

# IOWA STATE UNIVERSITY University Extension

[www.extension.iastate.edu](http://www.extension.iastate.edu)

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## IOWA STATE UNIVERSITY EXTENSION

MARCH 2009

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### SE IOWA AG RESEARCH ASSOCIATION MEETING – MARCH 5

The annual meeting for the SE Iowa Agricultural Research Association will begin at 10:00 a.m. on Thursday, March 5 in the Washington County Extension office in Washington. After a short business meeting, Kevin Van Dee, farm superintendent for the SE Iowa Research & Demonstration Farm will give an update on research occurring on the farm. Other presentations at the meeting will be “Cutting Crop Production Costs” by Jim Jensen & Jim Fawcett, Iowa State University Extension Field Specialists; “Full Width Tillage, Strip-Till, or No-till” and “Accurate and Uniform Anhydrous Application for 2009” by Mark Hanna, ISU Extension Ag Engineer; and “Making Insurance Decisions with the New Farm Bill” by William Edward, ISU Extension Farm Economist. Mark Honeyman, coordinator for ISU’s Research farms, will also give an update on activities at other research farms in Iowa. Certified Crop Advisor credits are available for a fee.

A lunch partially sponsored by the West Chester Savings bank will be available at noon. All members as well as interested non-members are invited to attend. A five year membership in the research association can be purchased for \$25. Membership benefits include updates on research results, invitations to the farm field days, and the chance to participate in research activities.

### ISU EXTENSION OFFERS CROP SCOUT SCHOOL

If you plan to work as a crop scout for the 2009 crop season, you will want to attend the upcoming Crop Scout School offered by Iowa State University Extension. Hands-on sessions will cover identification and scouting methods for weeds, insects and diseases. Workshops on plant growth and development of corn, soybean and alfalfa will be included along with discussion of common field crop problems.

Crop Scout School will be held Saturday, March 7, on the Iowa State University campus in Ames. Registration opens at 7:30 a.m. in Kildee Hall with sessions beginning at 8 a.m. and ending at 5 p.m. Registration is limited to 120 participants and pre-registration is required. The program brochure and registration form are posted on the Web at [www.aep.iastate.edu](http://www.aep.iastate.edu). The cost is \$80. Registration and fees must be received by March 4. Registrations will not be accepted at the door for this program. The fees cover a scouting notebook, lunch and breaks. Registration can be completed online with a credit card (MasterCard or VISA only) at [www.aep.iastate.edu](http://www.aep.iastate.edu). Registrations may be faxed with a credit card to (515) 294-1311 or be mailed along with a check or credit card information to: ISU Agribusiness Education Program, 2104B Agronomy Hall, Ames, Iowa 50011-1010. For more information, contact the Agribusiness Education Program at (515) 294-6429 or email [aep@iastate.edu](mailto:aep@iastate.edu).

## **2009 WIND ENERGY CONFERENCE - MARCH 20<sup>TH</sup> IN FAIRFIELD**

In 2008, Iowa surpassed California to become the nation's second largest in wind power generating capacity. At a time when renewable energy, sustainability and alternative forms of energy are in the spotlight, Iowa State University Extension presents the 2009 Wind Energy Conference on Friday, March 20 at the Fairfield Fine Arts and Convention Center in Fairfield, IA. Farmers, landowners, businesses, schools and homeowners interested in learning more about wind power are invited to take part from 8:00 a.m. to 4:00 p.m.

The day will include various exhibits, breakout sessions and panelists discussing the wind resources available in Iowa, the opportunities and threats related to the industry, and perspectives from current turbine owners and operators. The afternoon sessions will be broken into two tracks, one focusing on wind farms and the other on wind turbines for individuals, businesses or schools.

Sponsors include Iowa State University Extension, Iowa Energy Center, Henry County Farm Bureau, Jefferson County Farm Bureau, and Pathfinders RC&D. Those wishing to take part in the 2009 Wind Energy Conference should contact the Jefferson County Extension Office at (641) 472-4166. The cost is \$20 per person and will be limited to the first 200 registrants. For registration materials, please visit [www.extension.iastate.edu/jefferson](http://www.extension.iastate.edu/jefferson) or call (641) 472-4166.

