Cornell Cooperative Extension Oneida County

Farm Flash

Happy Holidays

From the Ag Team

December 2023

Livestock Issue

The Ag Team

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Agriculture District Open Enrollment

January 1st to 31st is Oneida County's Open Enrollment period for inclusion into a State Certified Agricultural District. Landowners who are engaged in a farm operation or renting land to a farm operator can apply. This is a voluntary program and landowners are enrolled in the district for eight years.

For an application or more information contact Matt Pawlusik, Oneida County Planning Department, at (315) 798-5710 or mpawlusik@ocgov.net. Applications can also be picked up at the CCE Oneida Office in Oriskany. Call Maryellen Baldwin at (315)736-3394 ext. 177, mfw73@cornell.edu or on the CCE Oneida website at https://tinyurl.com/52xte22b

Upcoming Events

Ag Workforce Development Council - Labor Roadshow VII

December 13 - Sackets Harbor, NY
December 15 - Greenwich, NY
December 19 - Geneva, NY and Online
December 20 - Batavia, NY

Register online at https://tinyurl.com/5dcejc5h

Labor continues to be the primary challenge for many farm businesses and this event aims to tackle those challenges head-on with these topics:

- Experienced labor attorneys to address managing in a union environment, complying with equal employment laws, and managing regulatory audits.
- How the new NYS Marijuana Law affects the workplace.
- State and federal employment law compliance.
- Overtime: the new 2024 NYS tax reimbursements for overtime, payroll systems, and compliance.
- Farm Safety and OSHA compliance.
- Workforce development: finding your future staff. Updating your payroll system to stay in compliance.

Featuring:

- Attorney Joshua Viau, Fisher Phillips Law Firm
- Nick Donofrio, New York Regional Office US Department of Labor/ OSHA
- Farm HR Managers Panel
- NYS Department of Ag and Market
- NYS Department of Taxation

Crop Congress

January 4, 2024 10:00 am - 3:00 pm
Check in starts at 9:00 am
Clinton VFW - 49 Franklin Ave, Clinton NY 13323

Registration is **REQUIRED** by December 29th to Danielle Taylor at (315) 404-8423 or by email danielle@clinton tractor.net

NYSDEC Recertification Credits est. 2 AND up to 6 CCA Credits will be available.

Attention Dairy Producers and Beef Farmers in NYS

Your insight is requested to help maintain the viability of the Beef x Diary Industry in New York State. Extension Educators from South Central NY Dairy and Field Crops Team are asking for input on the following survey.

You can take the survey online at https://cornell.ca1.qualtrics.com/jfe/form/SV_5yxPolqJPncmb78 or scan the QR Code with your cell phone camera.

Who should take this survey?

- Dairy farmers in NY using or not using beef sires
- Farmers purchasing and growing beef x dairy cattle
- Farm advisors or consultants assisting farmers with beef x dairy cattle decisions

Farmland for a New Generation

CCE Oneida County can help you access farmland, or someone to farm your land Farmland for a New Generation New York, is a FREE website tool developed in partnership between the NY State Dept. of Ag and Markets, American Farmland Trust, and a network of 27 land trusts, CCE offices, and other agricultural organizations, all working together to bring a new generation of farmers onto land across the state.

CCE Oneida County is one of those extension offices that can help you register a profile on the site, for finding farmland or to find a farmer to work your land. Your regional navigator at CCE Oneida County is Maryellen Baldwin, at mfw73@cornell.edu or 315.736.3394, ext. 177. On this site, located at https://nyfarmlandfinder.org, you will find how to prepare a profile, trainings, materials, and documents to educate and support farmers and landowners.

We know, gaining hands-on farm experience is an important step for farmers before accessing farmland. Through working on a farm, you can enhance your knowledge of the agricultural industry and gain valuable insight into the day-to-day operations of a farm. Also, new this year is a database of Farm Jobs. Please call our office; at 315.736.3394, ext. 177 for additional information.

Here's to 37 Years Jeff Miller!

As you embark on this exciting new chapter of your life, we want to take a moment to celebrate your remarkable career and wish you the happiest and most fulfilling retirement. Throughout the years, your dedication, hard work, and passion have left an indelible mark on all you have worked with in the office and out in the field. We know you will always be a resource when it comes to soil health and crops and hope that you'll still pick up the phone if we have questions.

As you bid farewell to the daily grind, may your days be filled with relaxation, joy, and the pursuit of all the activities you love. Whether it's traveling, pursuing hobbies or simply enjoying well-deserved downtime, we hope this chapter brings you the happiness you've earned.

Thank you for your years of service, commitment, and the positive impact you've had on everyone around you. The office won't be the same without you, but we're excited to see what adventures lie ahead for you.

Here's to a fantastic retirement! May it be everything you've dreamed of and more.

