Building Strong and Vibrant New York Communities
Cornell Cooperative Extension

Capital Area Ag Report
April 3, 2015

“The world hates change, but it is the only thing that has brought progress.” — Charles Kettering

Announcements

Wednesday, April 8, 2015 A Dairy Beef Quality Assurance Certification Program at 11:00 AM – 2:00 PM at Stanton Dairy Farms, 80 Biers Road, Coeymans Hollow, NY 12046. LUNCH will be sponsored by Boehringer Ingelheim. TO REGISTER: Email or call Gale Kohler: (518) 765-3579, gek4@cornell.edu Questions? Call or email Tom Gallagher, CCE CAAHP, 518-765-3511 or tjg3@cornell.edu There will be a $10 fee to cover the cost of the materials payable to Cornell Cooperative Extension. You may pay at the door, but please register ahead of time for an accurate meal count.

As dairy producers you may not realize that 20% of the overall beef production in the United States and 30% of the ground beef production comes from cull cows and bulls. Due to this fact it is important that an individual on the dairy farm be DBQA certified to help identify and avoid violative residue and carcass defects, to learn how to add value to cull cows and to build consumer confidence in the overall beef industry.

Dairy Beef Quality Assurance is a national program for Dairy Beef producers that provides science-based management practices that enhance carcass quality and safety and improve animal care.

April 15th, 2015 Genetically Modified Organisms Discussion at 7:00 p.m. at Cornell Cooperative Extension, 50 West

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The Ag Report is produced by: Aaron Gabriel
High Street, Ballston Spa, NY 12020. Cost: $5. Contact Ellie to pre-register by calling 518-885-8995.

Genetically Modified Organisms “GMO’S” have been around for almost two decades, but the controversy surrounding them isn’t dying down. Not all GMOs are the same and there is much room for misconception. Discussions about the science behind them and their use will help the public to better understand the debate. Please join Cornell University Plant Scientist Dr. Margaret Smith for a presentation on the science behind GMOs and their place in the current food and agricultural system. Topics to include plant breeding, facts behind GMO, current use, and much more.

**Wednesday, April 15th, 12:00-3:00pm (includes lunch)—Washington County Mettawee Valley Cover Cropping Field Day.** Meet at Slate Valley Museum, 17 Water Street, Granville, NY (http://www.slatevalleymuseum.org/directions.html). RSVP’s appreciated by 4pm, April 10th to Lori Sheehan, Washington County SWCD office, phone: 518-692-9940, ext 3, e-mail: Lori.Sheehan@ny.nacdnet.net

Are you thinking about adding cover crops to your rotation this fall and want to see what they look like in the Spring? What issues go with spring planting and winter cover crops? Why are we looking at a crop we need to be killing soon?

**FYI**

Capital Area Ag& Hort Program Participants: Did you attend one of our winter meetings? CAAHP Web Survey is now Live--- The web survey for our team is now live and available. As part of our efforts in each of the member counties, we need to show that we are impacting the agricultural community and farm businesses. Please take a minute to connect to the survey and give us a little feedback…. I know you are all feedbacked out…. But it really is important for just a quick blurb.

People with smartphones or tablets can also complete the survey using this QR code: Here is the link to the survey website: https://cornell.qualtrics.com/SE/?SID=SV_eXOHmhhQwiQOlvf

We appreciate your time and effort and will continue to provide valuable info, education and programming.

Soil Health: One principle in soil health is to protect the surface from the impact of rain drops. The force is the beginning of water erosion on unprotected soils. Here is a three-minute video from the Cornell Soil health Team. Check out the video here: Soils: Water’s Journey to the River


The Cornell Small Farms Program has a wealth of resources and classes (workshops, schools, and online courses) on almost every aspect of farming. Go to: http://smallfarms.cornell.edu/
Manure spreading advisory at: https://www.cvent.com/Pub/eMarketing/Pages/WebEmail.aspx?emstub=335b328e-16ea-4e40-8c85-02b7a4de9953. It is a hard thing to keep manure on a field where it is spread. Nothing good results from it running off. If you have manure management questions please call me (Aaron).

