CROP NOTES for April 24, 2015
Past issues of Crop Notes are posted at:
http://www.extension.iastate.edu/winnesihek/page/crop-notes-brian-lang

Iowa State University Extension Information for Northeast Iowa
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CLIMATE
4-inch Soil Temperature
The recent cool weather moved soil temperatures into the upper 40’s F. As we now warm up, soil temperatures will be 50 F and increasing, thus time to plant corn and soybean. However, we don’t plant other warm-season species (sorghum-sudan, millet, teff) until soil temperatures reach 60 F and increasing). Soil temperatures are posted in the NPKnowledge website at:
http://extension.agron.iastate.edu/NPKnowledge/

Corn Growing Degree Days (GDD)
In general, it takes 90 to 120 GDD from planting to initial emergence, however, it often takes a bit longer for April planted corn. Low night temperatures influence soil temperatures and seedling development more so than the GDD calculations would indicate. Average GGD for late April is about 6 per day. The following web site calculates GDD depending on dates entered in the drop menus (be sure to change the “year” window from 2012 to 2015).

CORN
FYI, Development from April 15 Planting at Nashua
Photo taken April 22 from our Planting Date Trials at the Research Farm showing nearly a ½-inch radical and a bit of initial shoot development. April 15 to April 22 was about 64 GDD.

COVER CROPS – Kill it or Keep it
Details were posted in the April 15, 2015 Crop Notes http://www.extension.iastate.edu/winneshiek/page/crop-notes-brian-lang

INSECTS
Alfalfa Weevil – Not yet scouting for in northeast IA
Egg hatch is underway in southern IA, starting in central IA, and about a week away from starting in northeast IA. A recent ICM News article discusses egg hatch, scouting and thresholds.  http://www.extension.iastate.edu/CropNews/2015/0414Hodgson2.htm This is a more frequent pest problem in southern Iowa, and a quite infrequent around here. However, once in a while it requires treatment, so we scout. In northeast Iowa, would not start scouting until degree day (DD) accumulations reach about 300 (base 48 F, staring Jan. 1). They start hatching around 250 DD, but for northeast Iowa waiting until 300 DD is more efficient use of your time. A DD mapping system from Iowa Environmental Mesonet, ISU, is available to generate up-to-date information for your area. Click on the “View Degree Day Map” button in the left corner of the page and then set the parameters for DD to create a new map. Make sure to set the start date to January 1, 2015 and the end date to today. Also set the base temperature to 48°F. The DD Map is available at: http://apps.csi.iastate.edu/pipe/?c=entry&a=view&id=27 I attached a current map as of April 24, 2015.

Black Cutworm – No significant trap catches yet
BCW pheromone traps across Iowa have had only a few catches so far. Larger catches have been reported well to the east (Indiana). We need those warm winds from the south to blow these months into Iowa. Recently our winds have largely been from the northwest, thus the cooler weather. Once we get significant catches we will comment about scouting and thresholds.
Common Stalk Borer - Control options
For those that lose corn plants in the first few rows along grassy field borders or grass-back terraces, you may have a problem with Common Stalk Borer.

Control option 1 has passed. Control options 2-4 remain. 
1) A controlled burn of the grass will destroy most of the eggs. This is usually the most successful control option.
2) Some Bt corn controls or suppresses stalk borer, and some do not. Check for this information in the “2015 Handy Bt Trait Table” at: http://msuent.com/assets/pdf/28BtTraitTable2015.pdf
3) You could wait for egg hatch and treat then with insecticide. Egg hatch starts ~575 DD base 41, Jan. 1. Current accumulated degree days are provided in the map at: http://mesonet.agron.iastate.edu/cgi-bin/oagdd.py?year1=2015&month1=1&day1=1&year2=2015&month2=4&day2=24&base=41&max=86
So, initial egg hatch for east central IA will likely be reach in the first week of May, but not until about the third week in May for northeast IA.
4) You could wait for larval migration from the grass to the corn at which to apply insecticide on the grass field border and the first few rows of corn. This begins around 1,300 DD base 41, Jan. 1. We will track degree days and let you know when we approach this window. It often occurs around mid-June.

WEEDS
How Many SOA’s Needed to Counter Development of Herbicide Resistant Weeds
The University of Illinois summarized multi-year research on crop rotation and different numbers of SOA (site-of-action) herbicide groups needed to tackle herbicide resistant weed issues. The quick answer is… that just rotating to a different SOA from year-to-year is not effective. You need to include multiple SOAs each year. For the research summary, go to:

FERTILIZER
Anhydrous Ammonia - Those Most Commonly Asked Questions
The University of Minnesota just published a nice article on commonly asked questions about AA. How deep to knife it in? When can I plant? Does AA adversely affect soil structure or soil organisms? Go to: http://blog-crop-news.extension.umn.edu/2015/04/anhydrous-ammonia-applications.html

New Publication on Sulfur Fertilization
All of those years of sulfur fertilizer research on alfalfa, corn and soybeans that we did since 2006 is now available in the following 12-page publication, available at: https://store.extension.iastate.edu/Product/Sulfur-Management-for-Iowa-Crop-Production

EVENTS
May 5, Great River Graziers Pasture Walk & Facilitated Discussion, Ferryville, WI.
Starts at 10:30 am at the Christopher Baird farm. The topic is stocking rate. For details and directions, go to: http://www.extension.iastate.edu/dairyteam/sites/www.extension.iastate.edu/files/dairyteam/2015%20April%20and%20May%20Great%20River%20Graziers%20Pasture%20Walk%20Schedule.pdf

May-August on Numerous Workshops on Seed Treating and Conditioning, Ames
The ISU Seed Science Center offers a series of workshops on seed conditioning and quality testing procedures throughout the summer. They are small group sessions that feature a mix of classroom and “hands on” equipment operation in our pilot plant at the ISU Seed Science Center. The schedule and additional information is provided at: http://www.extension.iastate.edu/registration/events/conferences/seedscience/ The Seed Treatment workshop on June 24-25 is approved for Commercial Pesticide Applicator Continuing Instruction Course credits.

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