

## January 2021 Dairy Situation and Outlook

By Bob Cropp, Professor Emeritus, University of Wisconsin-Madison, Division of Ext.

<https://fyi.extension.wisc.edu/dairy/january-2021-dairy-situation-and-outlook/>

Milk production continues to run well above a year ago. December milk production was 3.1% higher than a year ago marking the second straight month above 3%. Milk cow numbers have been increasing since July with another 12,000 in December bringing the total increase to 100,000. December cow numbers were 1.1% higher than a year ago. Of the 24 selected states just 8 had fewer milk cows than a year ago. Milk per cow continues well above the normal trend being up 2.0%.

Each of the five top dairy states that produce over half of the milk production had relatively strong increases in December. The increases were: California 3.2%, Wisconsin 2.6%, Idaho 1.2%, Texas 7.5% and New York 2.2%. South Dakota led all states with an increase of 11.9% followed by Indiana 9.8%, Colorado 6.3%, Kansas 5.1%, Michigan 4.9%, Illinois and Minnesota 4.7%, Iowa 4.3% and New Mexico 3.7%.

Of the 24 selected states just 6 had lower production with Florida leading with 5.0% followed by Vermont with 3.1%.

With this relatively high milk production dairy stocks are building. Butter and cheese stocks both built from November 30<sup>th</sup> to December 31<sup>st</sup>. Compared to a year ago December 31<sup>st</sup> stocks of butter were 44.4% higher, American cheese stocks 6.8% higher, and total cheese stocks 5.7% higher.

Relatively high milk production and higher dairy stocks are putting downward pressure on the price of cheese and butter. In early January 40-pound cheddar cheese blocks were \$1.6175 per pound and barrels \$1.4825 per pound. Then it was announced that a 5<sup>th</sup> round of the Farms to Families Food Box Program would run from January through April of 2021. The cheese market responded with blocks reaching \$1.9625 per pound by January 11<sup>th</sup> and barrels \$1.6525 by January 7<sup>th</sup>. But realizing cheese purchases under the program probably can not hold prices at these levels prices fell with today blocks at \$1.61 and barrels at \$1.3925. Butter showed similar price moves starting in January at \$1.29 per pound reaching \$1.4550 by January 20<sup>th</sup> and has fallen to \$1.36. Nonfat dry milk has shown strength starting January at \$1.1475 per pound and reaching \$1.2150 before falling to now at \$1.1625 per pound. Dry whey continued to strengthen in January starting at \$0.4650 per pound to now at \$0.54 per pound. With some strengthening in dairy product prices the Class III

price will be near \$16.15 in January compared to \$15.72 in December and the Class IV price near \$13.80 compared to \$13.36 in December. The outlook for milk prices remains uncertain. With the growth in milk production improved domestic sales of milk and dairy products and favorable dairy exports will be needed to maintain and to increase milk prices. Until COVID-19 comes more under control dairy product sales will be dampened. Hopefully with the vaccine things will be different and sales will improve by the second half of the year with restaurants more fully opened and schools returned to in person learning. After a 14 month of year-over-year volume growth November exports were down slightly, 0.2%. Compared to a year ago, dry whey exports were 27% higher due to continued strong sales to China, but nonfat dry milk/skim milk powder exports were 8% lower, cheese 16% lower and butterfat 3% lower. Looking ahead exports going into next year could remain positive for milk prices especially for nonfat dry milk/skim milk powder, whey products and butterfat as prices remain competitive with world prices. Milk production for 2021 by the five largest dairy exporters (EU-28, New Zealand, U.S., Argentina and Australia) is forecasted to be up about 1%. COVID-19 continues to restrict domestic demand in each of these exporters so most of increased milk production will be available for export. Also, it will take time for the world economies to recover from the recession caused by COVID-19.

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The South Central New York Dairy and Field Crops Program is a Cornell Cooperative Extension partnership between Cornell University and the CCE Associations in 6 Counties.



Government purchases of dairy products will provide support to milk prices. There is \$400 million under the Dairy Donation Program to pay for milk to be processed into dairy products and donated to nonprofit entities. There will be purchases of fluid milk, butter and cheese under Section 32 of the Act of August 24, 1935. And from January through April there will be purchases under the Farms to Families Food Box Program. It is not certain that the new administration will continue this program beyond April.

So, with the current amount of milk being produced we could see the Class III price in the \$16's first half of the year and the \$17's the second half if COVID-19 is more under control and things turn more to normal. The Class IV price could be in the \$14's and \$15's first half of the year and the \$16's the second half. But none of this certain and a lot could change this forecast. USDA in their last forecast was not quite this optimistic. USDA forecasted Class III to average \$16.90 compared to \$18.25 last year and Class IV to average \$14.10 compared to \$13.48 last year.



## January 2021 Dairy Market Outlook

*Jerry Cessna, USDA Economic Research Service  
Livestock, Dairy and Poultry Outlook*

*Based on recent data and higher expected milk prices, the milk production forecast for 2021 has been raised to 226.7 billion pounds, 0.4 billion higher than last month's forecast. Due to an improved economic outlook, enhanced by Federal Government actions to stimulate the economy, and USDA's announcements regarding purchases of dairy products, domestic demand expectations for dairy products have strengthened. Dairy product price forecasts for 2021 have been raised. The all-milk price forecast for 2021 is \$17.65 per cwt, \$1.05 higher than last month's forecast.*

We are pleased to provide you with this information as part of the Cooperative Extension Dairy and Field Crops Program serving Broome, Cortland, Chemung, Onondaga, Tioga and Tompkins Counties. **Anytime we may be of assistance to you, please do not hesitate to call.** Visit our website: <http://scnydfc.cce.cornell.edu> and like us on Facebook: <https://www.facebook.com/SCNYDairyandFieldCropsTeam>.

