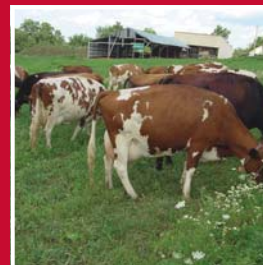


FIELD & FEEDLOT



ISU EXTENSION—NORTHWEST REGIONS

FEBRUARY 2010 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/>

The NW Iowa On-Farm Research Project Results for 2009!

By Joel DeJong, ISU Extension Field Agronomist

ISU Extension, the Iowa Corn/Soybean Initiative, ISU Research and Demonstration Farms and the NW Iowa Experimental Association have partnered together to form the Northwest Iowa On-farm Research project which is now in its 5th year in Lyon, Sioux and Osceola Counties in the NW corner of Iowa. The goals of this project are to implement on-farm research trials that are beneficial to the cooperators and other NW Iowa farmers; cooperate with producers to provide up-to-date research that affects their operation; and to provide unbiased, statistically analyzed data for farmers on compared production practices. We want to answer the crop production questions producers have using replicated randomized studies. We try to make these projects simple, informative and practical for our cooperators. ISU staff closely involved with this initial project are Joel DeJong, Extension Field Agronomist; and Josh Sievers, Extension Ag Specialist. Josh creates a good working mix to this project. He spends about 2/3 of the year working on research projects at the NW Iowa Research Farm, and about 1/3 of his time coordinating this project with the farmer-cooperators. Paul Kassel and Mark Licht have started working with a few cooperators in the last couple of years.

Over 20 different producers have worked cooperatively with us the past four years, and they have conducted over 150 replicated trials over that time. Some have been unique to one site; others have been repeated in several locations over several years. Some examples of projects include corn and soybean plant population comparisons, corn and soybean foliar fungicide trials, soybean seed

treatment trials, corn and soybean trait comparisons, tillage system experiments, date of planting comparisons, and planting speed evaluation.

A good example of what we are trying to accomplish with this project is the soybean plant population work. ISU Soybean Specialist Palle Pedersen and his research team found that 100,000 well spaced soybean seeds at the end of the year created an adequate soybean stand so that it did not limit yield potential. Therefore, in 2006, the ISU soybean seed planting population recommendation was dropped to 125,000 to 140,000 seeds per acre (assuming good seed placement, germination and management). Several of our cooperators were skeptical, until they could "see it for themselves." To keep comparisons simple, cooperators agreed to try two seedling populations, 125K and 175K per acre. Since 2006 we have had 21 sites comparing these two seeding rates. Only one site was statistically better at the 175,000 plant population level. The overall average for the 175K treatments was 57.3 bushels/acre, and 56.5 was the overall average for the 125K populations.

Another example that our cooperators initiated in 2009 was a comparison of soybeans using a roller or not using a roller over the field before emergence of the beans. Custom Made Products of Humboldt allowed us to use a 20 foot roller which weighed almost 7400# on five different sites in NW Iowa. None gave a significant yield difference due to rolling, but producers mentioned that combining was easier, less wear was occurring on their machines, and harvest speed might have been a little higher. However, we did not study the value of these other factors, just yield. We did evaluate for differences between pods left in treated and untreated areas, and found no difference in our studies, either.

Another project looked at comparing yield from no-till and tilled soybeans. Most tillage was a single pass done to corn-stalks before planting. Two sites gave a statistical edge to the no-till treatment, one was close (statistically) to favoring the tilled plots, and the rest were not statistically different. These five trial sites averaged 59.1 bushels/acre for the no-till treatment, and 58.5 for the tilled treatment. All soils were loess-derived soils, in which previous studies also noted the lack of yield differences between tillage methods practiced. Questions have arisen as to any residual effect on the following corn crop, so we will go back to those strips in 2010 and

evaluate differences under whatever tillage method they choose for that field during this growing season.

To see the specifics of all these and several other different trials, and data from each individual location from 2006, 2007, 2008 and 2009, go to the NW Iowa On-farm Research Project web site which can be found at: <http://ofr.ag.iastate.edu/>.