Two new What’s Cropping Up? Articles from Cornell faculty

Whole farm nutrient mass balance calculator for New York dairy farms

Feasible whole farm nutrient mass balances for New York dairy farms

NRCS Spreadsheet Tool Helps Farmers Determine Economics of Cover Crops

USDA Natural Resources Conservation Service has developed The Cover Crop Economic Decision Support Tool, a spreadsheet that helps farmers, landowners, and others make informed decisions when considering whether to add cover crops to their systems. The tool offers a partial budget analysis, derived from data that farmers enter. Find the spreadsheet at: http://www.nrcs.usda.gov/wps/portal/nrcs/detail/mo/newsroom/releases/?cid=stelprdb1250889

Alfalfa: It is time to walk your fields and evaluate how well alfalfa survived the winter. Look for heaved plants, crowns per square foot, and regrowth. A productive stand should have 55 stems/sq ft. To get that you need at least 4 large healthy crowns or more per square foot. Below is a picture of heaved crowns. That will happen most years in wet spots and poorly drained soils. Look to see if crowns are split from wheel traffic. Dig a root or two. Look for insect feeding mark on the outside, then slice it lengthwise and look for any discoloration inside the root or crown. It should be creamy white inside. As more regrowth occurs, look for random patterns of dead plants. If you find any, dig the roots and look for brown root rot (http://www.nnyagdev.org/PDF/09/BRR%20Whats%20Cropping%20Up%20Bergstrom.pdf).

Heaved alfalfa crowns
**Pastures:** I was looking through some ladino clover and found dingy cutworms feeding. The eat through stems and lop off leaves. I do not think that they do any economic damage, but when you take the time to look, it seems there is always some sort of pest out there.

**Thin hay fields:** What are the options if you have winter kill in your hay field, or it is just getting thin? The field in this picture has tufts of grass among mostly ladino clover. There is less grass in the lower part of the field. Ladino clover is a nutritious forage, but has low yields. Here are some options for this field:
- Graze it, then rotate it into a summer annual (sorghum, sorghum-sudan, sudangrass, corn, teff, …)
- Let it grow some biomass, then plow it under (early May) and plant corn.
- Broadcast 8 lbs/ac red clover and 5 lbs/ac Italian ryegrass to extend the hay production for another two years. Cover the seed with a coat of manure.
- No-till oats or spring triticale, probably just in the lower part of the field where there is less grass. Then rotate to a summer annual after first cutting.
- No-till 15 lbs/ac perennial ryegrass to develop a grass field.

**Small Grains:** It is time to evaluate how wheat survived the winter as well. Mike Stanyard and Bill Verbeten have a good article on determining how much spring nitrogen should be applied ([http://nydairyadmin.cce.cornell.edu/pdf/nwny_crop_alert/pdf21_pdf.pdf](http://nydairyadmin.cce.cornell.edu/pdf/nwny_crop_alert/pdf21_pdf.pdf)) and also how to terminate cover crops. Check small grains for heaving.

*Heaved rye plants*
Effect of Residual Herbicides on Cover Crop Establishment

Source: Iowa State University Press Release. www.cai.iastate.edu
By: Bob Hartzler

Ames, Iowa (March 16, 2015)--The interest in cover crops has increased recently due to the benefits they can provide to the corn-soybean cropping system. The use of residual herbicides has increased at the same time, and the potential impact these herbicides may have on establishing cover crops is an important consideration.

Herbicide labels usually include information regarding restrictions for rotational crops, and in many situations the restrictions were not developed in respect to cover crops. The two primary reasons for the rotational crop restrictions are 1) residues interfering with crop establishment, and 2) residues accumulating in rotational crops that may be fed to animals or humans. Due to the potential for herbicides with no established residue tolerances entering the food chain, it is essential to follow all rotational restrictions on labels when planting cover crops that may be grazed or harvested for forage. In situations where the cover crop is only used for conservation practices, greater flexibility is provided although the grower assumes the risk if the herbicide should interfere with the establishment of the cover crop. As cover crops are planted more widely, labels likely will change to take them into account. For example, the Harness label now states that only non-food or non-feed winter cover crops may be planted following harvest of food crops treated with Harness.