Exhibitor booth space is available for interested businesses or organizations. For more details, contact Jefferson County Extension office. Iowa State University Extension builds partnerships and provides research-based learning opportunities to improve quality of life in Iowa.

## **NITROGEN FERTILIZATION DECISIONS IN UNCERTAIN TIMES**

Many farmers are struggling with making decisions on fertilizing crops with today's extremely high fertilizer costs and the gyrating commodity markets. In some cases fertilizer prices have quadrupled in price in just 2 years and in just one year corn prices have been anywhere from under \$2 per bushel to over \$7 per bushel. Recently nitrogen (N) prices have plummeted on the global market, but most local farmers will not see those prices because local supplies were purchased when prices were much higher.

Although N prices do influence optimum N rates, environmental conditions have a much greater impact on optimum N rates, according to Jim Fawcett, Iowa State University (ISU) Extension Field Agronomist. Unfortunately we do not know what the environmental conditions are until the season is over, so cannot know for sure what the optimum rate of N for corn is until the end of the season. Because of this year-to-year variation, ISU gives a range of recommended N rates to help crop producers. In a corn-soybean rotation without manure applications, a rate of 100-150 pounds of N per acre is recommended. The recommended rate is 150-200 pounds per acre following corn. Even with today's high N prices, the recommended rate will still usually fall within these ranges because commodity prices are also higher than where they have historically been. Recommended rates are in the lower end of the range with today's high nitrogen prices. One way to help decide on N rates is to use the corn nitrogen rate calculator located at <http://extension.agron.iastate.edu/soilfertility/nrate.aspx>.

Regardless of N prices it is always best to try to reduce N losses to optimize its utilization. There will usually be more N lost when it is applied in the fall, and this was especially evident in 2008. Nitrification inhibitors can help reduce losses when N is applied in the fall, and urease inhibitors can reduce volatilization losses with urea-based N that is surface-applied in the spring. Losses will usually be the least and utilization the greatest when the N is applied closest to the time when the corn will be using it. Tools such as the late spring soil nitrate test and end-of-season stalk test can help to fine tune N fertilization decisions. For more information on making fertilizer decisions, see the ISU soil fertility web page at <http://www.agronext.iastate.edu/soilfertility/>.

## **PHOSPHORUS & POTASSIUM FERTILIZATION DECISIONS**

Many farmers are struggling with making decisions on fertilizing crops with today's extremely high fertilizer costs and the gyrating commodity markets. In some cases fertilizer prices have quadrupled in price in just 2 years and in just one year corn prices have been anywhere from under \$2 per bushel to over \$7 per bushel. Recently phosphorus (P) and potassium (K) prices have plummeted on the global market, but most local farmers will not see those lower prices because local supplies were purchased when prices were much higher.

Because of dramatically higher P and K prices, many farmers who usually apply fertilizer in the fall are waiting until spring this year hoping for lower prices. It is critical to have good recent soil tests in order to make informed decisions on P and K fertilization, according to Jim Fawcett, Iowa State University extension field agronomist. The chances are very small that any corn or soybean yield response will be seen when soils testing high or very high in P & K are fertilized, so it is not recommended to apply additional P & K fertilizer on these soils even when fertilizer prices are low.

The chances are high that corn and soybeans will respond to additional P & K if soils test low or very low. Even with today's high fertilizer prices, it would be risky to cut back on the recommended rate on these soils because of the risk of a poorer crop. In fact, the risk of loss of profit from not fertilizing low testing soils is even greater today than what it has been historically because of the higher commodity prices. However, if producers have traditionally fertilized for two crops every other year, it would make sense this spring to just fertilize for the 2009 crop and wait until this fall or next spring to fertilize for the 2010 crop.

On optimum (medium) testing soils, the traditional recommendation has been to apply a rate of P & K equal to what the crop removes to maintain the soils at these levels. This may not be as valid of a recommendation with today's fertilizer prices. There is about a 25% chance of a yield response when fertilizing optimum testing soils with additional P & K. With historical prices, fertilizing these soils with a crop removal rate in the long term was a break-even strategy. With current prices this is no longer the case, so this is one area to consider cutting back on fertilizer rates, although if no fertilizer is applied there is a 25% chance of seeing some yield loss. If less than crop removal is applied, the soil test level will drop and eventually more P & K will be needed. It is also important to remember that corn yields have increased dramatically which means greater amounts of P & K are being removed from the soil. For more information on making fertilizer decisions, see the ISU soil fertility web page at <http://www.agronext.iastate.edu/soilfertility/>.