2008 SURE Disaster Claims Begin

Adapted from article written by Steven D. Johnson, Farm and Ag Business Management Specialist, Iowa State University Extension, (515) 957-5790, sdjohns@iastate.edu

Submitted by Ron Hook, ISU Extension Farm Management Program Specialist

USDA's Farm Service Agency announced that growers could sign up for disaster payments on 2008 crop losses starting Jan. 4, 2010. A final application date for the 2008 SURE Program has not been determined.

The new disaster program called SUPplemental REvenue Assistance program (SURE), created as 2008 farm law, is a permanent disaster program that is directly tied to the level of crop insurance purchased. What's different is that instead of covering losses on individual crops, SURE triggers only when your whole farm income falls below a pre-established threshold. That trigger includes revenue from all crops on all farms in all counties in all states. Harvested forage and specialty crops also needed to be protected with either crop insurance or Non-Insured Crop Disaster Assistance Program (NAP) policies to guarantee your whole farm eligibility.

If 2008 total farm revenue meets the threshold for losses, farmers could be entitled to financial assistance. Estimates for losses could be worth upwards of \$100 per acre for some Iowa farms. Iowa was hard hit by excessive spring floods during the 2008 season and some growers suffered severe yield losses. In addition, 2008 saw record high crop insurance price guarantees that will benefit producers that elected crop insurance revenue coverage.

Since the national average cash price is used to determine the amount of the SURE claim, losses cannot be determined until approximately one year after the fall harvest when this national cash price average is known. The actual marketing year prices for the 2008 crops were \$4.06 for corn and \$9.97 for soybeans. SURE is available to eligible producers on:

- Farms in counties with Secretarial disaster declarations, including contiguous counties, that have incurred crop production losses and/or crop quality losses during the crop year.
- Any farm in which, for the crop year, the actual production on the farm because of disaster-related conditions is 50 percent or less than the normal production of the farm.

In 2008, 69 of Iowa's 99 counties received disaster declarations from the USDA Secretary of Agriculture plus an additional 21 were contiguous counties. Thus farmers in 90 counties will

be initially eligible to file for SURE claims.

Please contact your local USDA Farm Service Agency (FSA) office for final details on filing 2008 SURE Loss Claims which began Monday, Jan. 4.

Beef Feedlot Meetings

By Beth Doran, ISU Extension Beef Program Specialist

Iowa, Nebraska Beef Feedlot Roundtable - The Iowa and Nebraska Extension Services will co-sponsor a Beef Feedlot Roundtable on February 9 at the Sioux County Extension Office in Orange City, IA. The topics and speakers were chosen to benefit feedlot managers, owners, employees and allied industry.

The Roundtable, which is a day-long webcast, will be from 8:30 a.m. to 4:00 p.m. Topics for the webcast focus on current and impending issues that feedlot producers face and feature the following:

- Responsible antibiotic use
- Deadstock and proper disposal
- Feedlot cattle handling
- Implications of cap/trade and climate legislation
- Feedlot economics in 2010
- Air quality regulations
- Vegetative treatment systems
- Beef research update

Pre-registration (\$25/person) is requested by Thursday, February 4. If not pre-registered, the cost is \$40. Pre-registrations may be made with Beth Doran, Sioux County Extension, 400 Central Ave. NW, Suite 700, Orange City IA 51041. You may also pre-register by phone (712-737-4230) or e-mail doranb@iastate.edu.

Feedlot Forum 2010 – The beef industry faces key issues – high feed costs, animal welfare and lower fed cattle prices. These are the focus of a feedlot Extension meeting on February 10. The meeting will be from 9:30 a.m. to 2:30 p.m. at the Community Center in Lidderdale, IA.

“Feed Bunk Management: Bunker to Bunk” will focus on ways to control feed cost through improved storage and bunk delivery. “Hoops and Mono-Slopes” will feature cattle performance in the deep-bedded facilities and how management of these barns affects animal comfort. “Using Crush Margin to Implement Risk Management” explains how crush margin can be used to determine when to place a hedge. Crush margin is the difference between the fed cattle revenue and the major input costs – feeder cattle and corn. Other presentations include “Cattle Health and Handling Compromised Cattle” and “Cattle Market Situation and Outlook: 2010 and Beyond.” Brian Waddingham, Iowa Beef Industry Council, will discuss the BQA Feedyard Assessment Guide.

