

# IOWA STATE UNIVERSITY

## University Extension

Johnson County Extension  
4265 Oak Crest Hill Road SE  
Iowa City, Iowa 52246 319/337-2145

Washington County Extension  
209 S. Marion Avenue  
Washington, Iowa 52353 319/653-4811

## Iowa State University Extension Johnson & Washington County

### WASHINGTON COUNTY PASTURE WALK

Sieren Farms  
Wednesday  
June 16, 2004  
6:00-8:00 P.M.



Directions: From Keota, 1 mi. S on  
Co. Line Rd, 2 ¼ m. E, 1235 210<sup>th</sup> St.

- Managing Fescue Pastures
- Extending The Grazing Season
- Renovating Existing Pastures
- Watering System Options
- Weed & Thistle Control

*ISU Extension Specialists:*  
Jim Fawcett, Mark Carlton  
Byron Leu, Greg Brenneman

Sponsored by:  
West Chester Savings Bank  
Washington Co. Extension  
Iowa Beef Center  
Washington Co. Cattlemen



For more information contact Gene Mohling  
Washington Co. Extension, 319/653-4811  
[mohling@iastate.edu](mailto:mohling@iastate.edu)

### PRIVATE & COMMERCIAL PESTICIDE TESTING DATES

The Iowa Department of Agriculture and Land Stewardship will continue to offer local commercial and pesticide applicator testing for individuals seeking re-certification or new certification. The locations in southeast Iowa include:

**Iowa City, 4-H Fairgrounds, Montgomery Hall**  
Dates include June 7, July 6, August 2, September 7, October 4, November 1, and December 6  
**Mt. Pleasant, Henry County Extension, 101 South Jefferson St.** Dates include June 25, July 23, August 20, September 17, October 15, November 19, December 17 Tests are offered 10:00 a.m.-2:00 p.m.

### FORAGE/BEDDING PRICES

Recent auctions in east central and southeast Iowa have resulted in the following forage/bedding prices being paid: (Prices may vary depending of cutting, quality, storage & negotiation between buyer/seller).

#### **Walcott (EC IA) 2nd Sat Dec-Mar; Noon**

Alfalfa: SmSq \$102.50-147/T; LgSq \$120-140/T;  
LgRd \$70-97.50/T Mixed Leg/Gr: SmSq \$120-155.50/T ; LgRd \$70/T Straw SmSq \$2.55-3.00/bale  
CornStalks: LgRd \$7-22.50/bale

#### **Keosauqua (SE IA) Sat 11:30A**

Alfalfa: SmSq \$2.00-3.10/bale Grass: SmSq \$1.25-1.85/bale Straw: SmSq \$0.85-1.50/bale

#### **Kalona (SE IA) 1st Thurs, Yr-round 11:30AM (& 3rd Thurs Oct-winter)**

Alfalfa :SmSq \$3.00-3.40/b, LgSq \$100-110/T  
Grass: SmSq \$3.25-3.60/bale: LgRd \$50/bale Straw:  
SmSq \$1.50/-1.70bale

# COUNTRY ROADS AG TOURISM & MARKETING WORKSHOP: GROWING TOURISM COUNTRY STYLE

**When:** June 22nd & 23rd, 2004 (8:30 AM to 4:30 PM each day)

**Where:** Iowa Farm Bureau Building, 5400 University Ave. West Des Moines, Iowa

**Registration & Info Online here:** <http://www.ChooseIowa.com>

Both Days before 6-10-04 = \$150

after 6-10-04 = \$175

One Day before 6-10-04 = \$ 95

after 6-10-04 = \$120

**Call:** 515-281-7825 for more information

**Sponsored by:** Iowa Agriculture Innovation Center Choose Iowa **Hosted by:** Iowa Farm Bureau

## **Agenda: Tuesday, June 22nd**

**A day long workshop with Jane Eckert, one of the country's leading experts on agritourism.**

- How diversification leads to sustaining the rural way of life.
- What is "Agritourism" and what it can mean to a farmers way of life.
- Why tourists are flocking to farms and why farmers should get on the bandwagon.
- How the tourism industry works.
- Why farmers need to work with the tourism industry.
- How to meet the standards for tourism.
- How agritourism can increase visitation and grower travel revenues.
- How to offer diverse products through agritourism.
- How travel trends support the growth of this niche market.
- What agritourism offers.
- Meeting shared goals of revenue growth.
- How farmers and travel professionals can work together.
- How to develop agritourism packages that attract the motorcoach business.
- How farmers can tap into the marketing efforts of visitors bureaus.