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# Dairy Forward Grant Guidelines; American Farmland Trust

Dairy farm families across America are facing tremendous challenges due to many factors including a weak dairy economy, disruptions from severe weather and an aging farming population.

American Farmland Trust is joining Chobani with the Dairy Forward program to support dairy farmers in planning for the future.



## PURPOSE

Grants of \$500 to \$5,000 are being made available to help dairy farm families in New York access information and professional services to help plan for farm transitions. These funds may be used for one of the eligible activities listed below.

## ELIGIBLE ACTIVITIES

### Farm Transfer and Succession Planning

Farm transfer planning aims to ensure the successful transfer of ownership and management of a farm in a way that achieves the personal objectives of a farm family. Grant funds can be used to work with service providers such as an attorney to develop a farm transfer and estate plan that could include a will, health care proxy or other legal documents such as an operating or buy/sell agreement and/or a farm business consultant to help with farm business transfer planning.

### Farm Business Planning

Changes in a farm business —be it better management of existing resources, or in the launch of a new enterprise – can lead to enhanced farm profitability. Grant funds can be used to hire a farm business consultant to develop a plan to improve farm viability by setting business goals, researching processing alternatives, determining potential markets, evaluating financing options, developing a new farm enterprise and other purposes.

### Permanently Protecting Land

Nearly 7 million acres of farmland across America have been permanently protected. Protecting farmland can help farm families achieve personal goals as well as tap into the equity in their land, establish retirement funds, reinvest in their farm business or meet other family needs. Grant funds can be used to pay for professional services associated with conveying a permanent agricultural conservation easement including but not limited to land planning, appraisals, surveys or legal fees.

### Adopting Regenerative Farming Practices

Regenerative farming practices can help farmers improve soil health, sequester carbon, improve farm productivity and become more resilient to severe weather. Grant funds can be used to hire a certified crop advisor, Soil and Water Conservation District employee or other technical service provider to develop plans for the adoption of conservation practices that promote soil health. These practices could include cover crops, no-till and reduced

tillage, prescribed grazing and crop rotations.

## ELIGIBILITY REQUIREMENTS

- ◆ Any dairy farmer located in New York state is eligible to apply. Applications will also be accepted from service providers applying on behalf of dairy farmers located in New York state. Please note: the principal operator of the farm will be required to sign the funding agreement if an award has been approved.
- ◆ The farm must have sold at least \$1,000 of agricultural products in 2020 to be eligible.
- ◆ Only one application will be accepted from each dairy farm operation.
- ◆ A service provider must be identified to apply for this grant.
- ◆ Service providers engaged by dairy farmers must have appropriate qualifications. Types of eligible service providers may include, but are not limited to, attorneys, certified crop advisors, extension educators, farm business consultants, and Soil and Water Conservation District employees.
- ◆ Grant recipients will be asked to participate in communications efforts related to the Dairy Forward partnership. AFT will seek review and approval from farmers, partners and service providers involved prior to publication.

## APPLY HERE: [DAIRY FORWARD GRANT APPLICATION](https://www.surveymonkey.com/r/AFT-dairy-forward)

<https://www.surveymonkey.com/r/AFT-dairy-forward>

## AWARD PROCESS

Applications will be accepted beginning on January 20, 2021.

Grants will be awarded based on the order they are received from eligible applicants that will use funds in a manner consistent with grant guidelines.

Applications will be accepted on a rolling basis and grants will be awarded until available funds have been expended.

The execution of a grant agreement is required to have funds awarded.

The grant payment will not be made directly to the farmer. Payment will be made to the approved service provider upon completion of work.

Service provider must provide an invoice and signed W9 to be reimbursed for services.

An invoice will not be paid without prior approval in writing from American Farmland Trust.

To comply with Internal Revenue Service recordkeeping requirements, the service provider will need to maintain and make available for review for a period of three years after the completion of the services, records pertaining to the project.

## QUESTIONS?

Please contact [dairy@farmland.org](mailto:dairy@farmland.org) with questions regarding your application. Make sure to include the farm name in any communication regarding your application.





# Antibiotic Usage & Pathways: On-Farm Perspectives from CNY Dairy Producers

By Christine Georgakakos & Betsy Hicks

*This article is part of a series, written from a peer-reviewed article entitled “Farmer perceptions of dairy farm antibiotic use and transport pathways as determinants of contaminant loads to the environment” published in the Journal of Environmental Management (<https://doi.org/10.1016/j.jenvman.2020.111880>). The work focused on twenty-seven interviews of dairy farmers in Central NY March through October of 2019, completed and summarized by the authors. Eight of the farms included managed their farms according to USDA Certified Organic standards, and the remaining nineteen farms managed their farms conventionally. Farm size ranged from under 50 mature cows to over 1000 mature cows. This series talks about the nuances between farm size and management, specific to findings interesting to the dairy farmer. This article highlights farmer perspectives of antibiotic usage on-farm as well as subsequent pathways of antibiotics after administration to their herd.*