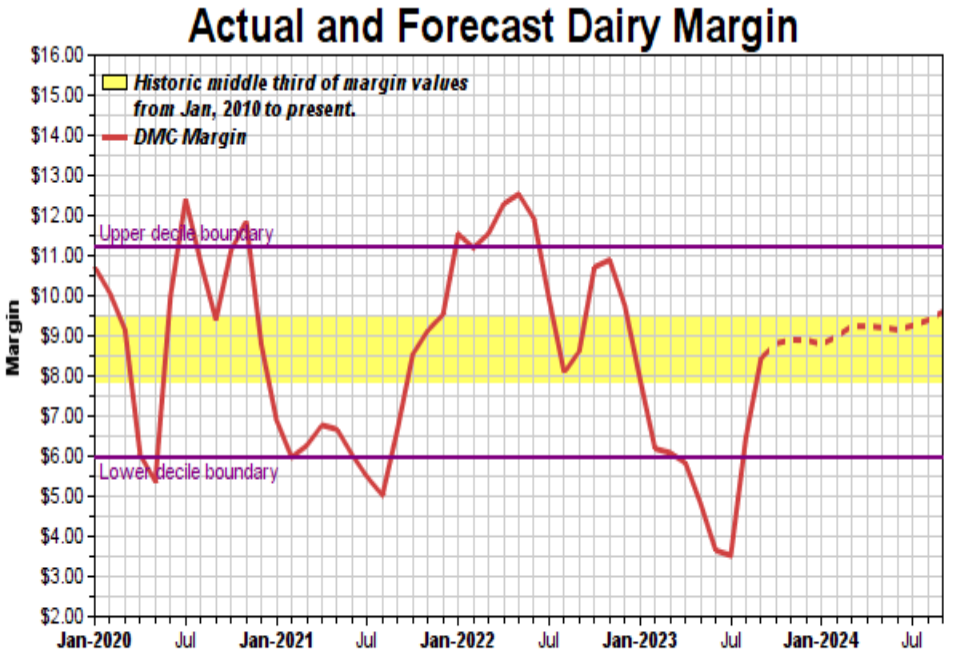
- All of us on the Ag Team

USDA Rural Energy for American Plan (REAP)
CCE Oneida Energy & Environment Team

As winter rapidly approaches now is the best time to look at your energy usage because you could be missing out on savings for you and your business. The process of improving energy efficiency for your business can be daunting financially but there are plenty of programs available to help fund your energy projects such as the USDA Rural Energy for America Program (REAP). The program offers grants that cover up to 50% of project costs and loans up to 75% for both energy efficiency projects and renewable energy projects.

REAP funding of up to $500,000 is available for energy efficiency projects such as high efficiency heating, ventilation, insulation, lighting, and refrigeration unites. If you'd like to embark on a renewable energy project such as biomass, geothermal, hydroelectric, wind or solar, REAP funding up to $1,000,000 can assist you.

Contact your local USDA office if you'd like more information or want to access REAP Funds. The next application deadline for REAP funding is December 31st.



https://dairymarkets.org/Tools/MILC-MPP.html

DMaP Dairy Markets and Policy

Updated 11/16/23

Inflation Reduction Act

The Inflation Reduction Act provided $3.1 billion for USDA to provide relief for distressed borrowers with certain Farm Service Agency (FSA) direct and guaranteed loans and to expedite assistance for those whose agricultural operations are at financial risk.

Since October 2022, USDA has provided approximately $1.5 billion in immediate assistance to more than 25,000 financially distressed direct and guaranteed FSA loan borrowers.

FSA is currently accepting and reviewing individual requests for assistance from borrowers who took certain extraordinary measures to avoid delinquency on their direct FSA loans and those who missed a recent installment or who are unable to make their next scheduled installment.

FSA direct loan borrowers with qualifying farm loans who are unable to pay their upcoming installments or have already missed a recent installment payment can request a cash flow analysis from FSA using a recent balance sheet and operating plan to determine their eligibility. This assistance is currently limited to installments due Aug. 1, 2022, through Jan. 15, 2024.

Assistance is also available for borrowers who took certain extraordinary measures between Feb. 28, 2020, through Oct. 18, 2022, to avoid delinquency on their loans, such as monetizing long term or essential assets, incurring additional non-FSA debt, or deferring other essential payments, resulting in reduced farm and household viability.

All requests for assistance must be received by Dec. 31, 2023. For more information, or to submit a request for assistance, producers can contact their local USDA Service Center or visit farmers.gov/inflation-reduction-investments/assistance.

Contact Information for Local Agencies that support Agriculture

NYS DEC 315-793-2554,
Oneida Co Soil & Water 315-736-3334
USDA Farm Services 315-736-3316
Oneida County Farm Bureau
1-800-342-4143
Farm Net 1-800-547-3276

A Little Thanksgiving History
Beth Irons

In 1620, a small ship called the Mayflower left Plymouth, England, carrying just over 100 passengers. Some seeking a new home where they could freely practice their faith and others lured by the promise of prosperity and land ownership in the New World. One month later, the Mayflower crossed Massachusetts Bay, where the Pilgrims, as they are now called, began the work of establishing a village at Plymouth.

Initial relations with Native Americans helped the Pilgrams survive the brutal first winter, with some being lost by exposure to scurvy and disease outbreaks. Members of the Pawtuxet tribe taught the survivors how to farm and raise crops - of which corn was one of the first. In November 1621, after the Pilgrims' first corn harvest proved successful, Governor William Bradford organized a celebratory feast and invited a group of the fledgling colony's Native American allies. This is now remembered as America's "first Thanksgiving."