## **Agenda: Wednesday, June 23rd**

**Workshop A:** Recreational & Lease Hunting Opportunities for landowners - Bob Wells

**Workshop B:** Agritourism Examples - Barb Lovitt, Renee Kidman, Norine Black and Paul Tabor

**Workshop C:** Iowa Wine and Vine Agritourism - Mike White, LuAnn Reinders, Ron Mark

**Workshop D:** Meat Slaughter, Processing, Labeling, Marketing - Mike Mamminga

# HANDLING HAIL DAMAGE IN CORN AND SOYBEANS

By Palle Pedersen, Extension Agronomist, Iowa State University

Besides the heavy rain and flooding that has hit the state's crop hard over the past several days, some areas also were hit with hail. Corn and soybean differ in their ability to tolerate hail damage and to compensate for reduced stands. For both crops, however, it is essential to make good estimation of plant health and accurate stand counts in order to determine the need for replanting. Overall, it is important to remember that because we are just in the beginning of the growing season, hail damage is not as critical as flooded fields.

## **Corn**

At the time of the hail most of the corn had not reached the V5-V6 growth stage yet. This is good news because the growing point is still below ground and even if the leaves have been destroyed or the plant has been cut off, re-growth from the growing point below ground will occur. The loss of those early leaves will reduce growth rate following the damage, but will not affect the overall yield significantly. Corn that

had reached the V6 or more advanced growth stages may not be viable due to the growing point having moved above ground. At these growth stages, the plant will continue to grow if only the leaves have been knocked off or shredded and the stem has not snapped.

When the stems have snapped at the base of the plant, the plant should not be considered viable. Leaves on the plant may have been shredded, but as long as they are connected to the stem they will continue to be an energy source for the plant and plant growth will therefore continue. Defoliation should not be considered a problem until later growth stages, approximately V7 or greater growth stages. Because no corn in Iowa is at that stage, leaf loss and stem snapping shouldn't be issues in the state.

Unlike soybean, corn can do little to change its growth pattern to take advantage of increased space in reduced plant populations. A low plant population of corn will mean fewer ears on an area basis, resulting in a yield reduction. Therefore, stand loss is more of a problem in corn, making estimation of viable plants very important.

### **Soybean**

Soybean differs from corn in that as soon as the plant emerges the growing point is above ground and extremely sensitive to adverse weather events such as hail or frost. In the case of hail, the plant is considered dead if it is in the cotyledon stage and it is cut off below the cotyledons, or if it is damaged by hail to such a degree that they have no green leaf tissue or re-growth. The reason is that nutrients and food reserves in the cotyledons supply the needs of the young plant during emergence and for about seven to 10 days after emergence, or until about the V1 stage (one fully-developed trifoliolate leaf). Cotyledons are the first photosynthetic organs of the soybean seedling and are also major contributors for seedling growth.

Unlike corn, the growing point for soybeans is between the cotyledons and moves above the soil surface at emergence. This makes soybean particularly susceptible to damage from hail, frost, insects like bean leaf beetles, or anything that cuts the plant off below the cotyledons early in its life. Stand reductions are therefore likely to follow hailstorms. After V1, photosynthesis by the developing leaves is adequate for the plant to sustain itself. It is important to remember that defoliation during the vegetative stages will seldom have a large impact of yield. However, it is a whole other story during the reproductive stages.

### **Secondary problems**

Along with the loss of plants in both soybean and corn populations, pathogen problems may also increase and consequently further reduce stands. Plants that have been damaged or wounded are also more susceptible to infection from plant pathogens. Corn is probably not at as much at risk as soybean, and soybean plants that have torn stems should be watched closely in the coming weeks for evidence of pathogen infection. Lesions around the base of the stem and plant wilting are often good indicators. If this is the case, it will be necessary to estimate the number of viable plants in the field again, and make a decision concerning replanting. However, it is difficult to assess this type of injury soon after the hail event. Therefore, if the field has a history of pathogen problems and if temperatures remain cool and wet, loss of wounded plants will probably increase.