## Contaminants of emerging concern

Pharmaceuticals, pesticides, and other emerging contaminants have been gaining attention across agricultural, environmental, and public health sectors. Slowly, we have expanded our understanding of the broader impacts of these compounds and how they can potentially move in our food, water, soil and air. As consumers as well as farmers, many of us contribute to the movement of some of these compounds into the environment on a daily basis, whether through ingredients in cleaning supplies, laundry detergents, or yard and lawn products, as well as the prescriptions and over the counter drugs we take or give to our pets or livestock to alleviate ailments. It comes as no surprise that agriculture is scrutinized as a potential source of pharmaceutical contamination – our industry is widespread and many antibiotics are dosed on a per-weight basis. We aim to use our findings from the interviews to help inform any future potential regulation so that the agricultural industry is better understood by policy makers, as well as uncover areas where the ag industry could feasibly implement strategies to help mitigate potential environmental contamination from farms.

## Dairy products: milk and meat

Use of pharmaceuticals in animal agriculture has focused on reducing antibiotic residues in food products. As such, there are strict regulations to which farmers must adhere to ensure the antibiotic concentration in animal food products falls under the required levels. Regulations like the Veterinary Feed Directive (VFD), improved veterinary client patient relationships (VCPR), and required prescriptions for antibiotic usage have all dramatically reduced the amount of antibiotics used in animal agriculture. In our study, not surprisingly, we found that tracking antibiotic usage as a means to minimize and eliminate milk and meat residues is a part of day to day operations for many dairy

farmers. We also found that the systems used for tracking cows treated with antibiotics varied between farmer ages. Gen X farmers were very concerned with antibiotic presence in meat and milk and stressed the animal tracking systems that they use to ensure milk separation. One Gen X farmer we spoke with stated that with tracking, “One of the things we’re super sensitive to is making sure we stay on top of [documenting usage]. I created a book with anytime an animal gets treated with anything that has a withhold. So we put it in here. Anytime an animal gets sold or moved, we make sure we know exactly what’s been in them.” Millennial farmers tended to emphasize on-farm testing, with one millennial conventional farmer stating “Well, there is a level of antibiotics in milk, you know. It’s just whether it’s met that [testing] threshold.” Several millennial farmers we spoke with highlighted the practice of “always test[ing] it here until it’s negative” before returning a treated cow’s milk to the bulk tank.



The tracking, testing, and required withhold time seems to have pushed some dairy farmers away from using antibiotics at all. One organic dairy farmer told us, “Well we don’t have to worry about contaminating our milk and our beef. We don’t have to watch withholding times and so for that, that’s a big thing. And mistakes happen”, as antibiotic usage is prohibited in animals producing organically marketed products. But regardless of management practice or farmer age, farmers highlighted their efforts to minimize antibiotic usage. While the reasons to reduce antibiotic usage varied across farm size and practice, the outcome of reducing antibiotic usage remained consistent across the industry. Organic producers tended to align with the ideology of contaminant reduction (i.e. viewing antibiotics and pesticides as environmental contaminants), while large conventional farmers tended to mention economic reasons, and smaller conventional

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farmers identified their usage of non-antibiotic treatments like topical udder creams and probiotic treatments.

### **Other dairy pathways: waste milk, manure, mortality**

To be clear, the total life cycle of an antibiotic can go in many directions other than into food products. Historically, these other pathways are less frequently studied and more poorly understood. We found extremely variable perceptions amongst farmers when discussing transport of antibiotic residue into waste milk, manure, and through mortality or carcass disposal, none of which have industry wide regulations.

The practice of feeding waste milk to calves and heifers is widespread across the industry. However, concern about transport of antibiotics with this milk is less consistent between farmers. Though we found variable perceptions and practices around feeding waste milk, there were no discernable differences between farm sizes or farmer ages, with high and low levels of concern present in each category. Some farmers explained nuanced approaches to feeding waste milk, recognizing that waste milk "does have some [antibiotic] residue in it. So you can't use that milk for calves that we plan on selling". Other farmers have explained "I'm not concerned about the level of antibiotics that would be in the waste milk, because we dilute that anyways with untreated milk". The process of feeding waste milk to other animals cycles undegraded antibiotic residues back into livestock, which can be a cause for concern further down the line.

Some waste milk from antibiotic treated cows is disposed of with manure, rather than fed to animals, which pushes these residues to the transport pathway shared with manure. Some manure management systems reduce antibiotic residues and antibiotic resistant bacteria (e.g. high heat systems like aerobic composting, high temperature digestion, and bedding recovery units) while other systems transport these contaminants, unchanged, with manure (e.g. daily spreading). In our study, farmers were less likely to consider this transport pathway. Of those that did, organic farmers were more likely to consider this potential outlet, explaining "it is in our manure...you give whatever to an animal, it comes out somewhere. It wasn't until [we went] organic that I realized about all the microscopic activity of a handful of soil", suggesting that manure with antibiotic residues may negatively interact with soil microbiota. Some conventional farmers explained their lower levels of concern by their usage rates: "I

don't use much...if we had tons of cows on it, I would be worried". None of the farmers we spoke with managed their manure specifically to reduce antibiotic residue and resistant bacteria transport.

