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Capital Area Ag Report
March 14, 2019

Announcements
Tuesday, March 26 at 6 pm—Harmful Algal Blooms—at the Greenwich Elks, 130 Bulson Rd., Greenwich. Sponsored by the Washington County Water Quality Coordinating Committee. Karl Czymmek, Cornell Pro-Dairy, will talk about HAB nutrient sources and impact on water quality. No charge. Open to the public.

Wednesday, March 27 from 10 am to 3 pm—Soil Health and Manure Applicator Training—at the Greenwich Elks, 130 Bulson Rd., Greenwich. Sponsored by A & K Agriservices and the Washington County Soil and Water Conservation District. DEC Manure Applicator Credits available. Karl Czymmek will cover the manure topics and Olga Vargas, NRCS soil scientist, will discuss compaction and soil health. Free. Lunch provided. RSVP to A&K Agriservices, 802-681-7228.

Thursday, April 11 from 10 am to 4 pm—What is a Soil Sponge Anyway?—Regenerating Soil Health for Resilience—at Pleasant Valley Grange, 2 Co Rte 59A, Buskirk. Guest speaker Didi Pershouse is the author of “The Ecology of Care: Medicine, Agriculture, Money and the Quiet Power of Human and Microbial Communities.” $30, lunch included. RSVP by April 5th to Ag Stewardship Association, www.agstewardship.org or 518-692-7285.

Wednesday, May 1 from 1 pm to 4:30 pm—2nd Annual Spring Turn Out Grazier Meeting—at St. Croix Farm, 14 Ridge Rd., Valley Falls. Topics include how beef production in our region fits into the bigger picture of New York and the United States; baleage production; prevention and control of

The Ag Report is produced by Aaron Gabriel

The NYS IPM Weekly Field Crops Pest Report is at http://blogs.cornell.edu/ipmwpr/

Topics in this issue:
• Spring Notes
• Managing Stored Grain in the Spring
• Frost Seeding
• NYS Hay Contest
internal parasites for cattle and small ruminants; pasture fly control for livestock; basics of direct marketing your products online and in-person. Speakers include Dr. Mike Baker, Cornell Beef Specialist, Aaron Gabriel, Ashley Pierce, Steve Hadcock of Cornell Cooperative Extension, and Ken Wise of the NYS Integrated Pest Management Program. $10 pre-registration by April 29th at https://tinyurl.com/SpringTurnOut or call 518-765-3518 or cce-caahp@cornell.edu. $15 registration at the door.

FYI

The March 2019 edition of the Penn State Extension Dairy Outlook is available at https://extension.psu.edu/dairy-outlook-march-2019

We would like to announce that the new ScabSmart website (https://scabsmart.org) has been launched and is now live. We have created a series of best management practices pages to provide you with the most up-to-date information on fungicides and integrated management strategies.


Consider entering the Hay Contest at the New York State Fair, https://nysfair.ny.gov/competitions/how-to-enter/.

Spring is coming. I could resurrect an old article about how to plant crops when cash flow is a trickle or non-existent. If you are managing the same way as over the past several years, then some new thinking is in order. If you have been making changes every year, as the rules of the game keep changing, then persevere and keep up the innovations. It is not fair, but we live in a strange economic system that has little regard for human welfare.

    So, make every penny and every effort count. It is better to harvest a good crop over a few acres than a poor crop over several acres. Put your seed, fertilizer, manure, machinery time, fuel, and personnel, where you will get the most return.

    Cover crops are a great thing. “Weeds” can make a fine cover crop, if you do not let them go to seed. Timely mowing is an expense, but probably not as expensive as cover crop seed or paying for more herbicide when weeds get out of control.

    Herbicide decisions depend on the weather. Should you use a pre-emergent herbicide? If there will be rain within two weeks or so of the application, then they will work. If it does not rain (like in May & June of 2018), then it is wasted money. To make an informed decision, use good weather forecasting websites. Here are two that I like:

    • Use the Climate Prediction Center website (https://www.cpc.ncep.noaa.gov/) to see if rain is likely within 2 weeks. If not, save your money and go to a post-emergent program or wait until rain is likely.

