CROP NOTES for March 12, 2018
Iowa State University Extension Information for Northeast Iowa
Brian Lang, ISU Extension Agronomist, Decorah, IA
Past issues of Crop Notes are posted at:
http://www.extension.iastate.edu/winneshiek/page/crop-notes-brian-lang
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CROPS
Beginners Crop Scout School, Nashua
9:00 AM to 3:30 PM at the Borlaug Learning Center, Nashua. Designed for growers and beginning crop scouts. Class size is limited, so register early to secure your seat. Taught by your local ISU Extension Agronomists. Registration is $75.00, includes lunch, many materials, and break refreshments. Live plants for weed ID & crop staging. Classroom and hands-on learning. For more details, please read the article at: https://www.extension.iastate.edu/node/44923/ To download a registration form, go to: https://www.extension.iastate.edu/blackhawk/news/crop-scout-school-march-21st-borlaug-learning-center
ISU Research Finds Wind Farms Positively Impact Crops
Read about this at: https://www.extension.iastate.edu/article/iowa-state-university-research-finds-wind-farms-positively-impact-crops

 Alfalfa and Ice Sheets or Ponding
Prior to this last snowfall, we had some occurrences of ponds or ice sheets in some low spots in alfalfa fields.

Ice Sheets: The importance of good fall management allows alfalfa to store sufficient carbohydrate reserves before winter to have these carbohydrates to carry out the over-winter metabolic activities. This function during winter also releases waste products such as carbon dioxide, which escape as gases from the proximity of the plant’s root and crown. When significant amounts of ice cover the ground, these gases can’t escape. Too much waste product built-up around the root and crown is toxic to alfalfa. Alfalfa can usually tolerate up to 3 weeks of significant ice cover before being overcome by the build-up of these waste products.

However, if plant stubble pokes through ice sheets, these gases can escape and the alfalfa is fine, thus the importance of one of those ‘routine’ fall management recommendations to leave at least 6 inches of stubble in fall.

Ponds: Alfalfa under water is similar to alfalfa under ice sheets, but the length of time it can survive is shorter. The warmer the weather, the higher to metabolic activity of the plant, the shorter the time it can tolerate the anaerobic conditions. In hot summer conditions, alfalfa under water could be killed in as little as 3 days. Under this cold weather conditions, alfalfa may tolerate ponding or saturated soil conditions for up to 2 weeks. Other factors contribute to the problem, such as no fall stubble, higher metabolic rates for less cold tolerant varieties, lower disease resistant varieties, stresses from lower soil fertility and/or more intense harvest schedules, age of stand (older stands less tolerant), poor field drainage once the pond subsides. Once the pond subsides, there is usually plenty of time to evaluate the stand before the land firms up enough to be able to get equipment on the field to do whatever you may need to do... good enough to keep, reseed to an alternative forage into the injured area, or rotate the field.

WEATHER
Soil Temperature
As we approach planting season, a nice website to help track changes in the 4-inch soil temperature is: http://mesonet.agron.iastate.edu/agclimate/smts.php At this website, select the station location first (upper left), then the time frame (right). Below is the last 2-weeks. You can see where the snow fall came in (March 6) and stopped/insulated the fluctuation in the 4-inch soil temperature (red line) from the day-night air temperature changes (blue line).
Precipitation
The winter did not seem to have much snowfall, but so far (from Dec. 1, 2017 to March 12, 2018) northeast Iowa is running about 1.7 inches above normal. The figure below represents the general region of northeast Iowa, with the black line as the long-term average and the red line as current data. Individual locations vary from 1 to 2 inches. This information is available at: http://mesonet.agron.iastate.edu/plotting/auto/?q=108 On the website just input the nearest location, the start and end dates, and click on “Make Plot with Options”.

MANURE ISSUES
Commercial and Confinement Site Manure Application Certification
The 2018 Commercial and Confinement Site Manure Applicator Certification meetings have finished, but certification can still be earned via testing, online or viewing a DVD. Contact your local Extension office to set an appointment to view the DVD, or check out the online option at www.iowadnr.gov/manureapplicator This is also where applicators and business managers can check their own records for renewals, expiration dates and fees.