Keep in mind that it is still May and problems like loss of plant stand can still be fixed. When it is possible to get back into the fields, take plenty of time to visit each of your fields and take the time to make a good estimation of the plant stand where flooding or hail has occurred, based on number of viable plants. Remember that yields will not necessarily be reduced just because plant stand has been reduced. Additional resources to help crop producers make decisions on how to handle hail- and flood-damaged crops can be found on the Web at: <http://www.extension.iastate.edu/ag/flooding.html>

## ***Spring Field Day***

**Iowa State University  
Southeast Iowa Research &  
Demonstration Farm  
Crawfordsville**

***Thursday, June 17  
Tour Begins at 1:00 p.m.***

### **Featuring:**

**Elwynn Taylor, Extension Climatologist  
“Crop Weather Outlook”**

### **Additional Topics:**

**Relay Intercropping of Soybeans Into Wheat  
Controlling Weeds in Non-GMO Soybeans  
Corn Nitrogen Needs in Crop Rotations  
Increase Profits with Low-Linolenic Soybeans**

**Directions: 1 ¾ miles south of Crawfordsville on Hwy 218, then 2 miles east on G-62, then ¾ mile north. Watch for Signs. 2.5 CEU's for CCA with \$25 fee. Two additional CEU's can be obtained by attending the morning session starting 9:00 am. Contact Jim Fawcett 319/337-2145 for more information.**

## ***Iowa Master Conservationist***

The Master Conservationist program is designed for individuals that share an interest in sustainability of Iowa's natural resources and in becoming better stewards of Iowa's resources.

The program offers 32 hours of hands-on training on woodlands, wetlands, ecology, sustainable agriculture, alternative energy use, wildlife, prairies and more.

There are 10 classes along with 3 scheduled field trips starting July 8. All class are held in the evening with field trips scheduled on Saturdays. The program registration cost is \$50 per person. Enrollment is limited.

For a complete brochure, schedule and registration information please contact the Johnson or Washington County Extension Offices at 319/337-2145 or 319/653-4811. The program is co-sponsored by Iowa State University Extension and the Johnson & Washington County Conservation Boards.

## **Mark Your Calendars!**

### **WASHINGTON COUNTY FAIR**

**July 12-15, Livestock Auction July 16**

**<http://www.extension.iastate.edu/washington/>**

### **JOHNSON COUNTY 4-H/FFA FAIR**

**July 26-29, Livestock Auction July 30**

**<http://www.extension.iastate.edu/johnson/fairhome.html>**

# REPLANTING CORN AFTER FLOODING

By Palle Pedersen, Extension Agronomist, Iowa State University

Corn that currently is not underwater is stressed and yellow because of the cool temperatures and wet, saturated soils. Farmers need to make stand evaluations and assessments in each field. Based on my travels around the state yesterday, most farms had a field or part of a field under water, significant erosion, and large gulleys. Regardless of the cause of the damage, the key to survival and regrowth is the health of the growing point. If recovery from the whorl is not visible within four or five days of improved soil conditions, then counts of healthy plants should be made and replanting decisions considered. The cool temperatures that we saw yesterday and today, after the damage, slowed both the recovery and deterioration of the corn, which may force us to wait a few extra days before making an accurate assessment of the field.

When you evaluate your corn stands, first you need to determine the plant population in the field (count the plants in a row length equal to .001 of an acre to determine population), then you need to evaluate plant health three or four days later, assess the unevenness of stands, compare the yield of a reduced stand to that of a replanted stand, calculate replanting costs, and evaluate the risk factors of replanting. Optimum populations do vary across locations, but these variations are relatively small.

If you are in a situation where corn needs to be replanted because of last weekend's weather, one of the first questions is "How late we can plant full-season corn hybrids in Iowa?" Although delayed planting shortens the growing season, corn hybrids adjust well to this delay. Corn yields do not begin to decline rapidly until planting is delayed beyond mid-May. Based on previous ISU research on corn yield response to planting date, corn yield will be about 70 percent of the relative yield potential compared to corn planted at the optimum window (April 20 to May 5).

A general rule is that if planting is delayed until May 25, you should select a hybrid that matures five days earlier than an adapted full-season hybrid for that area. If planting is delayed another seven days, select a hybrid that matures another five days earlier than the previous one. In general, the date to switch maturities is later in southern Iowa. Generally speaking, if corn planting is delayed until June 10 to 15, very early maturing corn hybrids should be used; after June 10 to 15, corn planting is risky unless the corn can be used for silage. If you decide to switch to another crop, such as soybean, please remember that the corn herbicide program that you used earlier may not allow you to plant soybean.

For more information on corn planting in Iowa, refer to PM 1885: Corn Planting Guide, available at <http://www.extension.iastate.edu/Publications/PM1885.pdf> Additional resources to help crop producers make decisions on how to handle hail- and flood-damaged crops can be found on the Web at: <http://www.extension.iastate.edu/ag/flooding.html>

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