The potential for herbicides to prevent successful establishment of cover crops is an important consideration. The threat posed by a herbicide is determined by the chemical’s half-life and availability in the soil, sensitivity of the cover crop species, herbicide application rate and date, and environmental conditions throughout the growing season. Late herbicide applications and limited rainfall following application will increase the potential for crop injury. The relatively short time period between cover crop planting dates and the onset of cool fall temperatures increases the risk that herbicides pose to cover crops.

We evaluated the response of five cover crop species to several persistent herbicides commonly used in Iowa corn and soybean production. All experiments were conducted in the greenhouse, thus the studies provide information on the relative tolerance of the five cover crop species to the herbicides rather than an assessment of actual risk under field conditions.

Results of the greenhouse trials are summarized in Table 1. The ratings are based on both greenhouse experiments and experiences with herbicides in the field. Radish was the most sensitive of the cover crops evaluated, with significant injury occurring with all herbicides except Dual II Magnum and Prowl. Cereal rye was the most tolerant of the cover crops. Hornet caused serious injury to plant death on the three broadleaf species, whereas Corvus affected the growth and vigor of all species.

There are many benefits associated with inclusion of cover crops into the corn/soybean cropping systems that dominate the Iowa landscape. Our relatively short growing season limits the time period for growth of cover crops following planting and the onset of dormancy, thus increasing the threat posed by herbicide residues. Cereal rye has a relatively high tolerance to the herbicides commonly used in corn and soybean, and under most situations its establishment should not be affected by herbicides used earlier in the growing season. Other cover crop spe-
cies are more sensitive to herbicides, and the potential impacts of herbicides on their establish-
ment should be considered. Finally, always follow any rotational restrictions on the herbicide
label when cover crops might be harvested for forage or grazed.

Bob Hartzler is a professor in the Department of Agronomy at Iowa State University.
Meaghan Anderson is an Extension Field Agronomist serving East Central Iowa.

The NYGC Grazette is now available on the web!
http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ny/home/?cid=NRCSEPRD333859

Pasture Management Tips (from the NYGC Grazette, Karen Hoffman): Since transition
to pasture always seems to be challenging for some, we always have the same (or similar) pas-
ture management tips in April every year. Dairy farmers need to be especially careful about
transitioning, or milk production may take a hit. Remember that switching from stored feeds to
pasture is like changing silos - the rumen bugs need time to adjust to a higher quality
feed. Even other kinds and classes of livestock need to make the shift, but you don't generally
see the effect of no transition time causing lower production - they usually make up the differ-
ence in growth later in the season.

Best bets are to begin the transition before the grass really starts to grow rapidly – gen-
erally before it reaches 6 inches in height. If the ground is so wet that they'll sink up to the
hocks, you may want to wait a little longer, or find a paddock where the ground is drier to start
on. Transitioning at the shorter height sets up your "grazing wedge" - in other words, it begins
the process of getting the grass staged to be grazed at the right height throughout the grazing
season. If you wait to turn out until it's 6 to 8 inches tall, you've set yourself up for a lot more
clipping or haying, because the animals will never catch up with it. The shorter starting height
also limits intake, and so helps the rumen bugs adjust over the first week or two on grass.

The one caution with early spring transition to grazing is to not overgraze your pas-
tures. The plants will initially grow from stored nutrients, but if overgrazed those nutrients are
depleted quickly, the plants will lose their root mass, and will take longer to regrow. Leave
enough leaf area for the plants to continue photosynthesizing, which usually means a short resi-
dency period or what is sometimes called “flash grazing” - this restricts the animals ability to
graze it too short. It’s a delicate balancing act in the spring, and requires observation and the
ability to change grazing strategies quickly. In other words, this is where the art is needed in
the application of the science of managed grazing!