Safety Regarding Hydrogen Sulfide
The IMMAG website has posted a series of articles about hydrogen sulfide safety and manure handling (agitation, monitoring and ventilation). Go to: http://www.agronext.iastate.edu/immag/hottopics.html

PASTURE
Nitrogen Management
by Steven K. Barnhart, retired ISU Extension Forage Agronomist.
Grass-based pastures generally respond very efficiently to the first 40-50 pounds per acre (A) of nitrogen (N). Bluegrass will continue to respond to N applications up to 150-180 lbs/A annually, but at a decreasing rate of response. Tall cool-season grasses (bromegrass, orchardgrass, tall fescue) respond to N levels of 250 to more than 300 lbs/A, but at a decreasing rate of response. N recommendations for grass-based pastures are greater than the minimal amounts, but at still modest, yet efficient rates.
Kentucky Bluegrass
- Early spring (March and April) 60-80 lbs/A
- Late spring (May to early June) (optional) additional 30-40 lbs/A
- And/or late summer (August to September) (optional) additional 30-40 lbs/A
Tall, Cool-season Grasses
- Early spring (March and April) 80-120 lbs/A
- Late spring (May to early June) (optional) additional 40-60 lbs/A
- And/or late summer (August to September) (optional) additional 40-60 lbs/A

Legume-Grass Mixed Pastures
- If less than 1/3 legume, treat as a grass pasture
- If more than 1/3 legume, no nitrogen is recommended

Note for legume-grass mixed pastures, high or frequent applications of N (particularly spring N applications) will make the grass component of pastures more competitive and limit the amount of legumes in the mixture. To encourage a greater legume presence, use modest N rates and limit application to summer or fall.

FARM MANAGEMENT

Iowa Farm Custom Rate Survey
The March 2018 Iowa Farm Custom Rate Survey has just been posted. For each operation, the average rate from the survey, the median, and the range are shown. This information is not designed to set any prices, but rather can provide a starting point for discussion regarding various operations. The publication is available at: https://www.extension.iastate.edu/AGDM/crops/html/a3-10.html

EVENTS

March 15, Northeast Iowa Dairy Foundation Annual Meeting, Calmar
10:00 AM to 2:00 PM. Agenda includes a Checkoff Update with MDA, ISU Dairy Team update and What's Happening at Iowa's Dairy Center followed by lunch and the Annual Meeting. Contact Mariah Schmitt, Dairy Center Coordinator for more info at schmittma@nicc.edu

March 20 & 21, Managing Your Unseen Employee: The Ventilation System., Postville & Cresco
- March 20 at the Postville Veterinary Clinic, 110 Hyman Dr., Postville
- March 21 at the Featherlite Center, 220 7th Street West, Cresco
9:30 AM to 3:30 PM. See the news release at: https://www.ipic.iastate.edu/news/VentilationWorkshops0318.html
Jay Harmon, ISU agricultural and biosystems engineering professor will lead a two-pronged approach to understanding issues and consequences of decisions by combining classroom instruction with hands-on trials and application in a real-world setting with the aid of the ISU 24 ft. mobile Swine Ventilation Trailer. Thanks to IPPA and other local sponsors, registration and the noon meal at all workshops are free. Preregistration is required due to limited space for 26 people at each location. Preregister by contacting Mark Storlie, ISUEO swine specialist, at 563-425-3331 or mstorlie@iastate.edu

March 21, Crop Scout School, Nashua
9:00 AM to 3:30 PM at the Borlaug Learning Center, Nashua. Designed for growers and beginning crop scouts. Class size is limited, so register early to secure your seat. Taught by your local ISU Extension Agronomists. Registration is $75.00, includes lunch, many materials, and break refreshments. Live plants for weed ID & crop staging. Classroom and hands-on learning. For more details, please read the article at: https://www.extension.iastate.edu/node/44923/ To download a registration form, go to: https://www.extension.iastate.edu/blackhawk/news/crop-scout-school-march-21st-borlaug-learning-center
Mar. 29, Soil Health/Cover Crop/Bioreactor field day
12:30 to 2:30 PM at the Brian Meyer Farm near Readlyn (3061 230th St., Hwy 3, Readlyn). Discussion includes cover crops, bioreactor and soil health. Free program and complimentary meal. Please RSVP by March 26 at 515-294-5429 or ILF@iastate.edu. More information is available at: https://www.extension.iastate.edu/article/readlyn-cover-crop-soil-health-and-bioreactor-field-day-march-29

April 4, Cover Crop Field Day, Postville
Noon to 3:00 PM at the Don Elsbernd farm near Postville. Topics include: Cover crop seeding dates; Delayed cover crop termination; Soil health benefits of cover crops; Interseeding cover crops in corn. For more information, go to: https://www.practicalfarmers.org/wp-content/uploads/2018/02/2018-Spring-Field-Day-Flyer-FINAL.pdf

Upcoming 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:
- April 5-6: Dairy Management Software
- April 18-19: Seven Habits of Highly Successful Feeders
- April 25-26: It’s Transition Time
- May 1-2: Calmar Calf College
- May 7-8: 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

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Brian Lang
Iowa State University Extension
Agronomist
325 Washington St., Suite B
Decorah, IA 52101
Office 563-382-2949
Fax 563-382-2940
Cell 563-387-7058
www.agronext.iastate.edu/