Also, some of the older pre-emergent herbicides are less expensive than the newer ones. Shop!
For haying and harvest weather I like this Hourly Forecasting site:
- Sunshine, temperature, wind, and humidity all affect hay drying, but WIND and HUMIDITY are the biggest factors. Go to the National Weather Service Hourly Report for better information to make hay harvesting decisions at, https://www.weather.gov/wrn/hourly-weather-graph.

**It is frost seeding time.** Broadcasting seed on bare ground in early spring, often but not always, can help you establish legumes (and to a lesser extent grasses) into pastures and hay fields that have bare spots. From best to worst legume species, use red clover, trefoil, ladino clover. Alfalfa is a weak seedling and not recommended for frost seeding. For grasses, ryegrasses are the best to frost seed followed by orchardgrass, then Kentucky bluegrass and bromegrass. The other grasses are not recommended. Broadcast the seed early in the morning while the ground is still frozen and “honeycombed”.

Here are two good articles about frost seeding:
- http://smallfarms.cornell.edu/2014/01/14/march-is-frost-seeding-time/

**Spring nitrogen applications** on grass fields and pastures are likely to give you a good return on your investment—as long as you can harvest the bounty. If wet weather coincides with harvest time, poorly-drained soils will not let you get your crop. Even if temperatures are cool, nitrogen can be lost from urea. So, a urease inhibitor may be a wise input for urea fertilizer.

**Ice and winter ponding** may have damaged alfalfa and grass fields this winter. Check you fields as soon as the snow and ice are gone, and you can walk on them. Frost seeding or no-till drilling red clover and/or annual ryegrass are options if you want to keep them in forage.

**Spring is a tricky time for managing stored grain.** Here is an article to help out. Call me if you want to evaluate your stored grain for temperature, moisture, or pests.

**Proper Spring Grain Drying and Storage is Critical**
MARCH 14, 2019
Ken Hellevang - North Dakota State University Extension Agricultural Engineer
From https://cropwatch.unl.edu/2019/proper-spring-grain-drying-and-storage-critical

As outdoor temperatures increase, stored grain requires attention to prevent losses, says Ken Hellevang, North Dakota State University Extension agricultural engineer and grain drying expert.
The stored grain temperature increases in the spring not only due to an increase in outdoor temperatures, but also due to solar heat gain on the bin. Solar energy produces more than twice as much heat gain on the south wall of a bin in early spring as it does during the summer. Hellevang recommends periodically running aeration fans to keep the grain temperature near or below 30°F until the grain is dried if it exceeds recommended storage moisture contents, and below 40°F as long as possible during spring and early summer if it is dry. Soybean oil quality may be affected in less than four months if even 12% moisture soybeans are stored at 70°F. Cover the fan when it is not operating to prevent warm air from blowing into the bin and heating the stored grain. He also recommends ventilating the top of the bin to remove the solar heat gain that warms the grain. Provide air inlets near the eaves and exhausts near the peak or use a
roof exhaust fan. Bin vents can become blocked with frost and ice when the fan is operated at temperatures near or below freezing, which may lead to damage to the roof. Leave the fill and access door open as a pressure relief valve when operating the fan at temperatures near or below freezing.

**Monitor Grain Moisture, Temperature**

Stored grain should be monitored closely to detect any storage problems early, Hellevang advises. Grain temperature should be checked every two weeks during the spring and summer. Grain also should be examined for insect infestations. Check the moisture content of stored grain to determine if it needs to be dried. Remember to verify that the moisture content measured by the meter has been adjusted for grain temperature. In addition, remember that moisture measurements of grain at temperatures below about 40°F may not be accurate. Verify the accuracy of the measurement by warming the grain sample to room temperature in a sealed plastic bag before measuring the moisture content. Corn needs to be dried to 13% to 14% moisture for summer storage to prevent spoilage. Soybeans should be dried to 11% and wheat to 13%. The allowable storage time for 13% moisture soybeans is less than 100 days at 70 degrees. Corn at moisture contents exceeding 21% should be dried in a high-temperature dryer because deterioration is rapid at warmer temperatures. For example, the allowable storage time of 22% moisture corn is about 190 days at 30°F, but only 30 days at 50°F.

**Recommended Airflow Rates**

- **Corn.** For natural air-drying, assure that the fan's airflow rate is at least 1 cubic foot per minute per bushel (cfm/bu) and the initial corn moisture does not exceed 21%. Start the fan when the outdoor temperature averages about 40°F.

