FIELD & FEEDLOT

NORTHWEST AREA EXTENSION FEBRUARY 2007 ISSUE

Managing Newly Purchased Bulls

By Beth Ellen Doran, ISU Extension Beef Field Specialist

The bull sale season is here! With the excitement of getting a new bull – whether private treaty, consignment or a production sale – newly purchased bulls need careful management. The level of management increases with younger yearling bulls compared to two-year-old or older bulls.

Yearling bulls are still rapidly growing and have a higher energy requirement. Most young bulls have been fed to gain from 2.5 to 4.0 pounds per day from weaning to yearling age. These bulls need to be fed to continue to gain at least 2.0 pounds per day until they are turned out for the breeding season.

Find out the nutritional program that your bull has been receiving and if changes are necessary, the key is to make ration changes gradually. If bulls are carrying extra condition, do not let them down too rapidly or breeding performance will be impaired. Conversely, thin bulls may need to be fed harder. At turn-out time, a yearling bull should have a body condition score of 6 to 7 on 9-point scale. Mature bulls should be a body condition score 5 to 6.

Use care when mixing bulls from different sources. Do not mix one or two bulls into a pen with a group of bulls that have been running together, and avoid mixing bulls in a small lot or pen. If you plan to mix a group of newly purchased bulls with existing bulls, it's advisable to turn them together at one time in a large field so that when they fight, each animal has ample room to move away.

After purchase and before the breeding season, bulls need to have access to an outside lot or field that provides an opportunity to exercise and harden up. However, it is critical to provide wind protection and proper bedding to decrease the risk of frost damage to the scrotum and testicles. Bulls that have their hair clipped are at increased risk in cold weather and need extra care.

If the bull was purchased without a breeding soundness exam (BSE), one should be conducted prior to breeding turnout.

A BSE includes a scrotal circumference measurement, a semen exam and a physical exam. A bull's fertility can not be determined by just visual observation.

A skeletally sound, correct yearling bull should not require any special foot care, but do avoid areas with rough surface conditions. New owners are advised to work closely with their local veterinarian to determine what vaccinations or boosters are needed.

2007 Iowa Pork Regional Conferences

By Jerry Weiss, ISU Extension Swine Field Specialist

Each year Iowa Pork Producers Association and Iowa State University Extension team up and hold a regional conference at five different locations across the state of Iowa. This years conferences will be held February 19-23, 2007. The locations are:

Monday, February 19, Carroll
The Carrollton Inn, 1730 Hwy. 71 North

Tuesday, February 20, Sioux Center
Corporate Centre, 950 N. Main Ave.

Wednesday, February 21, Ainsworth
Marr Park Conservation Center, 2943 Hwy. 92

Thursday, February 22, Oelwein
Luigi's Restaurant, 1020 S. Fredrick Ave.

Friday, February 23, Dows
Dows Community Center, 119 East Ellsworth

The meetings run from 9:00AM – 4:00 PM. The morning session will focus on strategies to maximize profitability on your operation pertinent to management/decision makers.

The afternoon session will focus on practical applications on how to optimize pig care. It will provide farm employees and managers the opportunity to view what they do on a daily basis and how that activity impacts individual pig care and profitability of the entire swine operation.

Attendees may chose to attend both the morning session and the afternoon session or just one of the sessions. Lunch is included in the registration fee, regardless.

Pre-registration is $20 and registration at the door is $30. Pre-registration deadline is two business days prior to location date. You may pre-register for any location by calling Iowa Pork Industry Center at 800-808-7675.

If you are a member of Iowa Pork Producers Association you should be receiving a brochure by mail. This brochure includes a registration form that can be mailed to the Iowa Pork Industry Center.

For more information you may contact: Ali Smith at the Iowa Pork Producers Association, 800-372-7675 or Colin Johnson at the Iowa Pork Industry Center, 800-808-7675.

Calibrate your solid manure spreader this spring

By Kris Kohl, ISU Extension Ag Engineer Field Specialist

Beef producers have a valuable resource in the by-product of their operation which is manure. Manure is a stable, organic fertilizer that contains the same nutrients as the corn and soybeans used to feed the cattle. While producers realize that it is a valuable by-product of their operation, producers are reluctant to rely on its nutrients because of the variability of the product, and not knowing how much is actually going on the soil. Calibrations in the past required weighing the spreader on scales and measuring the area spread, both of which are very time consuming and therefore rarely done. When manure or fertilizer is over applied, it can end up in surface or groundwater causing environmental problems.

To aid producers and encourage beef producers to calibrate manure spreaders, ISU Extension developed a simple method using a plastic sheet that is one two thousands of an acre. This sheet is 21.78 square feet and represents about twice the area that corn plant roots can explore during a growing season.

The sheet of plastic is placed on the soil prior to land application and the producer spreads manure over it. The plastic with manure is then weighed and a manure sample collected from the plastic sheet and sent in for lab analysis. The weight of manure on the plastic sheet in lbs. will then equal the application in tons per acre, making it simple to calibrate.

ISU Extension has started a program to help beef producers improve their manure management using the plastic sheet calibration method. To date, four calibrations have been performed. The results showed a manure application rate that was slightly below the nitrogen rate based standard manure book values. However, when the results of the manure test came back, they were higher than book values resulting in an adequate amount of fertilization from the manure application.

If you would like to calibrate your spreader and test the manure contact Kris Kohl at the Buena Vista Extension Office 712-732-5056. The program cost $25 to cover the lab analysis cost.

Asian soybean rust update

By Paul Kassel, ISU Extension Crop Field Specialist

Asian soybean rust (ASR) was first discovered in the United States in November of 2004. Much has been discussed about ASR since then, but there has been no real impact from ASR in the Midwest. The following is a review of the conditions that have affected ASR survival since its discovery in 2004.

