CROP NOTES for March 13, 2015
Past issues of Crop Notes are posted at:
http://www.extension.iastate.edu/winneshiek/page/crop-notes-brian-lang

Iowa State University Extension Information for Northeast Iowa
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FARM MANAGEMENT
Iowa Farm Custom Rate Survey Update March 2015
This information is now updated as of March 2015, and is available
at: http://www.extension.iastate.edu/agdm/articles/others/PlaMar15.html
County Yields for Corn and Soybeans in 2014

County Historical Yields for Corn and Soybeans
Corn yields are available at: http://www.extension.iastate.edu/agdm/crops/html/a1-12.html

CROP MANAGEMENT CLIMATE TOOLS
‘New’ U2U Ag Climate Crop Management Website
Weather and climate patterns are a driving force in cropping systems. U2U is an integrated research and extension project working to improve farm resilience and profitability in the North Central U.S. by transforming existing climate data into usable products for the agricultural community. The goal is to help producers make better long-term plans on what, when and where to plant, and also how to manage crops for maximum yields and minimum environmental damage. Here is the website for the Decision Dashboard: https://mygeohub.org/groups/u2u/tools

4-inch Soil Temperature
Temperatures are posted in the NPKnowledge website at: http://extension.agron.iastate.edu/NPKnowledge/ Currently, soil temperatures are in the 30’s. Oats will germinate at 35F, and could be planted anytime now once the soil is fit to drive on. However, alfalfa’s preferred planting window is April.

OATS
Seeding Rate
For grain and straw production, the general recommendation for seeding rate is to achieve 30 seedling plants/sq.ft. With typical tiller development of 2 tillers/plant plus the main stem, we should get 90 seed heads/sq.ft. at harvest. A ball park recommendation to achieve this is 3 bu/ac. We would use half this rate if oats was a nurse crop for an alfalfa seeding so as to not out-compete the developing alfalfa stand. More specifics regarding the general recommendation of 3 bu/ac is to consider actual seeds per pound and % purity and germination on the seed tag. Seeds per pound could vary by as much as 30% from variety to variety and circumstances affecting the growing season. To achieve 30 plants per square foot we would also consider using Pure Live Seed (PLS) in the calculations. PLS = % purity x % germination from what is listed on the certified seed tag. PLS plus the actual seeds per pound in the purchased seed bags are used to calculate a more specific seeding rate.

ALFALFA
Little Concern of Over-Wintered Stands
Even though winter weather was quite cold at times, snow cover usually kept 4-inch soils temperatures at 20F or higher. Only twice during the winter dropping to 19F (Feb. 18 and 23), but nowhere close to the 5-15F temperatures to where we might have some concerns with some cold injury to alfalfa crowns. Plus, with the rather quite warmup lately, we seem to have avoided some of our usual late-winter concerns with possible alfalfa injury to extended ponding or ice sheets.

**PASTURE**

*N Fertilization*

The majority of pasture production of our cool season forage species occurs in spring. To take advantage of this production potential, N fertilization of grass pastures in spring is usually recommended at anywhere from 30 to 80 lbs of N/ac. If a pasture consists of at least 40% legumes, then the legumes should be able to provide all of the needed N to the grasses.

**WEEDS**

*Can You Help ISU with a Survey to Improve Monarch Butterfly Populations?*  
Farming practices have reduced milkweed populations. Milkweed is very important to Monarch butterflies. The Iowa Monarch Butterfly Consortium is working on how best to replace the milkweed that has been lost from crop fields in order to increase monarch reproduction in the Midwest. Part of the effort includes ISU Extension documenting current milkweed populations in CRP acres in Iowa. You can help. Could you identify CRP ground that you would allow ISU Extension to walk and survey for the presence of milkweed? ISU plans are to do this survey in June/July. If interested in letting ISU walk your CRP field, please send me an email.