Perhaps most interesting, none of the farmers we spoke with identified animal mortality and carcass disposal as a possible pathway of antibiotic residue into the environment. On dairy farms, farmers often reduce on-farm mortality by culling cows and selling them for beef rather than treating them multiple times with antibiotics. It is therefore possible that this reduction of on-farm mortality reduced attention to the topic. Some research has shown that the high temperatures achieved in mortality composting, when carried out effectively, has been shown to reduce residue and resistant bacteria concentrations.

There are many decisions that farmers take that can lead to reduced loading of antibiotics into the environment. Those decisions, though generally made to further another goal, lead to the reduction of antibiotics in the environment at each step of the dairy farm process. From cow and calf nutrition, comfort, and health to non-antibiotic treatments, bacteria testing, and waste management systems, incremental decisions contribute to reduced environmental antibiotic loadings. Other articles in this series delve into these topics and the nuances our interviews revealed.

### **Antibiotic residue sources: Anthropogenetic & Agricultural**

It is important to highlight that dairy agriculture is not the only user of antibiotics nor contributor to antimicrobial resistance (AMR). Across conventionally managed agriculture, antibiotics are used to varying degrees, and even occasionally on organic farms. Human antibiotic usage also contributes to environmental antibiotic loads through discharge of our waste water treatment systems. Some wastewater sources, such as hospitals, contribute more concentrated streams, while others, such as individual septic systems, likely contribute far lower concentrations. However, tackling the growing threat of AMR requires actions taken from all contributors, rather than associating blame for environmental contamination on one sector over another. The rising global threat of antimicrobial resistance is a result of combined global antibiotic usage, across both agriculture and human applications. Understanding animal ag's evolving usage of antibiotics and working to inform both the ag and non-ag industry on this usage are good initial steps. Management decisions made by dairy farmers and animal ag can contribute positively to this effort, both locally and on a greater scale. 🐮



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Cornell Cooperative Extension

# Pasture Prep:

## Virtual Ruminations for your 2021 Grazing Program



CCE SWNY Dairy, Livestock and Field Crops and SCNY Dairy and Field Crops teams are excited to offer a grazing series with an emphasis on dairy herds, but all grazers are welcome! Join us **VIRTUALLY** for a 6 week series on unique topics around grazing. This series will be offered every Tuesday starting March 2, 2021 at Noon EST.

Our last session on April 6, 2021 will be a panel discussion at 7pm with our series presenters. Presenters will include Betsy Hicks, Alycia Drwencke, and Mary-Kate Wheeler with CCE, Troy Bishop, Upper Susquehanna Coalition Regional Grassland Conservation Professional, Sam Corcoran with UMass Extension, Jeff Wheeler and Dr. George Dawson with Diamond V, and Don Burkhard.

### **Registration:**

<https://tinyurl.com/dairygrazing>

### **Cost: \$25**

This fee gives you access to all 6 sessions and presentation files ahead of the meetings and recordings to be shared after.

**For registration help or questions please contact:**  
Donette Griffith, [dg576@cornell.edu](mailto:dg576@cornell.edu)  
607-391-2662

### **Tuesdays via Zoom**

**March 2, 2021:**

**Considerations for 2021 Spring  
Green Up  
Noon**

**March 9, 2021:**

**Nutrition & Grazing Through the  
Season  
Noon**

**March 16, 2021:**

**Incorporating Annual Forages to  
the Grazing Plan  
Noon**

**March 23, 2021:**

**Examining Lameness on Grazing  
Dairies  
Noon**

**March 30, 2021:**

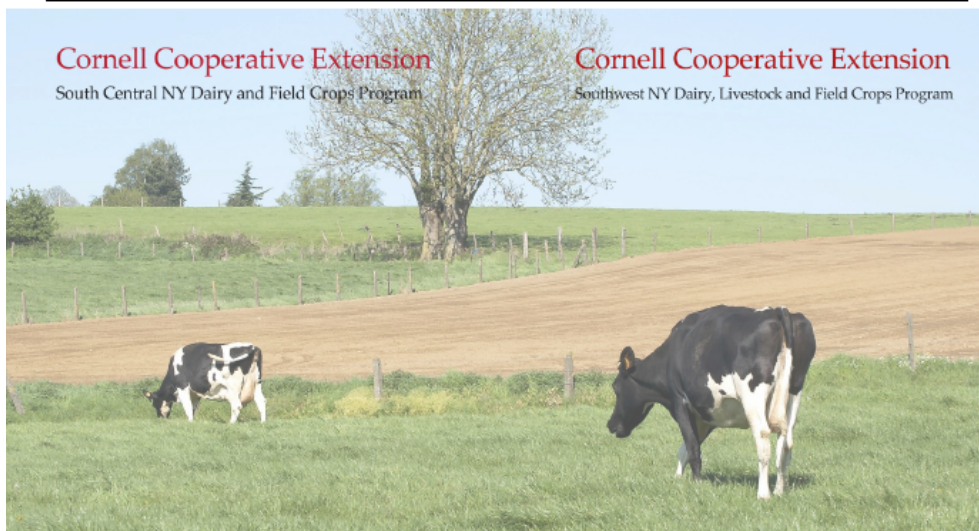
**Maximizing Pasture Investment  
Noon**

**April 6, 2021:**

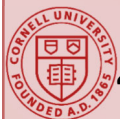
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## Podcast from CCE Dairy Educators & PRO-DAIRY, "Troubleshooting Herd Health Issues on Your Dairy"

