement of our industry,” said Leon Sheets, 2011 Iowa Pork Producers Association (IPPA) president. “Iowa pork producers take great pride in providing a safe, wholesome and healthy product for consumers around the world.”

PQA Plus is part of the industry aligned We Care responsible pork initiative. This initiative outlines ethical principles for pork producers to produce safe food, protect and promote animal well-being, protect public health, safeguard natural resources, provide a safe work environment, and contribute to a better quality of life in our communities.

For more information about PQA Plus, We Care, or other IPPA producer education programs, please contact Tyler Bettin at (800) 372-7675 or tbettin@iowapork.org.

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