- **Soybeans.** Use an airflow rate of at least 1 cfm/bu to natural air-dry up to 15% to 16% moisture soybeans. Start the fan when the outdoor temperature averages about 40°F. Follow the manufacturer's recommendation for high-temperature drying soybeans. Monitor the soybean quality and reduce the drying temperature if excessive cracking or splitting occurs. Reduce the fire hazard by keeping the soybeans flowing in the dryer. Pods and trash can become lodged and combustible. Frequently clean the dryer to remove anything that may impede flow. Constantly monitor the dryer when drying soybeans.

- **Wheat.** Use an airflow rate of at least 0.75 cfm/bu to natural air-dry up to 17% moisture wheat. Start drying when the outside air temperature averages about 50°F.

"Remember that some of the allowable storage life was used during the fall before the grain was cooled to near or below freezing, so there is less time for spring drying before deterioration occurs," Hellevang says.

Tags: Grain Storage

**It is time for eastern New York to be represented in the Hay Contest at the New York State Fair.**

Hay and The 2018 New York State Fair

*By J. Hansen, J. Lawrence, J. Fallon, Lynn Gilbert and S. Weber*

Following a hot summer in 2018, 41 bales were entered in the 2018 State Fair Hay Contest. Hay was entered from farms in Alton, Brooktondale, Camillus, Cazenovia, Cicero, Dryden, Locke, Manlius, Moravia, Richfield Springs, Sodus, Syracuse and Tully. Hay was entered in one of nine Conventional Hay Classes or one of seven Organic Hay Classes.
Hay was judged based on the physical characteristics (50 points: molding/odor, foreign material, maturity, leaf retention, color) and on forage lab analyses (50 points: dry matter, crude protein, fiber, fiber digestibility). Physical score averaged 41 points and the chemical score averaged 36 points. The grand and reserve champion bales for conventional and organic had a physical score average of 48 and a chemical score average of 42.

Thanks to all who entered hay bales in this contest and congratulations to the winning hay producers! Thanks to Dairy One (https://dairyone.com/) for analyzing the hay samples. Thanks to John Sinkovitz for assisting the judges and organizing the hay.

For 2019, visit the State Fair Website for Entry Date Deadline (usually late July) and Date for Bale Delivery to Syracuse (week or so before forage testing) https://nysfair.ny.gov/competitions/how-to-enter/.

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<thead>
<tr>
<th>Hay Class</th>
<th>First Cut</th>
<th>Later Cuts</th>
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<tbody>
<tr>
<td>Alfalfa</td>
<td>Class 1</td>
<td>Class 3</td>
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<tr>
<td>Alfalfa Acid Treated</td>
<td>Class 2</td>
<td>Class 4</td>
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<tr>
<td>Alfalfa Grass Mix</td>
<td>Class 5</td>
<td>Class 6</td>
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<tr>
<td>Grass</td>
<td>Class 7</td>
<td>Class 8</td>
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<tr>
<td>Other</td>
<td>Class 9</td>
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<tr>
<td>Organic Alfalfa</td>
<td>Class 101</td>
<td>Class 103</td>
</tr>
<tr>
<td>Organic Alfalfa Grass Mix</td>
<td>Class 105</td>
<td>Class 106</td>
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<tr>
<td>Organic Grass</td>
<td>Class 107</td>
<td>Class 108</td>
</tr>
<tr>
<td>Organic Other</td>
<td>Class 109</td>
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</tbody>
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Figure 1: Results of the Hay Judging Contest. Hay classes were 1=first cut alfalfa, 2=first cut alfalfa acid treated, 3=alfalfa later cuttings, 4=alfalfa later cuttings acid treated, 5=first cut alfalfa grass mixture, 6=later cut alfalfa grass mixture, 7=first cut grass, 8=late cut grass, 9=other, 101=Organic first cut grass, 108=Organic late cut grass, 109 = Organic Other. **Grand Champion in class 3, *Reserve Champion in class 8. **Grand Champion Organic in class 108.
The way we think (our attitudes) affects our physiology. WHY is it so easy to criticize, complain, and gravitate to a downward spiral of negative thoughts (even if they are false)?? I have learned it is actually a physiological response in our bodies, getting a sense of peace by surrendering to a path of least resistance. Agriculture is giving many people a real reason to be negative. HOWEVER, do not let it spiral out of control. If the old is not working, adapt your business to something new.