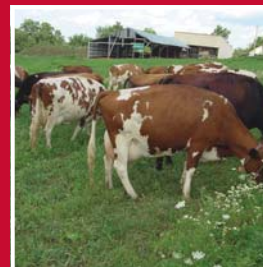


FIELD & FEEDLOT



ISU EXTENSION—NORTHWEST REGIONS

APRIL 2010 ISSUE

Extension Web Sites

Ag Decision Maker

<http://www.extension.iastate.edu/agdm/>

Beef Center

<http://www.iowabeefcenter.org/>

Manure Management

<http://www.agronext.iastate.edu/immag/>

Pork Center

<http://www.ipic.iastate.edu/>

ISU Extension Dairy Team

<http://www.extension.iastate.edu/DairyTeam/>

Agronomy Musings

By Joel DeJong, ISU Extension Field Agronomist

Last year we had a cool summer. So cool, in fact, that we lost about the equivalent of half of July for growing our crops. We had very little heat stress, which allowed corn a lot of days to fill ears. When we have seasons, particularly after pollination, when we don't have heat stress and adequate water, we typically produce a lot of bushels. They might be wet at the end of the season if we are as short on growing degree days as we were last year, but we typically get a lot of bushels. Never before have we had counties in Iowa that have averaged more than 200 bushels per acre. According to the National Ag Statistics Service report that came out recently with yield data by county, five Iowa counties averaged over 200 bushels this year. They were Ida at 204, Sioux and Cherokee with 203, and Plymouth and Shelby at 201. Others were very close. Lots of corn – but we also harvested more water than we might ever have harvested before. Of course, the handling problems of wet grain come with that. Watch your grain in storage very carefully!

Now, let's look ahead at the next growing year. Some of the long-term NW Iowa soil moisture sites were analyzed in early November of last fall. If you add in the rain that occurred in late November, I would assume almost all were at field capacity when winter hit. Since then we have added 4 to 9 inches of water from snow, and obviously not all fit into the soil. If you recall, a corn or soybean crop needs about 22 to 25 inches of water to grow a full crop and not have water as the limiting factor. Of course, other things like lots of extremely high temperature or late planting can cause yield losses, but right now our soil is storing almost half of the

water the crop will need during the growing season if we do a good job getting their root systems established.

Our challenge in the short run will be trying to get the seed in the ground in a timely manner, and into soil conditions that are favorable for plant growth and development. If we get that done, history would say that our yield potential for the next year looks pretty favorable. Why would I say that? Long-term soil moisture analysis from the NW Research Farm site at Doon would show that the odds of having very good yields when we start the year with a full soil moisture profile are very good!

I read an article recently by Craig Solberg of Freese-Notis Weather in which he reviewed yields after snowy winters. Here is the data he compiled:

- '61-'62: 59", rank #1 is on average for Iowa (nationally and in Iowa we had record yields up to that point in time)
- '59/'60: 51" of snow, rank #4 (national record, 3rd in state history)
- '78/'79: 49.3", rank #5 (national and state record yields)
- '74/'75: 49.2", rank #6 (3rd highest yield nationally, 5th in state records to that time)
- 2000/'01: 45.8", #7 (2nd highest yield nationally, 3rd for Iowa)
- '83/'84: 45.7", #8 (4th highest yield nationally, 5th for Iowa)
- 2007/'08: 45.1", #10 (2nd highest yield nationally, 3rd for Iowa)

Additionally, most of these years posted well-below normal temps in March, and even into April. Obviously, early spring flooding was inevitable. A fast start and end to the planting season looks unlikely. Planting delays are possible, but not inevitable. And, national corn yields in these years tended to be quite good.

In summary, it looks like a year that begins with challenges. If we can find a way to meet these early season challenges, and I am confident we will here in NW Iowa, I am optimistic about our upcoming crop production year. Will there be problems? Yes, but we can, and will, manage those problems to the best of our ability – and the outcome will likely be quite good!

Beef Issues

By Beth Ellen Doran, ISU Extension Beef Program Specialist

Moldy Corn – Livestock owners need to check the condition of their corn. There have been reports of binned corn developing mold. The presence or absence of mold does not guarantee there will or will not be mycotoxins.