This podcast is a series about troubleshooting herd health issues on dairy farms. It features PRO-DAIRY and CCE Dairy Specialists who over the course of fourteen episodes will discuss specific areas to look at when experiencing issues in different life stages of the dairy cow. Episodes focus on preweaned calves, transition through weaning, heifer phase, calving pen issues, metabolic disorders of the transition cow, specific fresh cow issues, lactating issues with reproduction, behavior and facilities, hoof problems during the dry cow issues from mastitis, production, feeding health and lameness, and period. Some episodes feature guest speakers and case studies, and was released on November 30<sup>th</sup>. Look for a new episode each week on the PRO-DAIRY website (<https://prodairy.cals.cornell.edu/events/podcasts/>) where you can find each episode along with additional resources and speaker contact information. You can also listen via SoundCloud on the CCE Dairy Educators channel, and check back for future podcast series. For more information, contact PRO-DAIRY's Kathy Barrett ([kfb3@cornell.edu](mailto:kfb3@cornell.edu)) or your CCE Regional Dairy Specialist, Betsy Hicks ([bjh246@cornell.edu](mailto:bjh246@cornell.edu)).



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coping with COVID-19 stress | referrals to additional resources



## What To Expect To Receive Credits from a Zoom Conference

The DEC has firm guidance that we must follow for virtual meetings offering pesticide credits. You must pre-register for the meeting and send us a copy of your license. If you can take a picture with your phone you can send to Janice's or Donette's email or you can text to Janice's cell phone. You will be asked to sign into the chat box prior to the meeting or as it starts with your full name as it is on your pesticide applicator's license and your number and again at the conclusion of the meeting. Please start the zoom a few minutes before the official start to give yourself time to enter the information into the chat box. Certificates will be sent via email when possible or snail mail.





# Utility Scale Solar - What you should know

By Timothy X. Terry, Farm Strategic Planning Specialist – Pro-Dairy



In March of 2020, Gov. Cuomo announced in his State of the State address an ambitious goal of 70% of the state's electricity needs would be generated via renewable means by 2030. Under this Green New Deal the mandate increases to 100% by 2040. As a result coal-fired plants will be idled while more wind and solar projects will be initiated. For you, as a holder of large tracts of open land, that may mean that you will be visited by landmen seeking to lease all or a portion of that land to use for constructing a solar array. Understand, this is not a couple dozen panels up on the barn roof generating a few kilowatts, but acres of panels on the ground generating several megawatts of electricity. This is not necessarily a bad thing as it reduces carbon emissions and may provide a secondary income stream for you, especially if it is placed on marginal land or land not currently in productive use. That said, in order for this to be a benefit and not a detriment you need to go into it with your head up and your eyes open.

## Therefore, Basic Information

Understand that this is an industry in its infancy, and lease documents are not battle tested so don't sign any landman's forms as is. There is potential for many unrealistic provisions and expectations, and almost everything is fair game for negotiation with few, if any, "deal breakers". You will need professional legal counsel. You may be able to educate yourself on understanding the broad strokes of a commercial lease, but here the devil is in the details and is why you need an attorney.

This transaction is a commercial lease, but it's a lease on steroids and may be 50 – 70 pages long. It is at a higher level of sophistication than any ag tenant lease, utility easement, or right of way (ROW). There will be permanent structures built that do not become fixtures owned by you the landlord. Part and parcel of the lease is a solar easement on the surrounding acreage which means you can't do anything that might interrupt the flow of sunlight. So that means no tower silos, large grain bins, tree plantings, etc. upstream of the incoming sunlight. Unlike the gas lease there are no royalties or subsurface rights.

The tenant (solar company) has some unique needs to understand.

The structures have greater requirements for access, maintenance, and transmission than other utility operations. The income stream from the structures is used as collateral to obtain financing, and the tenant's ability to continue operations on your land cannot be interfered with by anyone holding a superior interest in the land (i.e. -mortgage). You may need to subordinate superior liens. All lease documents will be recorded with your deed.

Go into this with the understanding that this is a long-term (>40 years) business relationship. The structures mentioned above may be sold multiple times. The tenant has the ability to assign (transfer) the lease without your approval, and this is non-negotiable. Given this, there is likely to be several tenant changes over the life of the lease. (Likewise, there could be landowner changes, too.) The presence of a solar array may also affect the marketability of your property which could impact your heirs.

The property tax liability should be a shared responsibility with the tenant paying for the increase in the assessment. You will need to make sure the tenant maintains liability insurance and names you as a co-insured. This is for your protection. They should also furnish you with a Certificate of Insurance (COI) each year, as well as indemnify you for any costs, losses, liabilities, etc. that arise from their activities. This must be all encompassing.

At some point in time the agreement and the array will reach its end of life. The structures age, are superseded by a new technology, you or your heirs do not wish to renew, whatever. The decommissioning, or removal and restoration, of the site is important and must be negotiated and established in detail upfront even though it may not occur for decades. You may not even be dealing with the same people that originally signed the lease. A Decommissioning or Performance Bond is one way of making sure there is funding available to get the job done to the satisfaction of the specifications originally negotiated. The exact nature of the bond is hard to determine, but this is where it makes sense to consult an attorney.

