



# Northeast Missouri Ag Connection

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## Decisions Needed for 2014 Farm Bill

The 2014 Farm Bill introduced several changes to the farm commodity programs available through the Farm Service Agency (FSA). Landowners and producers have some important decisions to make this winter that will affect their farming operations for the next five years. Although there is time to prepare and learn about the options available, landowners and producers need to start now.

Here is a summary of the decisions landowners and producers need to make:

- 1. EXAMINE:** In August, owners with base acres received a letter from FSA providing a summary of their current base acres, yields and 2009-2012 planting history. It is important to verify the accuracy of this information. If it is not correct, if you did not receive it, or if it was misplaced contact your local FSA office immediately.
- 2. UPDATE:** Landowners will have a one-time opportunity to retain the farm's current base acres, or reallocate base acres among the covered commodities planted on the farm during the 2009-2012 crop years. In addition, landowners will have the opportunity to update yield information that is used to determine some farm program payments. The landowner makes the final decision and signs the appropriate FSA form. The decision to reallocate base acres and/or update crop yields must be a unanimous decision by all owners of the farm. The landowner has until Feb. 27, 2015 to update base acres and/or yields by the FSA farm number.
- 3. ELECTION:** The 2014 Farm Bill authorized a new safety net approach for farm commodities, known as PLC (Price Loss Coverage) and ARC (Agriculture Risk Coverage) programs. The ARC program is divided into ARC-County (ARC-CO) and ARC-Individual (ARC-IC). The following explains each program:
  - a. PLC offers price protection. Payments are issued when the effective price of a covered commodity is less than the respective reference price for that commodity established in the statute for the 2014-2018 crops. The effective price equals the higher of the market year average price or the national average loan rate. The PLC payment is equal to 85 percent of the base acres of the covered commodity times the difference between the reference price and the effective price times the PLC payment yield for the covered commodity. These payments are made on base acres, not planted acres.
  - b. ARC-CO offers shallow loss revenue protection. Payments are issued when the actual county crop revenue of a covered commodity is less than the ARC-CO guarantee for the covered commodity. The ARC-CO guarantee equals 85

percent of the previous five-year market year average price, excluding the years with the highest and lowest price (the ARC guarantee price), times the five-year average county yield, excluding the years with the highest and lowest yield. The payment is equal to 85 percent of the base acres of the covered commodity times the difference between the county guarantee and the actual county crop revenue for the covered commodity.

- c. ARC-IC offers entire farm revenue protection based upon base acre commodities. Payments are issued when actual ARC-IC revenue, summed across all covered commodities on the farm, is less than the associated ARC-IC guarantee. The farm's ARC-IC individual guarantee equals 86 percent of the farm's individual benchmark guarantee, defined as the five-year average of a producer's annual benchmark revenue for each commodity, excluding the high and low annual revenues. The ARC-IC payment equals 65 percent of the sum of base acres on all covered farm commodities multiplied by the difference between the individual guarantee revenue and the actual individual crop revenue across all covered commodities planted on the farm. It is important to note payments may not exceed 10 percent of the individual benchmark revenues.

Producers will make a one-time, unanimous election of PLC or ARC-CO on a covered commodity-by-commodity basis or ARC-IC for all covered commodities on the farm. The election between PLC and ARC is in effect for the life of the farm bill. The decision has to be made by March 31, 2015.

#### **4. ENROLLMENT:** The last step is enrollment.

Producers can enroll the farm for the program from mid-April through summer 2015. Enrollment will be for 2014 and 2015 crop years concurrently.

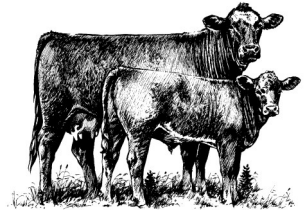
To help lessen confusion, farm bill meetings have been scheduled to further explain options and discuss decision tools available. To view presentations from farm bill meetings held in November, visit <http://farmbill.missouri.edu> Two decision tools have been developed to assist producers in making these important decisions. The Food and Agriculture Policy Research Institute (FAPRI) tool can be found at <http://tinyurl.com/fapri-afpc> and the University of Illinois tool <http://fsa.usapas.com> If assistance is

needed with these tools, please contact your local University of Missouri Extension Agribusiness Specialist.

**Source:** *Karisha Devlin, Ag Business Specialist*

## **Sexed Semen - A Tool for Beef Operations to Increase Marketing Opportunities**

According to USDA-APHIS (2009), artificial insemination (AI) use in the beef industry is 6% compared to 73% in the dairy industry. Reasons given for decreased use included extra labor, higher cost, and difficulty of use over natural service. Use of fixed-time AI should improve application of AI along with economic and market signals to enhance production and quality; despite this the beef industry still lags behind.



The number of beef sires with commercially available sexed semen went from zero in 2007 to over 70 in 2011 and continues to increase. Even though the total number of bulls has increased, breed availability is mostly limited to Angus genetics. Studies utilizing sexed semen technology have shown a 10 to 20% decrease in conception rates compared to conventional semen. This technology could be very beneficial in cross breeding systems, especially in smaller herds with less than 100 females. Sexed semen provides the ability to generate replacement heifers from a small group of the best cows in the herd, while the other cows are mated to a terminal sire. A review done by University of Idaho, shows cows pregnant to sexed semen (X-sorted) consistently produced calves that were 90 to 92% female. Adoption of this type of system for generating replacement heifers with superior genetics could result in a reduction of cows needed.