Three mycotoxins have been detected in this year's corn – vomitoxin, zearalenone, and fumonisin. All can cause reduced feed intake and poor performance, common symptoms for a variety of animal health problems. The only way to know if corn contains mycotoxins is to have it analyzed. Samples may be sent to the ISU Veterinary Diagnostic Lab.

Ruminants appear to be more tolerant of mycotoxins, but there are upper limits for each category of ruminant and mycotoxin. Corn containing mycotoxins may be blended with clean corn to reduce mycotoxins to a tolerable level. However, if mycotoxins are present, several categories of animals should NOT receive this corn – breeding animals, young animals, compromised animals and horses.

For more information on mycotoxins or to submit samples for analysis, check out <http://vetmed.iastate.edu/diagnostic-lab/>

Weak Calf Syndrome – Weak calf syndrome (WCS) has been reported by the ISU Veterinary Diagnostic Laboratory. WCS typically describes calves born alive, but lacking normal vigor. These calves may not stand and nurse without assistance. If they do stand, they are slow to get up and are often hunched over. Some affected calves may be stillborn.

Multiple factors may contribute to WCS – suboptimal dam nutrition, mineral deficiencies and infectious diseases. [Optimal dam nutrition is the best management intervention to prevent WCS.](#) Because 80% of calf growth occurs the last 50 days of pregnancy, the dam needs adequate nutrition. Cow-calf producers should evaluate their rations for energy, protein, vitamins and minerals. Cows should be at a body condition score of 5.5 to 7.0 prior to calving. Heifers should be in the 6-7 range for body condition.

Energy is important for the fetal calf. Fetal brown fat provides the energy for the calf to survive until colostrum and milk is ingested. Cows need adequate energy from their feed. Calves born to cows losing weight during late gestation will have less fetal brown fat and a longer interval from birth to standing. These cows will take longer to return to estrus.

Calves born from protein-restricted dams have reduced vigor, decreased heat production, and increased time from birth to standing. Idaho research indicates that adequate protein during gestation reduced the incidence of WCS. Late gestation cows need 2 pounds of protein per day (coming from the total diet).

Selenium and Iodine deficiency are also associated with WCS. If selenium is supplemented, it will take 4-6 weeks to build adequate selenium levels in the cow's liver. However, WCS can still be observed when selenium is adequate, and supplemental selenium in these instances is not beneficial.

WCS can be caused by Bovine Viral Diarrhea Virus (BVDV) and leptospirosis. Calves infected by BVDV in pregnancy may show signs of hydrocephalus, immaturity, "dummies", generalized weakness or stillborn births.

Bottom-line: Make sure that your herd nutrition meets the needs of your cows and heifers. Check that your herd health program is current.

Information for this articles was taken from: <http://vetmed.iastate.edu/vdpam/extension/beef/current-events/weak-calf-syndrome>

Estrus Synchronization Planner – The Iowa Beef Center has an updated version of the Estrus Synchronization Planner, a computer spreadsheet program to help make decisions and establish a program calendar for synchronizing estrus in cows and heifers.

The software offers 16 preferred synchronization systems and five less preferred systems in three categories – heat detect and AI, heat detect and clean-up AI, or fixed-timed AI. The program recommends various systems for cows and heifers and suggests systems based on the amount of heat detection desired. The program will provide a list of daily activities, barn calendar of the synchronization system, and a budgeted cost analysis.

To order a copy of Estrus Synch Planner, visit the ISU Extension Online Store at www.extension.iastate.edu/Store or phone 515-294-5247. The Estrus Synch Planner is \$25 plus shipping and handling. Refer to ESTRUS 0001. Clients who have an older version of the program may purchase an update for \$12.50 plus postage and handling. Refer to ESTRUS 0001 UPDATE.

Pre-Harvest Marketing Plans

By Ron Hook, ISU Extension Farm Management Specialist

Now is the time to make sure your pre-harvest marketing plan for the 2010 harvest is up to date. We are in the prime time to market corn and soybeans before harvest. If history repeats itself, the highest price for 2010 crops will occur during March, April and May. In 16 of the last 20 years, December corn futures have been lower on the first of October than they were on the first of May. In fact, the decline was more than 40 cents in 9 of those 16 years.