Pilgrims held their second Thanksgiving celebration in 1623 to mark the end of a long drought that had threatened the year's harvest and prompted Governor Bradford to call for religious fast. Days of fasting and Thanksgiving on an annual or occasional basis became common practice in other New England settlements as well. This practice continued for over 150 years.

In 1789 George Washington issued the first Thanksgiving proclamation as a national observance. He called upon Americans to express their gratitude for the happy conclusion to the country's war of independence and the successful ratification of the U.S. Constitution. This proclamation was upheld by his successors John Adams and James Madison during their presidencies.

In 1817, New York became the first of several states to officially adopt an annual Thanksgiving holiday. At the height of the Civil War, in 1863, Abraham Lincoln proclaimed all Americans to ask God to "commend to his tender care all those who have become widows, orphans, mourners or sufferers in the lamentable civil strife" and to "heal the wounds of the nation." He scheduled Thanksgiving for the final Thursday in November. It was celebrated on that day every year until 1939, when Franklin D. Roosevelt moved the holiday up a week in an attempt to spur retail sales during the Great Depression. Roosevelt's plan, known derisively as "Franksgiving", was met with passionate opposition, and in 1941 the president reluctantly signed a bill making Thanksgiving once again the fourth Thursday in November.

Traditions have been forged over generations, with Thanksgiving symbolizing appreciation for our families, our health and our wealth, especially after times of difficulty or drought.

This has been brought top-of-mind for many since the pandemic, as many face the holidays with empty seats at the table. As we continue to move forward and beyond the COVID pandemic, may we all take time on the fourth Thursday of November to give thanks for those that are with us, our fortune with food on our tables and family and friends close, and our ability to come together for the greater good so we may all have many Thanksgivings to celebrate in the years to come.

And remember, the Oneida County Public Market is here to help you provide a delicious, healthy and local feast for your holiday celebrations. Main Lobby, Union Station, Saturdays (except Nov 18th) from 9:00am to 1:00pm.

Familiarize Yourself with Available Resources

Maryellen Baldwin

If you're a farm owner with employees understanding and complying with the ever-changing regulations of New York State can be cumbersome. Cornell Agriculture Workforce Development is a resource available to producers across New York State. As an educator, I am often on their website to make sure that I am up to speed with labor questions or concerns that I may receive from producers.

This program area within Cornell Cooperative Extension and the College of Agriculture and Life Science can provide insight in the following areas:

1. Increase farm employer understanding and compliance with regulations
2. Develop leadership and supervisory skills of farm managers at all levels
3. Instill a culture of learning, continuous improvement, and employee engagement in farm business

In addition their website, I would highly recommend signing up for the Ag Workforce Journal. This email based newsletter provides new updates and helpful information for the agriculture industry. Sign up online at https://www.cvent.com/Pub/eMarketing/Pages/SignUp.aspx?p=323e4eda-7559-4d25-b4de-fd942ca46d69&m

Cornell Cooperative Extension
AGRICULTURAL WORKFORCE DEVELOPMENT

Reminders for Management of Livestock/Poultry Mortalities

ML Collins

Changes have been made to the NY Department of Environmental Conservation (DEC) Division of Materials Management regulations. For access to the guidance in its entirety please visit: https://agriculture.ny.gov/system/files/documents/2023/10/mortalityguidance.pdf

What has changed? During the rendering service restrictions experienced a few years back, NY DEC allowed for CAFO regulated farms to bury livestock mortalities using specified guidelines. This temporary regulation has been lifted, and it is no longer permittable for CAFO farms to rely on burial as a method of managing mortalities. CAFOS should adhere to NRCS Standards (NRCS-NY 316 Animal Mortality Facility) and/or Cornell Guidelines (https://www.dec.ny.gov/docs/water_pdf/compostinganimalmortalities-reducedsize.pdf) to address livestock/poultry mortality management in their facilities. These standards and regulations allow for proper on-site mortality management by means of composting.

Not regulated under CAFO permits? You are still encouraged to consider on-farm composting as a way to manage mortalities. Additionally, non-CAFO farms are permitted to use burial as an option, but most do so using the guidance provided in the 6NYCRR Part 361-2.1 (b) expert below:

(b) the storage, processing, and disposal of solid waste generated from farm-related activities provided all storage, processing, and disposal occurs on farm, though not necessarily the generating farm, excluding construction and demolition (C&D) debris and wastes identified in subdivision (a) of this section. For animal mortalities:

(1) the animal carcass must be buried within 72 hours, unless a longer period is approved by the department;

(2) the burial pit must not be located in a special flood hazard area, and must be 200 feet from the property line, a residence (excluding the farmer's residence), a potable water well, a surface water body, and a state or federally-regulated wetland;

(3) the base of the burial pit must be at least two feet above seasonal high groundwater, four feet above bedrock or other confining layer, and the underlying soil must not exceed a permeability of one inch per hour;

(4) a maximum of three large animal carcasses (bovine, equine, etc.) are allowed in one pit. For small animals, a maximum depth of three foot of small animal carcasses in a 10 foot by 10 foot area burial pit is allowed;