## **EASTERN IOWA HAY PRODUCERS ASSOCIATION CONFERENCE TO FEATURE JIM GERRISH**

Area hay and pasture producers are invited to attend the 26<sup>th</sup> Annual Eastern Iowa Hay Producers Association Annual Meeting and Conference on Wednesday, March 18, 2009 at Buzzy's in Welton. Registration will begin at 9:30 a.m. with the program scheduled to begin at 10:00 a.m.

This year's conference features well-known consultant and grazing educator **Jim Gerrish**. Jim will share his expertise and offer advice for getting the most out of your pastures. He will also explore what managed grazing can do for you. The day will also include Virgil Schmitt, ISU Extension Field Agronomist, and Denise Schwab, ISU Extension Beef Specialist, with hot-topic updates concerning the industry. The annual meeting of the Eastern Iowa Hay Producers Association (EIHPA) will take place shortly after lunch and will include their election of officers and directors.

Jim Gerrish of May, Idaho, owns and operates American Grazing Lands Services LLC, a business dedicated to helping farmers and ranchers more effectively manage their grazing lands for economic and environmental sustainability. They provide on-ranch consulting services and participate in many workshops and seminars across the US and Canada.

Jim’s experience includes over 20 years of beef-forage systems research and outreach while on the faculty of the University of Missouri, as well as 20 years of commercial cattle and sheep production on his family farm in northern Missouri. The University of Missouri Forage Systems Research Center rose to national prominence as a result of his research leadership. His research encompassed many aspects of plant-soil-animal interactions and provided foundation for many of the basic principles of Management-Intensive Grazing.

Registration for the conference is \$30 and includes a membership to EIHPA and meal. Tickets can be purchased at the door. Certified crop advisor credits have been applied for. This conference is sponsored by EIHPA, Iowa State University Extension, Iowa Beef Center, Iowa Forage & Grassland Council, and Iowa Grazing Land Conservation Initiative.

The Eastern Iowa Hay Producers Association provides educational workshops and field days for forage producers in Jackson, Jones, Clinton, Cedar, Scott and Muscatine counties. However, forage producers from other counties are also welcome to participate. For more information contact Kevin Brown at 563-872-4475.

## HAY/FORAGE & BEDDING PRICES

These are hay prices paid at auction in the recent past weeks. Much of the price information is obtained from USDA Hay Market News. Personal contacts of local Iowa hay auctions secured price information for these market outlets. Other nearby auctions may exist. No endorsement of the listed auctions is intended.

**Walcott** (EC IA) 2nd Sat Dec-Mar; Noon Dec 12 08 Sale; Alfalfa: SmSq \$150-220/T; Mixed: LgRd \$80/T; Grass: LgRd \$95-105/T; Straw: SmSq \$3.00-3.75/bale; Jan 10 09 Sale; Alfalfa: SmSq \$150/T; LgSq \$120/T; LgRd \$120-175/T; Mixed: SmSq \$195/T; LgRd \$85-95/T; Grass: SmSq \$140-200/T; LgRd \$100-120/T; Sraw: SmSq \$2.25-3.005/bale; Cornstalks: LgRd \$40/T; **Keosauqua** (SE IA) Sat 11:30A ; Alfalfa: SmSq \$2.50-4.25/bale; Grass : SmSq \$1.85-2.75/bale; Straw: SmSq \$2.00-3.25/b ; **Kalona** (SE IA) 1st Thurs, Yr-round 11:30AM (& 3rd Thurs Oct-winter); Alfalfa" SmSq \$2.10-4.80/bale; LgSq \$38-54/b; LgRd \$75-80/bale Mixed Leg/Gr: LgRd \$40-70/bale; Grass: SmSq \$1.75-4.80/bale; (LgSq \$40/b; LgRd \$48-50/bale Dec); CRP: (LgSq \$22/bale Dec); Cornstalks LgRd \$37-38/bale

## PRIVATE PESTICIDE APPLICATOR PROGRAMS SCHEDULED

The 2008-2009 private pesticide applicator continuing instructional courses have been scheduled for Iowa, Johnson and Washington County. If you wish to recertify by training and not by exam, you must attend a CIC session each year. Remember, you always have the option of taking the exam. There is a \$20 fee per person. A private pesticide applicator may attend a class offered in any county. Pre-registration is not required.

