Building Strong and Vibrant New York Communities
Cornell Cooperative Extension

Capital Area Ag Report
April 2, 2019

“Coming together is a beginning, staying together is progress, working together is success.” —Henry Ford

Announcements
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 internal parasites for cattle and small ruminants; pasture fly control for livestock; basics of direct marketing your products online and in-person. $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.

FSA Borrower Training Credits available.

Summer Beef Production and Marketing Series!
FSA Borrower Training Credits for each session!

Backgrounding Beef Cattle, June 13, 2019 6:00-8:00pm at CN Tomell Cattle Company. Info at http://tinyurl.com/BackgroundingBeefCattle

All about Stockers, July 11th, 2019 from 6:00-8:00pm at Diamond Hills Farm. Info at http://tinyurl.com/AllAboutStockers

Seedstock Beef Production, August 9th, 2019 from 6:00-8:00pm at Trowbridge Farms. Info at http://tinyurl.com/SeedstockBeefProduction

Cow Calf Production and the Freezer Trade, September 12, 2019 at Tilldale Farms. Info at http://tinyurl.com/CowCalfProductionFreezerTrade

Building Strong and Vibrant New York Communities
Cornell Cooperative Extension provides equal program and employment opportunities
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.

FYI

Recent “What’s Cropping Up? Articles:
Nitrogen Management of Brown Midrib Forage Sorghum in New York
Increase Yield Monitor Data Accuracy and Reduce Time Involved in Data Cleaning
Stalk Nitrate Test Results for New York Corn Fields from 2010 through 2018
Herbicide Resistance Management: Get to know herbicide sites of action
The Lastest ProDairy E-Leader newsletter is available at https://prodairy.cals.cornell.edu/about-us/e-leader-newsletter/

“On-Pasture” is a good electronic newsletter that comes by email. Find it at https://www.onpasture.com/. Do be careful in what you read. For example, a recent series on how wasted hay improves pastures may be true, I have calculated that depending on what the hay cost, compost may be more economical for building soil health.

Soil Compaction and ruts from last fall will need attention. To fill in ruts, a field cultivator type tillage implement is better for the soil than offset discs. Discs create a compaction layer where the blade smears the soil at two to 4 inches. For compaction, the winter freezing and thawing is some benefit. To further restore soil structure a recipe of manure, deep tillage (when the soil is dry at some point in your crop rotation), and a well-rooted crop (ie. winter rye, annual ryegrass, clover, sorghum sudan) will help. You have to fit tillage it into the rotation when the soil is dry and crumbly. Often this is August.

Pasture season will be here soon, but every year I see animals turned out onto pasture that has barely grown a couple inches. Wait for bluegrass to reach 6” and our taller grasses (orchard, timothy, fescue, bromegrass, perennial ryegrass) to reach 8” before setting animals out to graze. The plants need to establish root systems early on to reach their full yield potential for the rest of the year. Grazing close reduces rooting depth.
Small Grains have done well despite a winter of cold, wet, and ponding. Well, plants in the wet areas never over-winter well.

The first thing you want to look for when scouting grains in the spring is for healthy white tissue in the cross-section of the crown. This is barley with a healthy crown.

Even though these barley leaves are yellow, new leaves are growing. Small grains will grow at temperatures above 32 degrees Fahrenheit.

Taken on March 28th, this wheat seedling is beginning to grow a new root (both sides of the crown).

Planted late (because of difficult fall conditions), this wheat seedling survived the winter, despite its small size.

Late-planted winter grains did not have time to grow tillers in the fall. So, the proper dose of spring nitrogen will stimulate tillering this spring.

Here is a good article to learn how to evaluate winter grain fields in the early spring—Wheat Stand Assessment-Penn State
https://extension.psu.edu/wheat-stand-assessment

Early Wheat Management Tips
Mike Stanyard
CCE Northwest NY Dairy, Livestock and Field Crops Program

Last year (2018) was a good year for wheat production in WNY. We had a hot dry summer and that is usually when we have our best yields. The statewide wheat yield average per acre was 69 bushels (NASS NY) but I had many growers in this region have record whole farm averages. We were not so lucky when it came to planting this year’s crop last fall. It was wet and there were narrow windows to get wheat in the ground under good soil conditions. Soybean harvest delays also pushed planting dates and many of our wheat acres just did not get in
the ground. The last crop update from NASS NY on November 25 reported that only 82% of the wheat crop was planted and only 66% was emerged. How has our wheat weathered this winter and will the stand be good enough to keep?

**Tiller Counts and Nitrogen.** In past articles I have discussed counting the number of tillers to determine if you should put all of your nitrogen up front, split it into two applications, or put it all on at a second application at Stage 6 (jointing). I’m sure many of you have already assessed how many plants and tillers you have per square yard. If you have not and need a refresher course, see my short video on how to do so, [https://vimeo.com/124455368](https://vimeo.com/124455368).

Unfortunately, really late planted fields may just be emerging and you will have to wait a little longer to see what your final plant stand looks like.

See chart as example of tiller number and N timing and amounts. If your plant/tiller counts are low, be prepared to get more N on early as wheat plants green up fast and need to be fed. This N is utilized to increase vegetative production and promote additional tillers. This will be crucial on the later planted fields that did not have any tillers. If tiller counts are in the middle, then get some N on early and the remainder on at jointing. If tiller counts are high, hold off on applying N at green-up and apply it all at jointing. This later N application timing should coincide with stem elongation which means nitrogen is going towards increasing the number of seeds per head and seed size, not additional tillers. However, I will throw in a word of caution here. In wet years where we planned one later application of N and could not get in the field in a timely manner, the wheat turned off-color. This is definitely not want we want at this crucial growth stage and yield potential was lost. I know some growers that are going to apply 20-25 pounds of N early even if their tiller count is adequate, to protect against the potential for a delayed second application.