(5) A minimum of 10 feet of undisturbed soil is required between burial pits and no more than 50 large animal carcasses (or equivalent are allowed per acre;

(6) for mass mortalities caused by barn fires or other similar incidents, trenches may be allowed in lieu of the pits described in paragraphs 363-2.1(b)(4) and (5) of this Part, as determined by the department;

(7) a minimum of one foot depth of absorbent natural material (sawdust, straw, bedding (other than sand), etc.) must be placed under the carcass and extend at least six inches around the carcass, unless the soils present are sufficiently impermeable, as determined by the department;

(8) at least three feet of soil must be placed above the carcass. A finished grade that is slightly above natural ground elevation, to accommodate settling and reduce ponding from precipitation, is required. The surface must also be vegetated to minimize run-off;

(9) run-off must be directed away from the pit(s);

(10)a pit cannot be reused unless the prior mortality has undergone complete tissue degradation;

and

(11) the animals do not emanate from research or are otherwise subject to regulation under Part 365 of this Title.

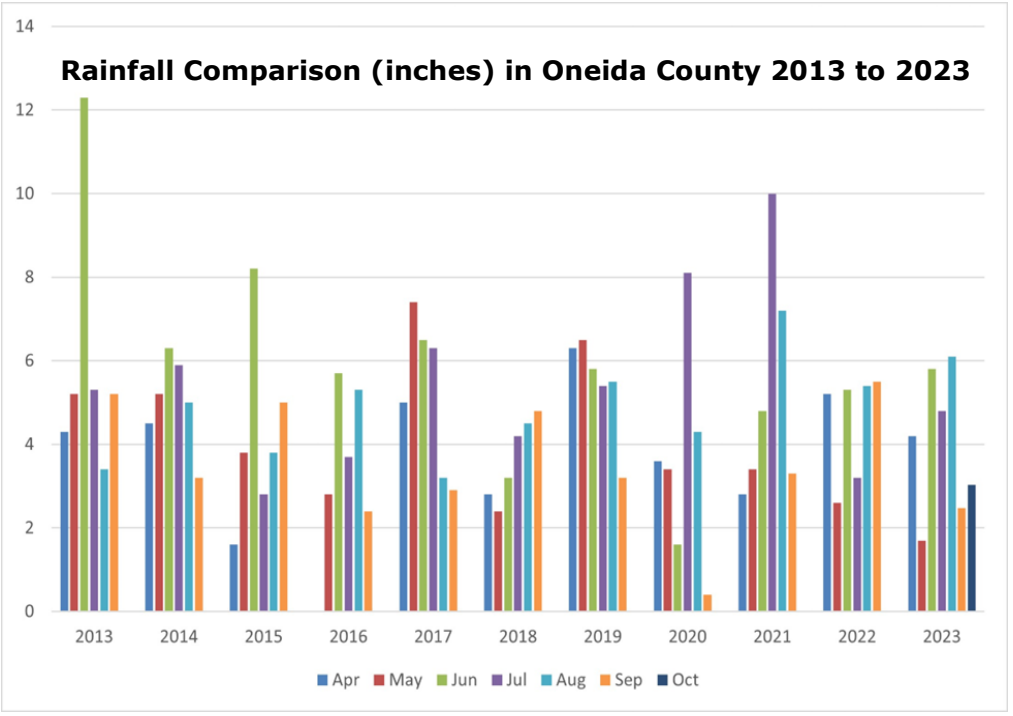
As a reminder, rendering services do still exist for local farms with livestock disposal needs. Scooby Doo will still pick up on farm, but continues to charge for this service. With limited options for rendering, it makes sense to be decisive when choosing cull cows to send. Be sure you are considering animals that are able to stand unassisted , are not displaying evidence of lameness, and are able to make the trip to the processing facility. Body condition scores in adult animals and thriftiness of young calves matter to potential buyers.

