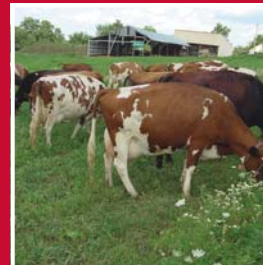


# FIELD & FEEDLOT



ISU EXTENSION—NORTHWEST REGIONS

SEPTEMBER 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/>

## Harvest Time Safety

By Joel DeJong, ISU Extension Field Agronomist

I love harvest time. I also fear it. Agriculture ranks as the third most dangerous occupation, according to the US Department of Labor. In 2008 for example, over 300 crop farmers died from work related accidents – nearly double the number of miners who died. Harvest time is the MOST LIKELY period for farm-related accidents and fatalities. We always feel like we are under the gun at harvest time, so many are tempted to take more risks and hurry. Bob Aherin from the U of Illinois, and Mark Hanna from ISU reviewed the top five corn harvest killers in a recent article. The first on their list is tractor accidents, including running over or striking a person with a tractor. Children are at risk when there is a lot of machinery traffic at harvest time. Rollovers also create a lot of risk, so be certain you have rollover protection bars in place on all tractors. Other equipment accidents made the list, too. At harvest time fatal injuries include getting crushed under the corn head. Be sure you lock and block it before getting under a head, disengage the power, and turn off the engine. Additionally, kids love to ride on combines and tractors. Only allow them to ride with you if there is a designed seat for that extra passenger. Falls while washing the windshield of the combine, or just from the platform is another frequent cause of injury.

Roadway accidents are also high on the risk list. It is wise to keep at least 1000 feet of view ahead of equipment on the road. That is why you should not move equipment at night, in fog or low light conditions, or any time when visibility is reduced. Get the headers from field to field on a trailer, even if going short distances. SMV emblems should be bright – not old and faded. Inspect lights daily. Be certain they work and are easily visible. More than once I have

been behind tractors pulling wagons after dark that have lights that either are absent, quit working, or shielded from the people behind them.

Grain storage accidents include falls from bins and suffocation. Railings and staircases on bins are much safer than just a ladder. Be certain handrails are in place. Remember that it takes about 3-4 seconds in moving grain to get up to your knees, and after that you aren't likely to escape. Fourteen seconds can submerge your entire body. Don't take that risk! And train any younger children about the risks of flowing grain.

Electrocutions on the farm most commonly occur when a power line is hit by an auger. Our equipment keeps getting bigger – again creating more risk of accidental contact with electrical lines.

I love the smells of fall, the satisfaction from a good harvest, and the wonder of the miracle of crop production. I also hate the feeling in my stomach when I hear of another person I have worked with over the years who had a tragic farm accident. It seems to happen every year. Take some time before your harvest starts to reduce the risks of the season, and take time during harvest to NOT take shortcuts that put you and others at risk.

## Roller Coaster Ride Continues for Pork Producers

By Dave Stender, ISU Extension Swine Field Specialists

Iowa State University calculates the Monthly Swine Farrow to Finish Returns which can be found on the web at: <http://www.extension.iastate.edu/agdm/livestock/html/b1-31.html>. The calculations presented are derived from the Monthly Returns.

Historically, feed input prices have been stable and swine producers have been able to develop a typical budget and cash flow. For example, market hogs sold between Jan 2001 and Jan 2007 earned \$12.57 profit per head. During that time the corn price was relatively stable and averaged \$2.11 per bushel. Feed cost per head averaged \$54.60/head sold. Ethanol usage at that time was 2 billion bushels or less. Corn exports were in the range of 1.8 to 2.4 billion bushels, similar to today.

From February 2007 through December 2009, ethanol utilization grew to around 4.5 billion bushels. Crop producers responded to the call for more corn usage with more acres and yield, and carryover stayed over a billion bushels. Corn prices averaged \$4.03, helping to promote higher levels of production of feed grains. Feed costs for swine averaged \$84.71 per head during this time frame, an increase of \$30.11 per head over the 2001 to 2007 time frame. Market prices were only \$3.37 per head higher. This resulted in staggering losses and financial instability to the pork industry. Swine producers lost \$15.89 per head during this period of time.

