CROP NOTES for May 7, 2018
Iowa State University Extension Information for Northeast Iowa
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Past issues of Crop Notes are posted at:
http://www.extension.iastate.edu/winneshiek/page/crop-notes-brian-lang
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TABLE OF CONTENTS
WEATHER
   Rainfall for Last Week
   Soil Temperature
   Wind Speed & Direction Forecasts
INSECTS
   Insect Pest Crop Scout Calendar
   Online Weather Tool to Track DD for Crops & Insects
   Seedcorn Maggot
   Common Stalk Borer
   Black Cutworm
   True Armyworm
   Alfalfa Weevil
ALFALFA
   Growth and Development
PEAQ
ACCIDENTAL FIELD FIRES
   Estimating Losses
MANURE
   New Version of RUSLE2
EVENTS
   Upcoming programs at the Northeast Iowa Dairy Foundation, Calmar
      May 8-9: Master Hoof Care Workshop
      May 9-11: Dairy Robotics
   June 7, Introductory RUSLE2 & Phosphorous Index Workshop, Altoona
   June 13-14, Four-State Dairy Nutrition & Management Conference, Dubuque
WEATHER

Rainfall for the Last Week
Obviously the northern tier of counties was hit the hardest with 3 to +6 inches of rain.

Soil Temperature
Current soil temperatures are in the upper 50’s°F. Once soil temperatures reach 65°F and increasing we can plant warm-season forage and grain crops like sorghum-sudan, millet, grain sorghum and teff. Soils in northern Iowa to be consistently above 65°F and increasing usually does not occur until late May.

Wind Speed & Direction Forecasts
A good web site for weather forecasts on wind speed and direction is the National Weather Service. Go to: https://www.weather.gov/. Enter your zip code in the upper left hand search box. When the forecast page comes up, page way down and click on the box titled “Hourly Weather Forecast” (looks like this chart).

This chart gives you 6 days (2 days to a page) of hourly weather forecasts of wind speed and direction, temperature and other information. I think it all works quite well except for the precipitation forecasts.

INSECTS

Insect Pest Crop Scout Calendar
FYI attached is a basic “Insect Pest Crop Scout Calendar”. It would print best on 8.5” x 14” paper. On the back side of the page is various relevant degree day information for crops and insect pests. Also attached is a handout I use for the Crop Scout School that suggests resources and equipment which are helpful for crop scouting.
Online Weather Tool to Track Degree Days (DD) for Crops & Insects

Something I use a lot to estimate GDD for crops and insect pests is linked on the Iowa Mesonet at: http://mesonet.agron.iastate.edu/plotting/auto/?q=108

- At the website under “Select Station” I pick a location closest to my area (i.e. if I was near Lawler, I might select “New Hampton” from the drop menu.
- Then select a “Start Date” and “End Date”, such as Jan. 1, 2018 and today’s date i.e. May 7, 2018.
- Then select the base GDD, such as 41 for Common Stalk Borer.
- Then the ceiling GDD if it has one. Can just leave it at 86 for Common Stalk Borer.
- Go down the page and click on “Make Plot with Options”.

The top graph of three provides GDD for 2018 (red line) and GDD for the long-term average (black line).

If you followed this example you would see the GDD red line is at about 350, which is still a ways away from 575 which is the start of egg hatch. Rechecking this weekly should keep you aware of when egg hatch for Common stalk borer would start.

Seedcorn Maggot

Peak adult emergence for 1st generation occurs about 360 DD (base 39). Northeast Iowa is currently at about 410 DD. If planting into recently tillage residue, especially green residue (cover crop, CRP, rotated hay/pasture), or winter/spring applied manure, the field would be at some risk and an insecticide seed treatment could be used. More details are provided in the following article:
https://crops.extension.iastate.edu/cropnews/2018/04/seedcorn-maggot-active-southern-iowa

Common Stalk Borer

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.

Remaining control options for the season include:
1) Some Bt corn controls or suppresses stalk borer, and some do not. Check the “Handy Bt Trait Table” for those products: https://lubbock.tamu.edu/files/2018/01/BtTraitTableJan2018.pdf
2) Wait for Common stalk borer egg hatch which starts ~575 DD (from Jan. 1 base 41F), and spray grass border with insecticide. Northeast Iowa is currently at ~360 DD and a rough extrapolation at this time to reach 575 DD would be about May 17.
3) Wait for larval migration from grass border to the first few corn rows, which starts ~1,300 (from Jan. 1 base 41F) and spray grass border with insecticide (usually mid-June).

Black Cutworm
Late last week about 10% of the Iowa traps have caught some Black cutworm moths. Once we detect significant flights we’ll track 300 DD (base 50) from the flight-trap date to what would generally be initial feeding of larvae and the starting time to scout corn fields for this pest. Once corn reaches V5 stage, it’s basically safe from Black cutworm. From late last week, and with normal May weather, northeast Iowa will reach about 300 DD around May 27.

True Armyworm
Late last week about 10% of the Iowa traps have catch some True armyworm moths. The trapping helps determine how wide-spread the activity may be this spring. However, we do not have a specific DD measure as to when to start scouting for feeding, but it will basically amount “to start scouting emerged corn late May and continue through June.”