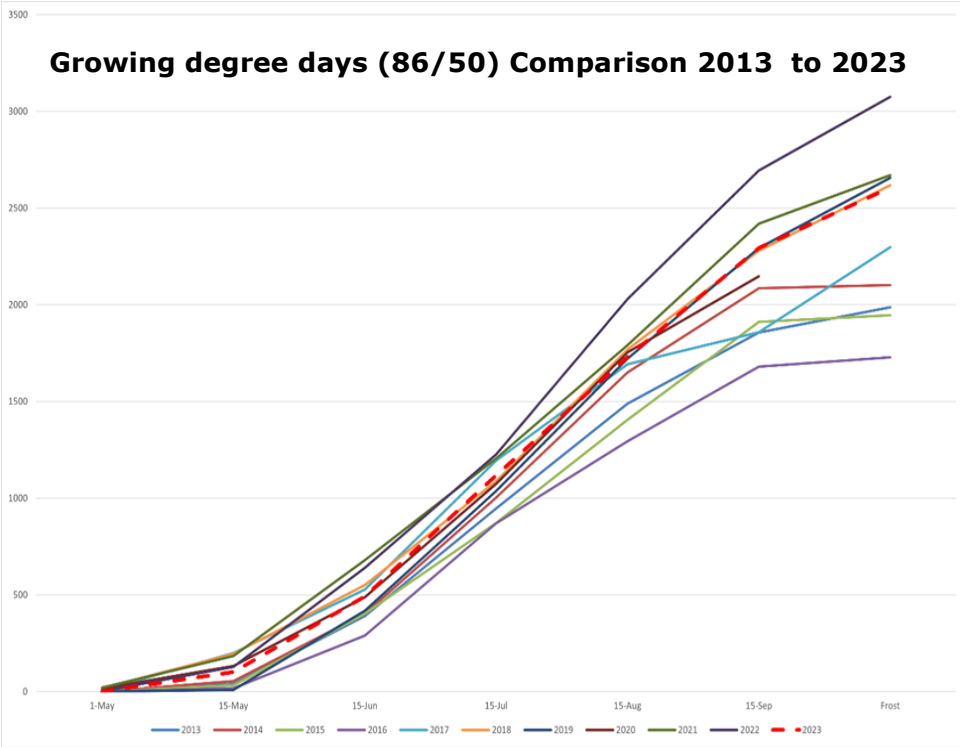
Crop Shorts
Jeff Miller

Weather Summary for the 2023 Growing Season

What do people say "be careful what you ask for." We had dry conditions in May which supported the timely planting of our annual crops. Most fields were planted from May 7th to May 23rd. Unfortunately the dry weather that made planting easy stayed around for a number of weeks. The weekly average rainfall for the weeks ending May 14th, May 21st, May 28th, June 4th and June 11th were 0.0, 0.2, 0.06, 0.0, and 0.5 respectively. The lack of rainfall had 3 major impacts: First it delayed germination and caused uneven germination in both corn and soybeans. Second, the dry weather slowed growth and development not only for corn and soybeans but also for hay crops planted in April. Third, the impact of the dry weather delayed maturity so corn silage harvest was delayed until late September and folks were still waiting to harvest 1.9s and 2.1s in mid October. This will impact how many acres of winter wheat will be planted for 2024 harvest.

Growers who wished for rain, were granted their wish and we had rain almost every week for the rest of the season. The rain definitely helped our annual crops but made it difficult to harvest wheat and almost impossible to make dry hay.





No-Till and Cover Crops Increase Profits. Most of the time when you read about the benefits of No-till and cover crops you get a list of environmental benefits.

- Erosion prevention
- Increased infiltration
- Reduced weed compaction
- Increase in the number of activity of soil biology
- Increased availability of soil nutrients
- Increase in soil strength - resistance to compaction
- Consistent yields in spite of extreme weather
- Increased resiliency

What hasn't been studied as much is the economics of No-Till and cover crops.

- One study by soil health institute surveyed 30 farms. Twenty-nine of those farms increase net income an average of $65/ac

Economics of soil health systems on 100 farms in the Midwest (Soil Health Institute). The Soil Health Institute and Cargill conducted this project to provide farmers with the economic information they needed when deciding whether to adopt soil health practices and systems.

- The 100 farmers interviewed grew crops on an average of 1940 acres, using no-till on 85% and cover crops on 53% of those acres
- Those farmers using no-till had been doing so for an average of 19 years, and those who grew cover crops had been doing so for an average of nine years
- 67% of the farmers interviewed reported increased yield from using a soil health management system
- Two farmers reported decreased corn yield
- Based on the information provided by these farmers, it costs an average of $24.00/acre less to grow corn and $16.57/acre to grow soybean using a soil health management system
- Across all 100 farms, soil health management systems increased net income for 85% of farmers growing corn and 88% growing soybean
- Based on standardized prices, the soil health management system increased net income for these 100 farmers by an average of $51.60/acre for corn and $44.89/acre for soybean
- Farmers also reported additional benefits of their soil health management system, such as increased resilience to extreme weather and increased access to their fields
- The current adoption rates of no-till 37% and cover crops (5%) in the U.S. indicate that many other farmers may improve their profitability by adopting soil health management systems

Scientists Ratchet Up a Key Amino Acid in Corn
ARS News Service 9/2023

Experimental lines of field corn developed by a team of Agricultural Research Service (ARS) and university scientists will usher in new commercial hybrids offering high-methionine grain.

The advance, reported in a recent issue of Crop Science, will be especially welcome news for organic poultry producers whose birds require dietary formulations of the amino acid to ensure optimal growth, health, and production of meat and eggs.

As one of nine essential amino acids and only two that contain sulfur, methionine helps kick-start the synthesis of proteins and is a key component of many tissues, including bone, muscle, ligaments, organs, skin, and feathers in poultry. Methionine also underpins important metabolic, digestive, and immune system functions.

ARS plant geneticist Paul Scott and colleagues combined the use of two conventional plant breeding methods - namely, doubled haploid induction and recurrent selection. Using these methods, they developed 16 lines of inbred corn whose methionine grain levels equaled - and in one case, surpassed - that of B101, a hybrid that has been shown to be a useful benchmark of comparison because of its naturally high concentration of methionine. It will be important to test these lines in hybrid combinations and in different environments to understand how stable the trait is and what their yield potential is.

High Oleic Soybean

Agri-view John Pretz Hubbard's Feed

What the difference between conventional soybeans and high-oleic soybeans? Overall their protein and fat levels are the same, but there are drastic swings in the fatty acid profiles.