In 14 of the last 20 years, November soybean futures have declined from the first of May to the first of October. The decline was more than 50 cents in 10 of those 14 years. So there is strong evidence that the time to do pre-harvest selling is in the March-May time period.

The amount that you can comfortably sell before harvest is the amount covered by your revenue based crop insurance. If you have 75% CRC, then you can sell up to 75% of your expected production. If the crop is short, your insurance will allow you to purchase grain to fill commitments made pre-harvest.

It is important that your pre-harvest plan include price targets that will trigger sales. These targets should be higher than your cost of production. You don't want to sell grain pre-harvest if the price available is less than it cost you to produce it. Your price targets can either be the harvest delivery price at the elevator or ethanol plant or the harvest futures price (December futures for corn and November futures for soybeans).

If the price available does not reach your target, it is necessary to have date targets as well. The price target might not be reached, but you can be sure that we will reach the date target. If the price target is not reached, but the price available is above your cost of production, your plan will have you sell on the date you selected.

There are several tools available to make the sale. Forward contracts for harvest delivery allow you to know exactly what you will receive for the bushels sold. Hedge to arrive contracts allow you to establish the futures price and sometime prior to harvest you will need to set the basis. Hedging requires you to sell a futures contract through a broker and make margin calls if the market goes up. The hedge is completed by buying back the futures contract and selling the grain for delivery to the local elevator or ethanol plant.

Regardless of the method used to make the sale, history shows that you are likely to get a higher price now than you will selling at harvest. If you have any questions about pre-harvest marketing, contact Tom Olsen, tolsen@iastate.edu, 712-210-3171, or Ron Hook, rhook@iastate.edu, 712-395-0443.

Agronomic Resources are Available

By Mark Licht, ISU Extension Field Agronomist

As spring comes upon us, it is now that we should start looking at what agronomic resources are available to help us as we start in on another crop season with challenges yet to be determined. Over the last several weeks I have gotten the question, "What will the season bring?" I may be young, but I have figured out a few things. First, we know what ideal growing season weather should be. Second, we have no clue what normal weather is or what cards will be dealt. And third, whatever we plan for won't be the challenge of the year. Because of this, we need to be able to manage and adjust for whatever situation we find ourselves in. Following are many

resources that are available that are sent out or updated frequently to assist you in making the best of whatever the growing season brings.

ISU Extension Field Agronomist Newsletters

Nearly all ISU Extension field agronomists put out a crop newsletter throughout the growing season. Joel DeJong, Paul Kassel, and Mark Licht are no different. To find past newsletters from us, go to: <http://www.extension.iastate.edu/ag/fsnews.html>. If you want to be added to our email list, send us a note at: jldejong@iastate.edu for Joel, kassel@iastate.edu for Paul, and lichtma@iastate.edu for Mark.

Integrated Crop Management News

The Integrated Crop Management News is an electronic newsletter where ISU campus faculty and staff post articles regarding all aspects of crop management. Typically, these articles hit on current happenings and refer to research findings on that topic. To view postings, go to: <http://www.extension.iastate.edu/CropNews>. To sign up for daily or weekly email alerts of new postings, go to: <http://www.extension.iastate.edu/CropNews/Subscribe.htm>.

CropWatch Blog

The CropWatch blog is a joint venture with Iowa State University Corn Soybean Initiative and Iowa Farmer Today. The CropWatch blog is where agronomists from industry and ISU post what we see and hear along with some helpful tips to go with our observations. This blog can be found at www.iowafarmertoday.com/blog.

Agronomy Extension Webpage

This webpage has subpages for corn, soybeans, fertility, soil management, water quality, weather, and more. Many of the subject matter have links to supporting publications. It also has a section that shows educational events and opportunities. Find this resource at: www.agronext.iastate.edu.



Corn Field Guide and Soybean Disease and Pest Management Field Guide

These two field guides are a must have. In addition to other topics, they offer information on crop growth and development, insects, and diseases. You can get these from any ISU Extension field agronomist and many ISU Extension county offices. Other Extension publications can be found at the Extension Online Store (www.extension.iastate.edu/store/).

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