<table>
<thead>
<tr>
<th>Tiller Numbers (per sq. yard)</th>
<th>Nitrogen Recommendation</th>
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<tbody>
<tr>
<td>&lt; 300</td>
<td>up to 60 units of N at green up, rest applied at GS 5-6</td>
</tr>
<tr>
<td>450-600</td>
<td>Up to 45 units of N at green up, rest applied at GS 5-6</td>
</tr>
<tr>
<td>&gt;700</td>
<td>No N at green up*, all N applied at GS 5-6</td>
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<td></td>
<td>* Some growers are applying 20-25 lbs.</td>
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**Weeds.** We continue to encourage the earliest planted fields to be sprayed for winter annual weeds (purple deadnettle, chickweed, chamomile) in late fall. Some of the later planted fields may have had a burndown sprayed prior to planting. You never know what the weather will be like in the spring and timely weed control can be tricky. Most fields are sprayed in the spring. We are still encouraging that you do not mix your herbicide and nitrogen applications and spray separately. The leaf burning can cost you up to 8 bushels and could get worse as temperatures increase.

We had some new wheat herbicides labeled for NY last year. Axial XL for annual grasses and particularly for foxtails. Osprey was also renewed until 2023 for control of roughstalk
bluegrass. Remember, it only can be applied up to the jointing stage. Huskie was also registered for control of resistant marestail in wheat. For more details on these herbicides see the article in the April 2018 issue of AgFocus.

**Fungicides.** We have seen that fungicide applications in wheat can really pay off. Powdery mildew and leaf rust can move in during the early vegetative stages and result in yield losses. These leaf diseases can be more prevalent with thicker wheat stands. Weather conditions also can play a role. Wet, cool conditions are more conducive to disease development. This means that early scouting of all your wheat fields is crucial to stay on top of this disease this spring! Look for large areas where the leaves are turning yellow. Lower leaves will gradually turn light brown. If you applied higher N rates (90-120 pounds), fungicides are even more important to keep the wheat healthy to prevent lodging.

**National Wheat Yield Contest.** If you were at the Soybean & Small Grains Congress in February, you heard me talk about the changes to the National Wheat Yield Contest. For 2019, they will now have a category for raw wheat yield in addition to the percentage above the county average. This means NY growers can be competitive on a national stage. If you are interested, call me or visit the National Association of Wheat Growers web page at https://yieldcontest.wheatfoundation.org/.

<table>
<thead>
<tr>
<th>100 Bushel Crop estimated crop * 2 lbs per N</th>
<th>200 lbs</th>
<th>Gallons per Acre</th>
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<tbody>
<tr>
<td>Soil Nitrate 0-6 inch</td>
<td>10 lbs</td>
<td></td>
</tr>
<tr>
<td>Soil Nitrate 6-30 inch</td>
<td>15 lbs</td>
<td></td>
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<tr>
<td>OM at 2 %</td>
<td>40 lbs</td>
<td></td>
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<tr>
<td>10-34-0 at 150 lbs</td>
<td>15 lbs</td>
<td></td>
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<tr>
<td>Soy Beans N residue Credit</td>
<td>20 lbs</td>
<td></td>
</tr>
<tr>
<td>Total N Credits</td>
<td>100 lbs</td>
<td></td>
</tr>
<tr>
<td>Total N needed</td>
<td><strong>100 lbs</strong></td>
<td></td>
</tr>
<tr>
<td>Tiller count 450 per square yard at green up</td>
<td>45 lbs</td>
<td><strong>15 Gallons of 28-0-0-2.6</strong></td>
</tr>
<tr>
<td>Feekes GS 5</td>
<td>55 lbs</td>
<td><strong>18 Gallons of 28-0-0-2.6</strong></td>
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**Do you need forage ASAP?** Apply 100 lbs of nitrogen to grass fields. As early as possible plant annual ryegrass or oats with ample nitrogen. Harvest cover crops.
Weed control in corn has been a problem for some. Remember that soil pH in the upper two inches, % organic matter, and surface residue will affect herbicide activity. Also, pre-emergent herbicides need some rain to be activated. As I mentioned in the last Ag Report, if you do not expect rain for two weeks, skip or delay the pre-emergent herbicide.

Organic Weed Control in Corn—my prescription:
- Plant in warm soil 2 1/2” deep
- In a couple of days as germination begins and before emergence, cultivate with a tine weeder to 2” deep. (like a Lely, Einbock, etc)
- Once the corn is up at V1 or V2 and rooted in, cultivate again with a tine weeder.
- Cultivate again with a tine weeder as needed up to 8” corn (go slow)
- After that, cultivate as needed with a row cultivator. Rolling tine cultivators (Lilliston) will throw soil into the row and cover weeds around the corn plants.
- Cultivation should begin with you when weed cotyledons appear. If you seed the first set of true leaves, look to see how long the root is. It is getting rooted in by the time the first true leaf has expanded.

Storing Grain properly in the spring is very tricky. Here is an article by Dr. Ken Hellevang, NDSU, published in Dakota Farmer,
Seven Steps to Protect Stored Grain in the Spring
https://www.farmprogress.com/grain-handling/7-steps-protect-stored-grain-spring

1. Control the grain temperature.
2. Cover fan openings when not in use.
3. Open vents at the top of the bins.
4. Open bin fill and access doors when running fans at temperatures at or below freezing to prevent clogs from frost.
5. Check the grain temperature every two weeks.
6. Check the grain moisture very two weeks.
7. Check grain for pests every two weeks.