Only about 22% of the fat in conventional soybeans is oleic. About 63% of the fat is comprised of polyunsaturated fatty acids - linoleic and linolenic.

That ratio shifts to 74% oleic and 9% to 10% linoleic and linolenic acids in high-oleic soybeans. Dairy cows can more easily use oleic fatty acids to increase milk-fat synthesis. At elevated levels polyunsaturated fatty acids can reduce overall milk-fat production.

A recent study conducted at Pennsylvania State University compared normal to high-oleic-acid roasted soybeans fed at 5% and 10% of the diet. The soybean type and level had no effect on milk yields, but high-oleic-acid soybeans resulted in a 0.17 unit greater milk fat concentration and a 0.2 pound greater fat yield.

The increase was explained by a decrease in the diet-induced milk-fat depression. Increasing the amount of roasted high-oleic soybeans in the diet from 5% to 10% of the cows diet also increased milk fat numbers by 0.2 units.

Breeders are working on incorporating enlist traits into high oleic soybeans with a target date of 2025. This will help growers that have glyphosate resistant water hemp and palmer amaranth. Growers that are considering planting high oleic soybeans should investigate potential markets first, they are not accepted at every mill because they need to be stored separately.

Questions to Ask Before Signing a Contract for Carbon Credits

Todd Janzen

This is not the first time that I have included information like this in the newsletter. I had a conversation with a local grower who was getting some payments for practices that increase carbon sequestration but was tied to marketing grain with the company.

Carbon credit payments have been pioneered in some mid-west states. The general pattern is lower payments for specific farm practices where minimal responsibilities are placed on growers, higher rates but greater requirements to measure actual carbon savings.

On the next page are a few questions that you should ask before signing a contract for carbon credits:

First, how much does the soil carbon contract offer to pay per acre? There are many different compensation structure for these programs. The simplest contracts pay a farmer a per acre fee to implement a specific practice. These are straightforward. Other contracts offer to pay the farmers for the results of carbon farming. These pay farmers for carbon credits generated on their land during the contract term. Figuring out how much payment will results from signing up can be a real challenge, since the amount of carbon that will be stored and the price of a carbon credit in the future are both unknown. Still, ask the company to give you an estimate of revenue expected.

Second, does the expected revenue offset the "paperwork" burden required during the term? Some of these programs have fairly significant reporting obligations. If these are accomplished electronically for a farmer who has good digital records, the burden on the farmer is probably insignificant. But for other platforms that require self-reporting, sometimes even on paper forms, the burden could be substantial. Ask on the front end.

Third, will required changes to your farm have a significant short-term impact on yield? Presumably, any improvement in soil health will have a long-term benefit to the farmland, which is great but if there is an anticipated short-term negative impact, make sure it is offset by the payment provided or long-term improvement to soil health.

Fourth, can the farmer exit the program before the end of the term? Building a soil carbon is a long-term prospect. Farmers should understand whether they can exit before the end of the term and what is the penalty for doing so. Long-term is not bad, but understand how long and deep the commitment is at the beginning of the term.

Fifth, does the contract have an indemnity clause? These are what keep lawyers awake at night. **Is the farmer potentially liable to the soil carbon contract company if things do not go as intended?** Considering the payouts for farmers under these programs are relatively small (compared to the cost of farming), any indemnity by the farmer should be small as well, or non-existent.

My opinion: If you plan to start doing no-till or planting cover crops investigate what options are available to you. There is a "Climate Smart Farming Grant" that can be applied for to NYS Ag and Market through Oneida County Soil and Water Conservation District. Call (315) 736-3334 for more information.

The Delong Co. has a program called Grown Climate Smart that offers payments for specific practices. Look it up online and review their program offers and requirements.

New Research Provides Hope for Controlling Tar Spot

We have included some information about tar spot disease of corn in past issues of the Farm Flash. It is a disease that has caused some significant yield losses and has been moving from the mid west to the east. We have a few locations with tar spot in NY in Chautauqua, Livingston and Yates counties.

ARS scientists have found that the germination of the spores produced by the tar spot fungi (phyllacora maydis) can be reduced significantly by 2 other fungi.

- Exposure to spores of Gliocladium cantenulatum (a commercially available biocontrol fungus) prevented 88% of the tar spot fungus' stromata from germinating
- An Alternaria fungus isolated from a tar spot stroma prevented about 45% of stromata from germinating

These results provide hope that this disease can be managed.

Soil Parameter to Measure and Identify the Health of Your Soils

From North American Project to Evaluate Soil Health Measurements

- Organic Carbon
- pH
- Water-Stable Aggregation
- Crop Yield
- Texture
- Penetration Resistance
- Cation Exchange
- Nitrogen
- Phosphorus
- Potassium
- Carbon Mineralization
- Nitrogen Mineralization
- Erosion Rating
- Base Saturation
- Bulk Density Capacity
- Infiltration Rate
- Micronutrients

TIER 1 MEASUREMENTS. A Soil Health Partnership project conducted over a 3-year span with over 100 soil scientists, 124 long-term ag research sites and 30 different soil health measurements at each site identified these 17 "tire 1 measurements" to focus on when evaluating soil health.