Asian soybean rust needs green foliage to survive. Kudzu, a perennial leguminous vine provides that over wintering site for ASR. However, cool and dry winter conditions the last two winter seasons have limited the wintertime growth of kudzu. Therefore the amount of ASR spores that have been produced on kudzu has been limited. Also dry spring and early summer conditions have not provided ideal conditions for ASR development the last two summers. Some low temperatures in December of 2006 may slow the growth of ASR on kudzu this winter season also.

This combination of cool winters and dry summers has therefore limited ASR spore production in the early summer months of 2005 and 2006.

There was a reversal of the southern US weather patterns in the late summer of 2006. Weather conditions changed from dry to wet in September and October. There is a concern that ASR spread rather quickly in the late fall of 2006. A record 274 counties reported ASR in 2006, including counties in southern Illinois and southern Indiana. These reports of ASR in late 2006 posed no real threat to the 2006 soybean crop. However, it does raise some questions for future years.

The following are some observations on the survival of ASR the past two growing seasons.

- ASR has over wintered the past three winters.
- Wet conditions in the southern US will allow ASR to produce adequate amounts of spores to infect soybeans in the southeast US – even if it is late in the season and has no economic impact.
- Plant pathologists at Iowa State University are the most concerned about ASR buildup in Louisiana and east Texas, especially early in the season. Prevailing wind conditions are more likely to deliver ASR spores to Iowa from this area than areas east of there.

The bottom line here is that ASR will continue to be a threat to Midwest soybean producers. Farmers will need to stay current regarding information on ASR this spring. This information will be the most useful for making ASR treatment decisions for the 2007 growing season. See www.sbrusa.net for the latest updates.

Evaluating Your Operation

By Dave Stender, ISU Extension Swine Field Specialist

Can I afford homegrown corn to feed my swine herd? Or should I sell the corn and the hogs?

Many smaller farrow-to-finish operations are considering the transition to corn farming as corn prices went through a counter seasonal rally last fall and remained high since then.

The question is how much is a bushel of corn worth to the small independent swine herd? The answer requires farm specific records and depends on the cost structure of the operation.

Today, many independent producer's facilities are about paid for and increasingly difficult to rent to someone else. If they sell hogs, they potentially get no return for their swine facilities, investment or family labor that would typically be a swine expense.

Cash cost for this type of operation would be feed and variable cost (such as utilities, supplies, medications, hired labor, trucking, etc). Last year, an average operation's feed cost was about $22/cwt or $58 per head. Direct costs averaged $29/cwt. ~ $77/head. Farm specific records are essential. Direct costs will vary greatly between operations.

In this example, any return over $77/head would be to operator labor, facilities, investment and profit. There will be no profit and no return to indirect cost of the operation. How much return over feed depends on the actual direct cost of feed/operating relative to the market price.

For example, a $50/cwt summer market would gross $132 per head. Return over direct cost for a small farrow-to-finish operation, would be market gross ($132/hd) minus last years cash cost ($77hd) or $55/head. Farrow-to-finish operations feed about 13 bu per pig sold. Increasing the revenue to the operation by $55 through 13 bushels of corn provides $4.23/bu extra cash into the farm that would not be there if the hogs are sold with the corn. Last year's direct corn value was $1.70/bushel added to the $4.23/bu increased value. Counting the return to facilities, operator labor and profit, corn fed through hogs will return the operation up to $5.93/bushel.

This year's direct cost will be substantially up from $77/head as corn price increases from $1.70 to $3.50 or more. $1.80/bu increase on 13 bushels will raise the direct cost to produce a pig to about $100, or $38/cwt. If the market drops to this range (~$38/cwt) with $3.50/bu corn, there would not be any return to feeding swine.

A producer considering an exit strategy from livestock to corn farming should make sure the decision is based on good records and that an alternative income is available for family labor and existing livestock facilities.

Flexible Cash Leases

By Tom Olsen, ISU Extension Farm Management Field Specialist

The present market prices for corn and soybeans for the 2007 crop years with projected input costs will calculate a dramatic increase in land rents and still maintain "best-ever" profits for the tenant-producer. This is a "win-win" situation; however, the steep run-up in corn and soybean prices creates greater uncertainty and risk. A farm operator is willing to pay a fair rent if these prices hold and the yields are normal. But since the investment per acre is considerably higher, the financial risk is as well.

A flexible cash lease is a way to share some of the risk between the landlord and tenant. The goal of most of these lease types is to establish a variable rent pricing mechanism in a way that the landlord does not need to be involved in the operating decisions of the farm. This would be different than the common crop-share lease. Several types of flexible leases are discussed in the Ag Decision Maker File C2-21, "Flexible Farm Lease Arrangements" www.extension.iastate.edu/agdm Included is a flex lease spreadsheet to examine and fine-tune various lease types: http://www.extension.iastate.edu/agdm/wholefarm/xls/c2-21flexiblerentanalysis.xls

A common flex-lease will begin with minimum cash rent and a bonus based on a percentage of the gross income (actual yield x market price) greater than an expected gross income. The market price could be an average price determined by actual local price at certain dates in the year.

An example for corn: Minimum Rent $175, Maximum Rent $275, Base Gross Income $450, Bonus Rent Percent 35%, Market Set Dates: Feb 1, May 15, Nov. 1(1/3 each) at the local elevator.

If the farm raised 160 bushel corn and the established price is $3.25 the rent would be: 160x3.25=520 minus 450base=70*.35=$25.50bonus+$175minimum=$200.50/acre rent.