Alfalfa Weevil
It’s been over a decade since we have seen any problems with this pest in Northeast Iowa. But you never know when a larger population will appear. So we track degree days (base 48) and provide a heads-up when it’s time to scout. Scouting begins at about 250 DD from January 1. Current DD base 48 in northeast IA are about 250 DD for the Hwy 20 region to 200 DD for the Hwy 18 region. A rough extrapolation at this time puts 250 DD at about May 11 for the Hwy 18 region. Greater risks would be on south-facing slopes and proximity to woodlands. The quickest and easiest way to initially scout for Alfalfa Weevil is to use a sweep net just to survey a field. If there are some alfalfa weevil in the net, then refer to the scouting procedure and threshold information in this April 2018 article https://crops.extension.iastate.edu/cropnews/2018/04/alfalfa-weevils-get-slow-start-2018

ALFALFA
Growth and Development
It takes about 750 GDD (base 41 starting March 1) for alfalfa to reach bud stage. Current alfalfa GDD for Manchester is ~395; and for New Hampton is ~360; and for Decorah is ~320. A rough extrapolation at this time puts 750 GDD for Manchester at ~ May 25; and for New Hampton at ~ May 27; and for Decorah at ~ May 28.

PEAQ
While tracking GDD for alfalfa to determine first crop harvest is simple, it tends to be more variable than using PEAQ (Predictive Equation for Alfalfa Quality). PEAQ provides an estimate of forage quality in the field using plant height and crop stage. Use the following instructions and table for these measurement: https://www.extension.iastate.edu/dairyteam/files/page/files/PEAQ.pdf  Do not forget to subtract either 15 RFV units for a haylage harvest or 25 RFV units for a hay harvest from the standing crop reading. ISU Extension staff around the state will be providing some readings from alfalfa fields and posting these at a website which should be running in time for the next Crop Notes. You will be able to track these postings over time, but we strongly encourage that you take PEAQ readings from your own alfalfa fields for best reliability.

ACCIDENTAL FIELD FIRES
Estimating Losses
Here’s an article to help explain the factors involved in assessing the situation of a burnt field. For those that want a specific answer, sorry it does not exist. Most of the mineral nutrients (i.e. P, K, others) are not lost, but some quantity of N and S are lost. Please read the article at: https://crops.extension.iastate.edu/dry-fall-conditions-can-lead-field-fires
MANURE
New Version of RUSLE2
Those involved in developing DNR Manure Nutrient Management Plans should be aware of the upgrade to a New Version of RUSLE2.
RUSLE2 and Iowa Phosphorus Index are used in nutrient management plans, comprehensive nutrient management plans, and manure management plans. A newer version of RUSLE2 software (version 2.6.8.4) is available for FIELD USE. The instructions (PC based computers, Windows 10 Operating System) for how to save your prior work, download and install the new version, and import in your prior work are available on the IMMAG website. All service providers are required to use this version. Installation instructions are at http://www.agronext.iastate.edu/immag/info/RUSLE2instructions.pdf For the latest updates on anything to do with manure, bookmark and checkout the IMMAG website at http://www.agronext.iastate.edu/immag/

EVENTS
Master Hoof Care & Dairy Robotics programs at the Northeast Iowa Dairy Foundation, Calmar
ISU Extension, NICC and the Dairy Foundation will be hosting a series of applied workshops for dairy producers, employees and students. The workshops will be held at Iowa’s Dairy Center south of Calmar and will feature a mixture of classroom and hands-on learning on the dairy farm. Mark your calendar for the following dates:
- May 8-9: Master Hoof Care Workshop
- May 9-11: Dairy Robotics
Additional details will soon be available at www.iowadairycenter.com Prices and participation will vary based on the workshop. If you are interested in participating in one of these workshops, please contact Mariah Schmitt at (563) 534-9957 or schmittma@nicc.edu

June 7, Introductory RUSLE2 & Phosphorous Index Workshop, Altoona
The program brochure and link to on-line registration is available at: https://register.extension.iastate.edu/images/events/rusle2/RUSLE2-Brochure-June-7_2018V2.pdf

June 13-14, Four-State Dairy Nutrition & Management Conference, Dubuque
At the Grand River Center, Dubuque, IA. Presenting the latest research on issues concerning the dairy industry including feed efficiency, calves, and transition cows. Complete agenda and registration is available at http://www.wiagribusiness.org/fourstate.html

June 21, Northeast Iowa Silage Conference, Dubuque
9:30 AM to 3:30 PM at the Midway Best Western Plus, Dubuque (3100 Dodge Street). The conference will feature presentations from both academic and industry experts. This one-day conference will focus on the keys to growing, harvesting, storing and feeding high quality silage to beef and dairy cattle. Topics include quality corn silage before, during & after harvest, characteristics of corn varieties for silage, preventing molds and mycotoxins, pricing corn silage, silage in beef or dairy rations, and safety. Online registration and more conference information is available at: http://www.aep.iastate.edu/silage/

June 28, Seventh Annual Iowa Swine Day, Ames
Showcases national industry speakers. Details at http://www.aep.iastate.edu/iowaswineday/
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