*(Continued on page 9)*



## The Agreement

The agreement comes in two parts: the Option Agreement and the Lease agreement, but even before that you may be presented with a Preliminary Letter of Intent. This one page document is basically a non-disclosure agreement or confidentiality clause so that future terms, especially the financial compensation, are not disclosed to others. Sometimes these letters omit that disclosure is allowed to attorneys, accountants, financial advisors, family etc. -- so make sure that is in there.

The Option Agreement (10-12 pages) locks in the land for a due diligence period of 1-5 years while the solar company decides if they want to develop the site. You will receive some payments during the period to secure their development rights, access to the site, and your confidentiality. This gives them time to do a more thorough feasibility study including a title search, legal survey, distance to grid connection, and neighboring land availability. They are trying to determine the viability of development – financial and otherwise. No ground will be broken at this time, except for some soil borings, and they will bear all the costs. You may still farm the land during this period, but no development. In other words, no new home site, heifer barn, satellite manure storage, etc. on the optioned property. The Lease Agreement – a.k.a. Ground Lease (50-70 pages) – shows up when the solar company decides to develop the site. You will be sent a copy of the agreement to sign within a specified period. You have no chance to renegotiate at this time **so don't sign the option agreement without also negotiating the entire lease agreement.**

## Negotiating

Some of us are good at animal husbandry, others are good at crop production, and still others excel at ag engineering. It's a rarity, however, that any have successfully negotiated a commercial agreement as intricate as a solar lease. This is why you need to secure professional legal help. Start with your own attorney. If they're not comfortable with it ask them who'd they least like to go up against in court. Look for someone experienced with real estate contracts, land acquisition, or better yet, oil and gas leases. Even though your attorney may do all the talking there are some things you need to know or at least consider:

**1. Understand your bargaining position** - They have to have the land, and until you sign an agreement you have all the leverage. Unfortunately, you have little or none after signing so get it up front. It's best to think about this in the long term – not just the immediate benefit. The lease will often be presented with a sense of urgency, perhaps even as a crisis. This is nothing more than a marketing technique. Landmen / leasing agents want to make the sale. The first offer is not their best offer. (Negotiation 101 – Never begin a negotiation from a point you can't immediately abandon.) Ask yourself, "Is this the only offer I will get?" "If one developer is interested will there be

others?" "Can I walk away?" "Which terms are flexible, which are not?" Offers may range from X to 10X and is likely due to the number of middle men the lease may have to go through. Proximity to existing infrastructure – high voltage power lines, substations, facilities to be built – may also be a factor. Cost to construct a substation is considerable, so if you're located less than two miles from one your site may garner a premium.

You may be thinking, "Why don't I just develop this myself?"

According to the Pennsylvania Dept. of Environmental Protection a solar array requires an average investment of \$1.13M per megawatt for utility scale solar. Think about that for a minute.

There is a deadline and offers due get retracted, so be deliberate but don't dawdle.

## 2. Determine what you want and/or what you want to prevent. Do

this before seeing your attorney as it will help them help you. Think:

What will this look like when it's operational and over the next 40 years? What's important to me? Thought through the finances? What will and won't you allow? Do you want to protect natural structures – pond, lakes, creeks, etc.? Are there places you don't want solar panels and /or ROW's? Do you want to grow or do something under or between the rows of panels? Every property is unique. Describe specifically what you want to go into the option. Many leases don't specifically state 40 - 50 years, instead they are written for 10 or 20 years plus a series of 5 year options.

Option period payments tend to be small because it's a period of highest risk for the developer. Can you get more money? Try bargaining for more money or less time to develop – real money is when it's operational.

Critical in any long term leasing agreement is to build in an escalator – dollars have to keep pace with inflation. What initially looked like the gravy train could, over time, only buy you a cup of coffee. Use the government inflation statistics as the escalator. This is typical of commercial rental agreements so you shouldn't get any push-back from the developer.

**3. Don't assume you can do things that are not written in the lease agreement.** Include in the initial negotiation or via addendum. The guy who sits down on the back deck and tells you all the nice money you're going to make and what a wonderful person you are and how this is going to be a great thing -- once you sign the lease you'll never see him again. Instead, you'll be dealing with someone who has the company's best interest in mind and, quite possibly, an attitude, too. It doesn't matter if it wasn't written down. It is a bitter pill to swallow, but realize that while you still own the land you won't be able to use the land. The chain link fence and barbed wire sends the message that no one, not even the landowner, is welcome in there. Grazing cattle, growing crops, setbacks, even placement of panels and control units need to be delineated up front. You will need to specify continued access to the back 40, pastures, water sources, or the secret fishing hole.

(Continued on page 11)

# What's New for Agronomic Weed Control in 2021

*Dwight Lingenfelter, Extension Assoc. Weed Sci.;*

*Dr. John Wallace, Asst. Professor Weed Science, Penn State Extension*

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As in the recent past, there are absolutely no new herbicide modes of action. All the newer herbicide products are simply new premixes or revised formulations of existing active ingredients. There are not many new products to discuss for this upcoming growing season. But here are several products, label updates, and products in the pipeline to consider.

Syngenta is modifying Acuron, Acuron Flexi, and Halex GT. Current formulations of Acuron and Acuron Flexi will be phased out after 2022. The new replacement products will be **Acuron XR**, **Acuron Flexi XR**, and **Acuron GT**. Primary changes include increased amounts of mesotrione (Callisto) and s-metolachlor (Dual) in the new formulations of Acuron XR and Flexi XR. Acuron GT is the same as Halex GT but will contain bicyclopyrone. The new formulations will likely not be used until the 2022 cropping season, but bulk tanks will start to be filled in late 2021.