You can see that some of the parameters are very familiar to (pH, phosphorus, potassium, micronutrients) the soil chemistry tests that many growers have been using for years to manage their manure and fertilizer program.

Scientists are still struggling with tests that can measure biological activity. Here they highlight measurements of carbon and nitrogen mineralization and organic carbon. Others have incubated soil and measured carbon dioxide, some just bury a cotton sock and dig it up months later to see how much has been consumed by the soil biology. Another simple measurement is taking your shovel and digging up a few spots in your fields. I have been amazed by the number of earthworms I find in a shovel full of soil on a farm with long term no-till and cover crops versus the number found in well managed fields under conventional tillage.

Climate Smart Farming Grant

The 7th round of this grant occurred this year. So far the feedback indicates that is was competitive, that about 1/3 of the grants were funded. The focus of these grants is reduction of greenhouse gas, and sequestration of carbon through changes in farm practices. Changing farm practices to increase resiliency in response to the changes in our climate including extremes in weather.

There are 3 tracks under the grant:
1. Agricultural waste storage, waster cover, and flare systems
2. Water management
3. Soil health management practices

Track 1: Agricultural waste storage, waste cover, and flare system covers the following:
- Waste storage
- Manure and agricultural waste treatment systems
- Nutrient management system - cultural

Round 7 included funds for equipment that supported the best management practices.

Waste Storage and transfer: My interpretation was that if you could show a benefit such a reduced N loss, reduced compaction, reduced fuel use, reduced greenhouse gas (GHG) emissions changing from your current system that your grant proposal might rank well for funding.

Let's take a common current system:
- Applying manure to the surface of your fields with tankers loaded with manure covering every acre of each field (compaction?, fuel use?, N loss?, GHG?)
- Possibly going back the next day incorporating the manure with some sort of tillage again covering every acre of the field (compaction?, fuel use?, GHG loss?)

Now lets look at a new system:
- Manure is trucked from your storage in one or more tankers
- Manure emptied into a Frac tank at the edge of the field (eliminates many road trips saving fuel, eliminated many trips across the field with heavy tanks of manure reducing fuel use and soil compaction)

- The manure is pumped through a drag hose to the injector hooked to your tractor and is incorporated immediately (eliminates 2nd trip across the field with tillage equipment saving fuel and GHG losses from full surface tillage, reduces N loss by immediate incorporation thereby reducing N fertilizer purchase with all of its associated environmental costs)

Manure and agricultural waste treatment systems. There are only 2 systems I can think of:

- Removing the water from your manure with some system, composting it to kill pathogens and reusing it as bedding (how will this impact (GHG?, N loss, fuel usage?)
- Generating methane from manure using some system (what is the net effect on GHG? Fuel usage?)
- If you have manure storage and don't use sand for bedding, then it might be practical to consider putting a cover over your manure storage. This grant would cover the cost of a cover and flare system.
- Your benefit is to exclude rainwater. This would increase the concentration of nutrients in the volume of manure you would be applying to your fields reducing the amount of manure you would have to apply - reducing fuel and labor of manure spreading and reducing compaction
- Environmental benefit: burning the methane significantly reducing the negative impact on our climate

We will cover the other two tracks in the January issue of Farm Flash. At this time the estimate is that the next round will occur next spring. It would be best for you to learn about the program during the winter and if you want to participate than you can contact Jessica Armstrong at (315) 736-3334 for more information.

Cornell 2023 Corn Silage Variety Trial Results

Cornell supplies all the data for the corn silage variety trials each year including the conventional yield and dry matter, also forage quality results as well as running each variety through the CNCPS ration balancing software to derive a milk per to estimation for each variety. They publish tables of data for 3 main maturity groupings as well as plot variety performance on graphs to help growers assess in terms of both yield and milk production.

I only include this one table that shows performance parameters and results across a number of years. To read this years report follow the link: https://bpb-us-e1.wpmucdn.com/blogs.cornell.edu/dist/5/8858/files/2023/11/2023-NY_VT-Corn-Silage-Hybrid-Evaluation-Report-11.10.2023.pdf or search 'cornell 2023 corn silage variety trial.

Joe Lawrence also writes an overview of the trials that can be found online at: https://ecommons.cornell.edu/items/72d6f624-fbbe-47ed-b90e-48b94ec46e78