**SOILS**

*What is the Nutrient Value of Lost Organic Matter by Erosion?*  
Whether its crop rotation, no-till, reduced-till, contour strip cropping, waterways, cover crops or other practices, its typical to just look at crop yields to access success of a conservation practice. But besides crop yields, what is the value of avoiding soil loss. The following article attempts to put dollar values on the soil itself: [http://www.extension.iastate.edu/CropNews/2015/0306AlKaisi.htm](http://www.extension.iastate.edu/CropNews/2015/0306AlKaisi.htm)  
This is basically a cash-cost estimate and doesn’t include potential yield losses overtime from eroded soil, or potential social costs such as environmental impacts of lost N, P and sediment into local streams and fishing habitats, and eventually the Gulf Coast.

**POULTRY**

*Attention Iowa Poultry Producers, Hatcheries and Testing Agents*  
Wednesday, March 11 2015, from Randy Olson, Executive Director, Iowa Poultry Association, (515) 727-4701. Good afternoon. I am writing to alert and update you on three new cases of Highly Pathogenic H5N2 Avian Influenza viruses confirmed in Missouri and Arkansas.
The first was confirmed on March 9th at a turkey grower facility in Jasper, County Missouri, affecting 30,100 turkeys. The second, confirmed on March 10th at another grower facility housing 21,000 market turkeys in Moniteau County, Missouri. State officials have set up a quarantined zone and plans to depopulate the remaining birds are underway. The USDA stakeholder announcement may be viewed here: http://www.aphis.usda.gov/stakeholders/downloads/2015/sa_hpai_missouri.pdf And finally the third case was confirmed yesterday, March 10th, in Boone County, Arkansas. This case involves 40,020 8-week old turkey hens in three houses. All are currently under quarantine while awaiting depopulation. The USDA stakeholder announcement may be viewed here: http://www.aphis.usda.gov/stakeholders/downloads/2015/sa_hpai_arkansas.pdf

We cannot stress it enough: Biosecurity! Biosecurity! Biosecurity!

1. Foot traffic into your barns is the most likely way to introduce the virus to your flock. Limit overall traffic to your farm if possible.
2. Clean boots, coveralls and equipment are essential.
3. Make sure your barns are tight from birds entering your barns.
4. Avoid convenient stores where farmers, tourists and hunters frequent.
5. Avoid contact with water fowl and their feces.
6. This includes the water they are in, even if the birds are not present.
7. Highly pathogenic strains of avian influenza can travel in wild birds without the birds appearing sick.
8. Do not stack, store or expose any of your equipment or supplies to the outside where manure could be deposited from birds flying over.

Clinical signs:
1. Be observant of your flock. Watch for signs of sluggish behavior and respiratory problems. A bird's head and joints may become swollen as well.
2. Sudden death may occur with few other signs. Most of the flock usually dies, and quickly.
3. The virus's incubation period is 21 days.

Outcome:
1. 40 countries have banned turkey products from Minnesota. 6 million Minnesota turkeys are sent to international markets every year. If the ban is not quickly lifted the turkey meat will go into the domestic market which means domestic turkey prices could drop. I do not have numbers on Missouri, but expect the same situation. Minnesota is number one in turkey production, Missouri is fifth.
2. You are not able to medicate your way out of this.
3. If a flock becomes infected with HPAI all birds on your site will be depopulated.
4. This is the beginning of the migration season = a lot of birds flying over your farms.
5. If a farm within 10 kilometers of your farm breaks with AI, you will be quarantined too. That means no movement of birds from you farm without USDA approval.
6. If a farm within 20 kilometers of your farm breaks with AI, you will be under surveillance from USDA.

Additional information on biosecurity for backyard flocks can be found at http://healthybirds.aphis.usda.gov. Please do contact the office of our State Veterinarian if you
observe abnormal behavior in your flock. You can call Dr. David Schmitt at (515) 281-8601 or via email at David.Schmitt@IowaAgriculture.gov or alternately, Dr. Jeff Kaisand at (515) 281-0866 or via email at Jeff.Kaisand@IowaAgriculture.gov. As a reminder, if you participate in the Secure Egg Supply program, make sure your protocol is up to date, and if you are not currently participating, please consider participation in SES by visiting www.secureeggsupply.com. Thank you, and please let us know if you have any questions, or if we can be of help.