Registration for the meeting is \$20/person and is due February 7. Late registrations will be \$30. For information on this

meeting, contact Beth Doran, Sioux County Extension, 400 Central Ave. NW, Suite 700, Orange City IA 51041. You may also pre-register by phone (712-737-4230) or e-mail doranb@iastate.edu.

Preparing Barns to Sit Empty

Dr. Mark Whitney, Associate Professor at the University of Minnesota Extension

Submitted by Jerry Weiss, ISU Extension Swine Program Specialist

During difficult economic times, pork producers may be considering having barns sit empty for an extended period of time. However, closing these facilities involves much more than simply emptying the barn and shutting the lights off, especially if it is anticipated that barns may be brought back into production in the future.

There are several steps that should be taken to ensure safety while empty and ability to economically return production in future.

Thoroughly Clean the Facilities and Equipment

Removal of all organic material from the barn, penning and equipment is necessary to minimize deterioration. Wash all surfaces thoroughly and allow time to dry, removing as much moisture as possible. Manure, animal dander, feed dust and manure gases can all combine with moisture or condensation on cooler exterior surfaces, resulting in enhanced degradation. Grease motors, drive chains and other moving metallic components to inhibit moisture penetration.

Empty Feed Lines and Feeders, Water Lines

Feed contains salts and other products that, when combined with moisture, can cause corrosion. Empty out all feed lines and feeders and flush feed lines with whole grain, such as corn, to remove as much of the feed particles and salts as possible. Flush and drain out water lines, blowing out lines with air, if possible, to remove all water. Shut off the main water line coming into the barn, and remove all water orifices, such as nipple water receptacles.

Remove All Manure in Storage

Removal of manure from under empty barns is perhaps the most important action that needs to be taken. Gases, such as methane, hydrogen sulphide, carbon dioxide and ammonia, continue to be produced from the decomposition of manure, even during cold weather. Build-up of methane provides an explosion risk, while other gases are extreme health and safety hazards. Take all necessary precautions while pumping out manure pits, including ensuring adequate ventilation, and attempt to remove all accumulated solids.

Supplemental Heat Required Over Winter

In order to prevent flooring and foundation from freezing, and thus deteriorating and potentially losing structural soundness, minimum heat should be provided and maintained over winter months. Frost may crack exterior walls, causing leaks in pits and potentially resulting in structural failure. To ensure proper operation and

minimize the cost of heating, have a qualified individual inspect and maintain the heating system.

Maintain and Provide Ventilation

Minimum ventilation should be provided in empty barns to ensure adequate removal of moisture and gases that may continue to accumulate either from manure decomposition or heater combustion in the barn. Failure to provide adequate ventilation may result in increased equipment and facility corrosion or severe injury or death due to carbon monoxide poisoning or hydrogen sulphide asphyxiation. Make sure the facility is reasonably 'tight' and that room inlets are operating properly to ensure fresh air is properly introduced and distributed in the barn from designed air inlets. Close and seal sidewall curtains in curtain barns and louvers of large summer operating fans in tunnel or year-round mechanically ventilated barns to prevent backdrafting and leakage of air using insulated panels or heavy plastic. Allow only one side of the barn to introduce fresh air during winter months (south side in barns running east-west) to prevent snow 'blow through' in the building attic. Finally, check the operation and cleanliness of all minimum ventilation fans. Dirty or rusted shuttles can reduce airflow capacity of a direct drive fan by 40 per cent.

Routinely Inspect Empty Facilities

Empty barns should be periodically checked, i.e. weekly during cold weather. Inspect heating and ventilation systems to ensure they are functioning properly. Check for signs of water or mould damage, particularly in the attic. These may indicate roof damage, or if the attic is humid, inadequate distribution of air suggesting insufficient ventilation.

Actively bait and check rodent traps – removing feed will help rodent control considerably but maintaining bait stations should prevent rodent infestation.

Finally, when considering bringing a facility back into production, have all electrical and heating systems inspected by a qualified technician and thoroughly test all other water and feed systems, equipment and penning for functionality prior to use.



Published by: Dianne Dirks, ISU Extension Pocahontas County Office Manager