There was a response to high feed cost and significant financial losses. From Jan 2009 through June 2011 the market pork prices rose to average \$156.28 per head, income up by \$28.47/hd. This was because financial stress reduced the number of producers. Downsizing the modern swine industry was and still is extremely difficult and costly. Most of the downsizing comes through bankruptcy, but the industry structure is not willing to leave the factory (hog facilities) empty. Many times, the new financial owners of bankrupt production systems keep the output maximized to reduce cost; therefore, in these cases financial disaster does NOT change production output. Rather, it is simply a transition to a new owner with now-lower cost facilities. Eventually enough producers shut the doors to their operations to reduce supply and increase the market hog price to profitable levels.

Corn prices averaged \$4.44/bushel for the period from January 2009 through June 2011, thus increasing feed costs to \$93.42 per head. This means that feed costs increased \$8.71/head while during the same period the hog market price went up by \$28.47 per head. Nevertheless, the average profit only reached \$7.57/head for this period.

Now, the situation has changed again. Ending corn stocks have been drawn down, leaving only pipe line supplies, a positive corn basis and a corn price of over \$7.00 per bushel. Pork producers made money when corn was \$4.44/bushel and a pig sold for \$156.28 per head. Now we have \$7 corn and summer hogs selling for over \$200/head. Retail pork prices have finally been impacted as the average retail price for pork is close to \$3.50 per pound. Historically, retail pork prices have averaged closer to \$3.00 per pound.

This coming year will be interesting. Pork producers need a continuously high market hog price to cover the cost of production. However, will the consumer continue to purchase as much pork at these new higher price levels — or will consumer demand decrease?

Profitability for pork producers will depend on several factors. The first factor is the value of the dollar. Currently a low value dollar is stimulating higher market prices through export demand. Also critical is the price of energy. As energy prices increase so does the demand for ethanol expansion creating more corn demand and higher prices for feed. And of course the weather is a player

as a shortfall of corn will push feed prices and cost of production up even higher.

## Grain Storage Preparation

By Kris Kohl – ISU Extension Agricultural Engineer

2011 has been a trying year from the cold, wet spring to the hot, dry summer. My prediction is that we will have a slightly below trendline corn yield with lower than normal drying needed. Regardless, we need to get the grain storage bins ready now.

With all bins, sweep or vacuum out all the grain and dispose of it away from the bin site because it contains bugs and fungi that can infest the new crop grain. Be sure to allow at least 6 inches of clear air space between the floor and the fines below the floor. Kill the grass and weed trees within two feet of the bin to prevent hiding places for insects and rodents. Tree roots can displace concrete and damage foundations. Check ladders and stairs to ensure that all safety equipment is in good, functional order. Caulk any air leaks around the foundation and spray paint any metal that shows a hint of rust using zinc-based paint. Service all motors, making sure to oil them.

### Specific recommendations:

1. Drying Bins- Turn on burners and motors and make sure everything is working properly. Check the propane tank. While I think the drying needs will be less than normal, which is 3 to 5 moisture points, it might not be zero. Estimate your fuel needs and buy or contract them before harvest season.
2. Aeration Bins- Turn on motors and be sure everything is working well.
3. Non-aerated Bins- These bins are often used for storage of soybeans and do not allow controlling the temperature in them. More grain spoils each year because of temperature problems than moisture problems. With the high price of soybeans, consider upgrading these bins to at least contain a perforated tile snaking around the bin with a fan at the door. Soybeans that are below 10% moisture and colder than 55 degrees are a lower damage risk if moved out by March each year in a non-aerated bin. If you put grain in storage hot in September, please don't call me in January with a grain quality problem.

Have a safe and profitable harvest.

## Late Season Cornstalk Nitrate Test

Submitted by Tom Olsen, ISU Extension Farm Management Specialist

Adapted from: Iowa State University and Penn State University Publications

Note: ISU Extension Publication, *Cornstalk testing to evaluate nitrogen management*, PM 1584, gives detailed instructions for stalk sampling and interpreting the test reports.

Nitrogen (N) management is one of the most challenging areas in corn production because of the many factors that influence N availability including: form of N applied, timing of application, impact of weather, etc. This is especially true when

manure is part of the system. Standard N recommendations take into account many of these variables and early in-season tests such as the Pre-sidedress Soil Nitrate Test (PSNT) and Chlorophyll Meter test are very helpful in reducing the uncertainty in N recommendations. While this uncertainty can never be completely eliminated, it can be minimized. A key to improving N management over time is having reliable feedback on how well your N management program is working. While good yields and dark green plants are clear indicators of adequate N, they do not tell you if you have too much N which can especially be a problem for fields to which manure has been applied. Similarly, visual symptoms of N deficiency may be observed late in the season, but they are not always associated with decreased crop yields.