The US beef herd is smaller than it has been since the 1950's; therefore heifers with good genetics are in high demand and price. Utilizing this technology makes economic sense in today's market even with the potential of decreased conception rates.

**Source:** *Wendy Flatt, Livestock Specialist*

## Evaluating Wheat Stands for Spring Nitrogen Application

As the fall growing season for winter wheat wraps up, the stand can be evaluated to determine the best time to apply spring nitrogen (N). Unlike other crops, the harvested population of wheat is not plants, but tillers. Each wheat plant can develop side shoots called tillers that will bear heads nearly as large as the head on the main stem. Normal seeding rates are sufficient to produce optimum yield only if two to three tillers develop on each plant. There are two main periods when tiller development occurs: (1) in the fall between planting and dormancy and (2) again for about one month in the spring when the wheat resumes growth until jointing and stem elongation begin. Ideally, the wheat crop should develop two to three strong tillers in the fall, and then no additional tiller development is needed in the spring. Tillers formed in the fall are often more vigorous and yield more than tillers formed in the spring. However, if there are not enough tillers formed during fall, then formation of additional vigorous tillers in the spring is critical to attaining good yields. The targeted fall stand for wheat seedlings (before tillering) is generally between 30 and 35 plants per square foot. Timely planting soon after the hessian fly-free date, followed by favorable weather may result in tillering in the fall. Development of a vigorous root system and several healthy tillers per plant in the fall is instrumental in growing high-yield winter wheat. If this fall growth is not achieved, yield potential is reduced.

The most important management factors to promote good fall growth are the planting date and seed placement. A successful, well managed planting operation is an important component of a profitable wheat system. Fall weather will interact with planting variables to determine the amount of fall growth. When wheat is planted too early and fall weather is warm, excessive growth can occur and the wheat will be vulnerable to winter kill. Late planting is even less desirable when fall weather is cold as fall development will be inadequate and the wheat crop will not be primed for rapid spring growth.

Tiller formation is highly influenced by nitrogen availability. If there is a combination of late planting, cold fall weather and inadequate fall N availability, the wheat crop will enter spring growth with inadequate tillers. It is important in this situation to apply nitrogen fertilizer in time for it to be available to the plant as

soon as spring growth resumes. Nitrogen application at greenup can stimulate the formation of additional tillers and increase yield potential. Fields with an average tiller density below 60 per square foot should receive top priority for early spring nitrogen application. When wheat is already well tillered at greenup (more than 70 tillers per square foot) nitrogen is most efficiently used if application is delayed until the wheat is near jointing thus reducing the risk of nitrogen loss and matching when wheat requires the most nitrogen. The highest rate of N uptake occurs between jointing and flowering, which typically occurs in March or April in central and northern Missouri.

In summary, fall tillering is ideal for high yield wheat. When good fall tillering occurs, nitrogen fertilizer produces the largest yield increase when applied near jointing. If fall tillering is poor, an early spring nitrogen application may stimulate tiller development and increase yield potential. Research trials on wheat with good fall tillering generally obtained the highest yield with a pre-jointing N application of 90 lbs/acre. For more information on managing wheat see University of Missouri Extension Guide IPM1022 "Management of Soft Red Winter Wheat," available online at <http://extension.missouri.edu/p/IPM1022> and at your County University of Missouri Extension office.

**Source:** *Max Glover, Agronomy Specialist*

## The Importance of Hay Testing

It is essential to know what is being fed in order to accurately balance feed rations for livestock. Wide variations occur in the nutritional value of stored forages. The only way to know the value is to test the forage. Dr. Marvin Hall, professor of Plant Sciences at Penn State University, explains accuracy and precision are the two main reasons forage quality results differ when the "same" sample is submitted to two forage testing laboratories.

The difference in accuracy of forage sample collection is generally much greater than the differences in the precision of the laboratory analysis according to Hall. Precision refers to a laboratory's ability to obtain the same results repeatedly. Over 150 forage testing laboratories participate in a certification process annually to insure their results are precise. Visit [www.foragetesting.org](http://www.foragetesting.org) for a list of the certified labs.

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Collect a representative sample to insure accuracy in the results. Separate samples should be collected for each “lot” of hay or baleage. A lot is a group of bales which are similar in the location harvested, the forages species and weeds in the bales, and the date mowed and baled. One lot of forage should be similar in the stage of forage maturity at harvest time and whether or not the forage had rain damage. The goal is to remove the variability of the hay quality within the sample.



The best way to sample hay is through the use of a hay probe. A hay probe is a hollow cylinder, 12 to 18 inches long, which pulls a core from the bale. Collect a minimum of 20 cores from each lot of hay. Randomly select at least 20 bales to be sampled to insure all of the hay is represented by the sample to be submitted.

Push the probe through the curved side of large round bales at waist height. Large or small square bales should be sampled in the center of the end. Thoroughly mix the cores together, and then put the entire sample in a clean air tight plastic bag to maintain the moisture content. Contact an MU Extension livestock specialist for hay probe availability and assistance balancing rations after the hay nutritional results are obtained.



**Source:** *Valerie Tate - Agronomy Specialist*