EVENTS

Mar. 18, Bill Northey to Speak at ISU Research Farm Annual Meeting, Nashua
The meeting is free and open to the public. No registration required. Secretary of Agriculture Bill Northey and Ag Economist Mike Duffy will speak at the annual meeting of the Northeast Iowa Agricultural Experimental Association (NEIAEA) at the ISU Northeast Research Farm near Nashua. The program starts at 9:30 a.m. with a Call to Order for the board meeting. From 10:00 a.m. to Noon will be key presentations from Bill Northey and Mike Duffy. Northey will discuss Iowa Agriculture’s Essential Role in Water Quality. Duffy will address Iowa Land values: How we got here and where are we going? After lunch, Ken Pecinovsky, Research Farm Superintendent, will review results from the research farm trials conducted in 2014. Provided free at the meeting is the 2014 Research Farm Report. Lunch will be offered by the Riverton Lucky Clovers 4-H Club. Following lunch and Pecinovsky’s presentation, the NEIAEA board of directors will meet. The program will be held at the Borlaug Learning Center on the ISU Northeast Research Farm. Directions: From Nashua at the Jct of Hwy 218 (Exit 220) and Co. Rd. B60, go west on B60 1.1 miles to Windfall Ave., then south 1 mile to 290th St., then east 0.2 miles to the farm. For more information about the event, call Terry Basol at 641-426-6801. CCA credits available for the 10:00 to Noon sessions for $10 (1 SW, 1 CM).

Mar. 19, Webinar on Socioeconomic Issues of Genetically Engineered Crops
The National Research Council committee for the study, "Genetically Engineered Crops: Past Experience and Future Prospects," will hold a webinar on Thursday, March 19, from Noon to 2:00 pm Central Time on socioeconomic issues related to genetically engineered (GE) crops in industrialized countries. The webinar will feature the following speakers:
• Keith Fuglie, Research Economist, USDA Economic Research Service
• Lorraine Mitchell, Agricultural Economist, USDA Economic Research Service
• Seth Wechsler, Agricultural Economist, USDA Economic Research Service
• Peter Phillips, Distinguished Professor, University of Saskatchewan

Mar. 19, Eastern Iowa Hay Producers Association Meeting and Conference, Welton
Area hay and forage producers are invited to attend the 32nd Annual Eastern Iowa Hay Producers Association (EIHPA) Meeting and Conference at Buzzy’s in Welton. Registration will begin at 10:00 a.m. with the program scheduled to begin at 10:30 a.m. Speakers include: Matt Liebman, ISU Professor of Agronomy, will speak on forages as part of a crop rotation. Mark Carlton, ISU Extension Agronomist, will speak on utilizing cover crops as a forage. Following Mark will be a producer panel who are using cover crops as a forage source for their livestock operation. Following lunch and a brief annual meeting to elect officers and directors, will be regional updates from Virgil Schmitt, ISU Extension Field Agronomist, and Denise Schwab, ISU Extension Beef Specialist. Specific regional topics to be addressed include information on the newly released low lignin alfalfa and concerns about molds and mycotoxins in corn stover. Registration for the conference is $30 and includes a membership to EIHPA and meal. Tickets can be purchased at the door. The EIHPA 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 Denise Schwab at dschwab@iastate.edu or Kevin Brown at brofarm@windstream.net or 563-872-4475.

Mar. 24, Commercial Pesticide Applicator Recertification for Certified Handlers
For details on these programs, go to: http://www.extension.iastate.edu/psep/ComAp.html
Email notifications now available for Commercial Pesticide Applicator Recertification Programs. Applicators can use the link below to sign up to receive notifications. Applicators can select the categories they would like notification for and will also have the opportunity to update their information if it changes, or opt-out at any time if they no longer wish to receive email notifications. Participation is voluntary. Spring and Fall postcard notifications will still be sent to employers. http://iastate.us9.list-manage.com/subscribe?u=3cb55533aaf3888868f4e5b21&id=363ab060d4

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