**Impact Core 7.15EC** (topramezone [Impact] + acetochlor [Harness]; groups 27, 15; AMVAC) will be used POST in **field corn** and provides foliar and some residual control of annual grasses & broadleaves. The typical use rates are 20 to 36 fl oz/A. [Not for sale of use in Nassau or Suffolk counties]

Gowan has acquired the rights to the active ingredients prosulfuron and primisulfuron from Syngenta. The acquisition includes product registrations and trademarks for **Peak**, **Spirit**, **Beacon**, and **Northstar** herbicides and related intellectual property and labels. This is good news since we typically recommend the use of Peak and Spirit to control burcucumber in corn.

**Roundup PowerMax3** (Bayer) is a new, high load (4.8 lb ae), unique adjuvant, **glyphosate** formulation. PowerMax3 at 19 fl oz = 22 fl oz of PowerMax (0.75 lb ae/A).

**Shieldex 3.33SC** (tolpyralate; group 27; SummitAgro) is a newer, low use rate (1 to 1.35 fl oz/A), HPPD-herbicide that controls annual grasses and broadleaves postemergence in **field** and **sweet corn**. It is very similar to Armezon or Impact. It will typically be tankmixed with atrazine to improve the control spectrum. [Only Shieldex 400SC currently registered in NYS.]

**Sinate 2.57L** (topramezone [Impact] + glufosinate [Liberty]; groups 10, 27; AMVAC) can be used postemergence in **field corn** and **sweet corn** varieties that have the LibertyLink trait and controls many annual grasses and broadleaf weeds. Typical use rates are 21 to 28 fl oz/A. [Sinate products available in NYS with no use allowed on Long Island. The 2.57L formulation not registered in NYS for 2021]

**Paraquat updates:** Anyone using products containing paraquat (i.e. Gramoxone and all other generic formulations) must now complete an **EPA-mandated training** before application. The following are items related to the new label for paraquat products:

- Only certified applicators, who successfully completed the paraquat-specific training, can mix, load or apply paraquat

- No longer allow application “under the direct supervision” of

- a certified applicator; registered technicians cannot apply
- Restricting the use of all paraquat products to certified applicators only

- Applicators must repeat training every three years

- The EPA website has the required [paraquat video training](#) (users must create an account with user-name and password). For those who are unable to do the training online, EPA will have a non-web-based training format available.

- Refer to the [EPA paraquat website](#) for more information and frequently asked questions.

In addition to the training, EPA requires that paraquat products be contained in a **closed system**. Over the next year or so, manufacturers will begin placing special lids on 2.5-gallon jugs and a necessary adaptor/receptacle will need to be installed on your sprayer in order to pour this herbicide into the sprayer tank. These new jug caps cannot be removed or opened by hand. Mini bulk tanks will also have special connectors on hoses to maintain a closed system into the sprayer tank. More details will be released once these lids and adaptors become more widely available.

## Newer soybean technologies

**Understanding the differences:** With all the newer soybean technologies on the market, it can be somewhat confusing to know the differences between them. Make sure you know the differences between the unique variety options before you purchase. Also, consider that other “standard herbicides” that are labeled for use in soybeans still can be used with any of these as well. Here is a quick overview of their trait packages and some related herbicides:

**Roundup Ready 2 Yield** soybeans are tolerant to glyphosate only.

**Roundup Ready 2 Xtend** soybeans are resistant to both glyphosate and dicamba products labeled for this use. **XtendFlex** soybeans are resistant to glyphosate, dicamba, and Liberty and will be available for the 2021 growing season.

Last year, the EPA re-registered the Xtend-specific dicamba products until Dec. 2025. **Engenia 5L** (dicamba-BAPMA salt; BASF) and **Xtendimax 2.9L** (dicamba-DGA with Vapor Grip Technology; Bayer) are the only two dicamba-only herbicides that can be used in Roundup Ready 2 Xtend (Flex) (dicamba-tolerant) soybeans. Each of them contains the group 4 herbicide dicamba and are now classified as “Restricted Use Pesticide” (RUP) and thus require special dicamba-specific training **annually** to purchase and apply them. Some major updates to the new label include: the inclusion of a drift reducing agent (DRA) and volatility reducing agent (VRA) in the spray mix; applications can be made only until June 30 or R1 soybean stage (whichever comes first); and a 57’ omnidirectional buffer and 240’-310’ buffer for sensitive areas downwind.

**Tavium 3.39CS** (dicamba + s-metolachlor [Dual Magnum]; groups 4 and 15; Syngenta) is a premix and will provide post broadleaf control from dicamba and residual annual grass and broadleaf

**4. Understand the duration of the lease.** Basic math here: Option + Construction + Operations + Renewals = Duration of the Lease. The option period may be as long as 4-5 years with very little money coming in. There is usually little or no breakdown of the various categories in the lease except maybe renewals. Options periods range from 30 – 60 months, and it may be in your best interest to push for lower – the sooner they start paying you the real money the better. A Memorandum of Lease document will be recorded on your deed in courthouse.