Date	Time	County	City/Area	Location
March 12	1:30 p.m.	Washington	Washington	Washington County Extension
March 12	7:00 p.m.	Washington	Washington	Washington County Extension
March 16	7:00 p.m.	Iowa	Victor	KC Hall, 210 Washington St.
April 15	1:00 p.m.	Johnson	Iowa City	Johnson County Extension
April 15	7:00 p.m.	Washington	Washington	Washington County Extension

## CONSIDER SPRING FROST SEEDING/INTERSEEDING PASTURES

Producers wanting to add to or improve forage in their existing pastures should consider using either the frost-seeding method in February and early March, or interseeding later in the Spring months. The frost-seeding method involves spreading forage seed on existing pastures during the late winter or very early spring while the ground is still frozen. Freeze-thaw cycles then provide shallow coverage of the seed, with help from early spring rains. Frost seeding is the easiest method producers have to add new forage grasses or legumes to their pasture, and is likely the least expensive method, as well. To increase this method's success, one should spread seed on the thinnest pasture sod areas first and on areas where bare soil has been exposed due to heavy grazing or disturbance. One common misconception about frost seeding is that spreading the seed on top of snow works best. The goal of frost seeding is to get seed on bare soil. This is more effectively and more safely done without snow cover.

Red clover has been the forage species of choice in Iowa for frostseeding. Other legumes, such as white clover and birdsfoot trefoil, also can be frost seeded but with less success than red clover, he said. In general, frost seeding does not work as well with grasses. Research has found that following a few steps will improve the success of frostseeding. See Iowa State University Extension bulletin *Improving Pasture by Frostseeding* for more seeding rates and guidelines. <http://www.extension.iastate.edu/Publications/PM856.pdf>

Interseeding offers an opportunity for improving pasture productivity too. Interseeding involves using a no-till drill to aid in the incorporation of a legume or a more productive grass into an existing pasture sod. Interseeding is normally done from mid-March through early May, when soil moisture and temperature are more suitable for rapid seedling establishment.

Interseeding can be accomplished with relatively few field operations. Opening of the grass sod, shallow seed placement, and seed coverage are required. A number of drills are available that can be used in sod-seeding efforts. Some of these drills may have improved features related to sod penetration, depth control, seed metering, or coverage that improves their effectiveness in sod seeding situations. Equipment limitations for sod seeding implements sometimes are overcome by operator experience and home shop modifications.

Legumes interseeded into grass sod should increase pasture yield, improve forage quality, and eliminate or minimize need for nitrogen fertilizer. Clovers, alfalfa, birdsfoot trefoil have been successfully interseeded. The more efficient seed placement provided by a no-till drill allows many of our more productive perennial forage grasses to also be successfully established by interseeding. Thin, low-producing, grass sod might best be improved by interseeding a grass-legume mixture.

A seeding delay into late spring to improve growing conditions often also leads to a greater competition from the existing grass sod. Close grazing in the fall or spring, ahead of interseeding, will help to reduce sod competition. Contact herbicides are sometimes also used to temporarily further reduce competition from plants present in the stand. Interseeding success depends a lot on paying attention to details, timeliness, careful management of sod completion, controlling seeding depth to no deeper than ¼ to ½ inch, and a little bit of luck with weather.

Interseeding research has been conducted in many parts of the U.S. and around the world. It shouldn't come as a surprise that the conclusions from these efforts all point to several very important issues that must be met for successful interseedings. See Iowa State University Extension bulletin *Interseeding and No-Till Pasture Renovation* for seeding rates and guidelines. <http://www.extension.iastate.edu/Publications/PM1097.pdf> For more information, contact **Stephen K. Barnhart, Extension Forage Agronomist, Iowa State University, and Ames, Iowa. Phone 515-294-7835 or sbarnhar@iastate.edu.**