TABLE 5: Whole Plot Means for Key Corn Silage Performance Indicators

Relative Maturity Group	Growing Season	Location	Yield, 35% DM	Dry Matter	Starch Content	aNDFom	30 hr NDFD	120 hr NDFD	240 hr uNDFom
			tons/acre	%	% DM	% DM	% NDFom	%NDFom	% DM
85-98 day RM	**2023**	**Oakfield, NY**	**32.0**	**36.3**	**41.7**	**33.7**	**56.2**	**63.4**	**11.3**
		Willsboro, NY	-	-	-	-	-	-	-
		Alburgh, VT	**25.2**	**31.6**	**38.2**	**37.3**	**47.7**	**56.8**	**15.2**
80-95 day RM, 2017 -2022	2022	Oakfield, NY	21.0	37.4	36.7	37.5	60.5	69.1	10.4
		Willsboro, NY	25.9	30.3	37.2	35.4	60.6	67.9	10.3
		Alburgh, VT	27.8	33.6	36.2	36.2	55.8	66.3	11.2
	2021	Oakfield, NY	29.1	37.7	40.3	33.0	57.7	65.1	10.6
		Willsboro, NY	23.6	32.1	39.0	34.6	56.3	67.4	10.3
		Alburgh, VT	19.9	36.3	37.9	36.1	52.8	64.1	12.0
	2020	Albion, NY	19.3	36.6	41.7	32.5	60.2	68.9	9.2
		Willsboro, NY	16.5	30.6	34.7	37.7	60.4	71.9	9.5
		Alburgh, VT	19.8	32.4	37.8	35.9	56.0	65.6	11.4
	2019	Albion, NY	26.0	31.9	35.1	36.5	59.1	66.3	11.3
		Willsboro, NY	19.2	32.6	36.9	35.8	60.5	67.6	10.6
		Alburgh, VT	23.4	33.7	36.5	37.8	61.6	67.6	11.2
	2018	Albion, NY	19.2	36.2	39.2	34.2	56.1	69.4	10.0
		Willsboro, NY	18.5	35.0	34.9	35.7	62.0	70.0	9.7
		Alburgh, VT	18.3	33.3	31.0	39.0	56.2	67.4	11.8
	2017	Albion, NY	25.2	30.8	32.3	37.2	59.1	69.8	10.1
		Willsboro, NY	19.2	31.3	38.1	39.5	56.3	66.8	12.1
		Alburgh, VT	27.5	31.8	34.4	38.9	53.2	62.7	13.4
99-110 day RM	**2023**	**Aurora, NY**	**25.0**	**34.8**	**38.4**	**36.1**	**57.7**	**65.2**	**11.4**
		Madrid, NY	**34.5**	**35.9**	**39.9**	**35.7**	**55.6**	**63.2**	**12.2**
		Alburgh, VT	**24.4**	**30.8**	**38.1**	**38.4**	**49.5**	**59.8**	**14.4**
96-110 day RM, 2017 -2022	2022	Aurora, NY	20.6	31.7	37.2	37.4	61.5	70.0	10.0
		Madrid, NY	31.1	34.1	39.6	36.0	55.1	62.5	12.5
		Alburgh, VT	27.3	33.0	38.7	36.5	52.3	60.7	13.2
	2021	Aurora, NY	29.3	35.2	37.8	38.5	54.1	62.7	13.3
		Madrid, NY	32.5	32.3	36.9	37.2	55.4	62.6	12.9
		Alburgh, VT	23.9	39.8	37.2	38.6	56.9	66.9	11.7
	2020	Aurora, NY	17.1	36.0	38.2	36.0	61.1	68.3	10.4
		Madrid, NY	23.6	34.1	40.1	32.9	60.3	67.6	9.8
		Alburgh, VT	25.1	36.4	37.9	36.5	55.4	65.6	11.6
	2019	Aurora, NY	27.1	34.7	38.3	36.9	55.5	62.2	12.9
		Madrid, NY	27.4	28.6	30.7	38.0	58.4	65.5	12.1
		Alburgh, VT	24.3	35.4	39.3	35.5	61.6	71.1	9.2
	2018	Aurora, NY	21.7	38.2	38.8	35.3	59.9	67.7	10.4
		Madrid, NY	28.6	32.9	35.4	35.9	61.2	69.9	9.8
		Alburgh, VT	23.3	34.9	34.2	38.3	55.2	66.0	12.0
	2017	Aurora, NY	26.0	31.9	31.2	42.6	54.5	63.8	14.4
		Madrid, NY	31.9	35.2	34.8	41.3	50.6	59.4	15.9
		Alburgh, VT	28.5	32.7	35.3	39.8	52.7	61.4	14.3

Farm-to-School Grant Update

Raevyn Saunders

CCE Oneida has the pleasure of being apart of the New York Farm-to-School initiative. This program was created to connect schools with local farms and local food producers. This innovative approach aims to strengthen our local agriculture, enhance student health, and raise awareness about regional food systems. We are working with Oneida Herkimer Madison BOCES (OHM BOCES) to support their strides in implementing the 30% NYS Initiative.

To support school districts in using more locally sourced products, the 30% NYS Initiative was created. The initiative increases reimbursement for schools. They previously would be reimbursed 5.9 cents per meal, but will now be reimbursed 25 cents when they incorporate 30% eligible NY produced and processed products into their lunch meals. This provides new market opportunities for farmers and strengthens the roots of our communities.

I was welcomed into Clinton Elementary and Westmoreland Elementary, where I learned the fun and creative ways they are incorporating local foods into their lunches. The inventive spaghetti squash creations and the delightful twist of black bean brownies showcased a commitment to nutrition and inspiring creativity that set the stage for the future of New York food in schools.

A challenge that all schools are currently facing is the nationwide shortage of milk cartons. Milk is the most significant contributor to the 30% locally sourced products served, and the students love it! In response to the shortage, OHM BOCES has provided schools with resources to help transition to serving milk in cups. The food service teams at these schools have shown remarkable resilience towards this new challenge, actively seeking, and implementing solutions.

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