The Late Season Cornstalk Nitrate Test has been demonstrated to be a reliable end-of-season indicator of crop N. It provides a good assessment of whether the crop had the right amount of N or too much N or whether it ran out of gas. This information combined with records of N management can be very useful for making future management decisions. While you could test all fields, testing a few representative fields will probably be adequate to provide a good assessment of your N program.

A short video demonstrating the stalk test process can be found at: <http://extension.psu.edu/cmeg/video/stalk-test/stalk-test> or by searching for: *Stalk test, Penn State*.

The basics are: Gather 10 to 15, eight-inch stalk samples, beginning six inches off the ground, from non-diseased plants in similar treated fields. Submit these in a sack Iowa State University testing lab. Complete stalk test instructions and submission form for the ISU Agronomy Labs can be found at: <http://www.agron.iastate.edu/soiltesting/> or, use your search engine and search for *soil test, ISU*, or stop at the local county extension office.

## Federal Regulators Back Off Proposal to Require CDLs for Farmers

By Melissa O'Rourke – Farm & Agribusiness Management Specialist, [morourke@iastate.edu](mailto:morourke@iastate.edu)

Farm tractors and other implements move down gravel roads, county blacktops and highways all across Iowa, traveling from field to field. This necessary movement is heightened during planting, haying and harvesting seasons.

For years, the federal agency charged with monitoring and regulating commercial vehicle safety has allowed state governments to waive commercial driver's license (CDL) requirements for farmers hauling crops or driving farm equipment on public roads. Earlier this year, the Federal Motor Carrier Safety Administration (FMCSA) was poised to eliminate this exception.

Under the proposed change, FMCSA suggested that all crop shipments be considered part of interstate commerce – even, for example, when farmers were making short hauls to local grain elevators and not crossing state lines. This new designation would make CDLs a necessity for anyone operating a farm implement or

hauling grain on a public road. CDLs would have been required for livestock hauled in trailers as small as 16 feet in length. Producers who operated tractors, combines and pickup trucks hauling trailers would all be required to obtain CDLs along with medical cards and maintain log books as if they were long-haul truckers. In many states, young drivers – who may be family farm members assisting in production operations – would be ineligible for CDL license, and therefore excluded from participation in the farm operation.

The FMSCA initially intended to allow 30 days for public comment before implanting the new rules. Fortunately, farmers, ranchers and related industry groups contacted federal legislators with their concerns. These contacts resulted in 18 US senators requesting that FMSCA allow more time for public comment – through August 1, 2011.

FMSCA received over 1700 comments from farmers and representative groups. FMSCA heard a wide range of protests from concerned individuals and groups. It appears to some that the comments received by FMSCA served to inform the agency of the realities of farm operations.

On August 10, 2011, FMSCA issued regulatory guidance, essentially backing off the proposed new rules. At least for the present time, CDLs will not be required of farm operators moving tractors, combines, and trucks pulling implements and livestock trailers. The responsiveness of ag producers and representative groups yielded a positive result. Continued watchfulness on this topic is warranted.

## Manure Value

Submitted by Tom Olsen, ISU Extension Farm Management Specialist

### Component Pricing

The most common method of valuing manure as fertilizer is component pricing. The manure is sampled and tested to determine the nutrient content. Then this analysis is used to determine the value based on commercial fertilizer prices. There can be a considerable range in the projected prices of commercial fertilizer nutrients, depending on material type (dry, liquid, or gas), method of application, and the time of year applied.

### Manure Nutrient Value vs. Commercial Fertilizer Budget

Manure is a fertility package. The nutrient components as applied will not be in the same proportion as a commercial fertilizer recommendation. Value adjustments may need to be made to account for these differences. Some manure components that are in excess of crop needs may be discounted. Consideration also should be given to shortages if they need to be supplemented commercially.

### The Spreadsheet

A manure value calculator spreadsheet can be downloaded from the *Ag Decision Maker* [www.extension.iastate.edu/agdm/](http://www.extension.iastate.edu/agdm/) This will report both component value and budget comparison, with inputs of a NPK manure test, application costs, and the prices of commercial fertilizer.