**5. The option agreement is their option not your option.** They can pull out at any time so don't spend the lease money before you have it. However, don't think you're going to get out of it if you change your mind. Depending on how it's written, by signing the option agreement you are also signing the lease agreement – this is where your attorney earns his/her keep. You may not have your land developed after you sign a lease. You can't get out of it or amend it after you sign. They may option all of your land, but only use a portion of it. You may be able to push this with the solar company, i.e. – they have to use a minimum percentage or release the remaining acreage.

**6. Know how to modify your lease.** Step 1 – find an attorney (see #1) Legal contracts require legal help. Answer the long term questions upfront. Get what you want in writing before signing the lease as changes are not possible afterward. Shorten the option period and/or increase the option money. You may unknowingly be agreeing to a Warranty of Title thereby indemnifying the solar company. As landowner you are guaranteeing that you have perfect, blemish free ownership of the property, but that is not usually the case as there may be other leases, originated generations ago, that are still in effect today, such as utility ROW's, conservation easements, FSA/ NRCS administered programs, subsurface rights (oil, gas), etc. There may be some long hidden environmental hazards that come to light during installation. If you indemnify the solar company you are essentially giving them a blank check. Curtail this as much as possible. Lease offers usually have some flexibility.

**7. Be clear on when, where, and how you will be paid.** After you've done your due diligence and have settled on an offer be clear that you are not giving them anything for free. Even water used for cleaning and maintaining the panels. Get paid for any access they will be restricting. Getting paid for ALL acres used including access and ROW's not just the solar field itself. Be sure that they will maintain any ROW's – keeping brush and noxious weeds trimmed. You'll want the payment terms to be clear and concise. There are many different arrangements on the options. Sometimes payment is upfront, sometimes there is a modest upfront plus annual payments. You need to specify defined dates, i.e. - "Need to have a check for this amount on this date or solar company is in default." Define what

happens if payment(s) are missed – are you free and clear from the lease, how will back payments be recouped?

**8. Things that are written count, things that are spoken don't.** Once you sign the option you will never see the landman that originated the lease option again. You will likely be dealing with an entirely different person and/or entity, or even their attorneys. Avoid falling for "that doesn't need to be in there", or "Everybody knows that's ok" statements. Get all the promises in writing. If it's important to you it has to be in the agreement. Even down to minute details – such as herbicide use especially on an organic operation. These leases are so new there is no track record and procedures have not been standardized. Define who, when, and how the site will be maintained. What happens if a water line or drain tile is cut during construction – who pays? How will it be repaired? There may be shared farm lanes, but who will maintain them? Get it in writing!

**9. Things your neighbors may not like.** Fences limit hunting. Arrays may detract from their views. Local zoning may exercise some limitations. You may have already leased out part of that land for another ag enterprise, this should be recorded on the lease. What will happen to these things following construction? For instance, will the array interfere with maple sap harvesting? Will part of the sugarbush be removed to accommodate the array? Will there be light intrusions from security lights? How will the grounds around the facility be maintained vis-à-vis weeds, grass, litter caught in the security fence, etc? What visual screening will be provided around the site? The last thing you need is to be regarded as a slum-lord and/or someone who sold out the charm of the community for a few bucks.

**10. Not all info on the internet is good info.** Some is very good, some is conspiratorial, most is somewhere in between.

### Parting Thoughts

Site plans may/ may not be required. These are usually not a condition of the option but may be required for the lease. Decommissioning and land recovery – bargain for the maximum amount of clean-up and removal, and remedies if they don't. This is often addressed by a performance bond secured at, or prior to, signing of the agreement.

Determine the remedies and disposition of the lease if the solar company is liquidated. You don't want or need the responsibility of remediating the site. Sure, much of the galvanized steel structure may look pretty appealing, but the panels may be considered hazardous waste requiring special disposal and a hefty tipping fee. Plus it needs to be properly disconnected from the grid.

This may affect Land Trust easements and or any "clean and green" status. Often if 50% or more of the power generated is used internally it is not a problem, however, this is not likely for an industrial sized project. Any roll back taxes should fall to developer.

As stated earlier, **securing legal services is a must, not an option.**

Figure on 10 – 12 billable hours, or more, depending on how complex the lease may be.





# Did I Sell My Grain Too Soon? <https://extension.psu.edu/did-i-sell-my-grain-too-soon>

By: Andrew Frankenfield, Penn State Extension Educator, Agronomy

It is best not to look back at individual grain marketing decisions you made for your 2020 crop but rather average all your grain sales per crop. Did you sell more 2020 grain than you would have liked at a price that is lower than where the market is today? Was the price you received at a profit? I would expect everyone would answer yes to these questions. No one can predict the commodity markets. It is best not to look back at individual grain marketing decisions you made for your 2020 crop but rather average all your grain sales per crop. If you are still holding unpriced grain, I hope you have a written marketing plan in place for determining when and/or at what price you are going to sell a certain number of bushels.

Instead, let us focus on the 2021 crop. Most likely you have already locked in and paid for many of your costs for this crop. What is the market offering you for soybeans delivered at harvest? It is probably somewhere in the \$11 range. I know that is not the \$14 you could have gotten last week for cash 2020 soybeans you had stored in your bin but a nice improvement over the cash soybeans delivered in early October 2020 at about \$9.75.

Do not forget about corn. Cash price for 2020 corn is around \$6.00 for delivery in the upcoming couple months. What is your marketing plan for your 2020 corn? How about the 2021 corn crop?

You could lock in a price for this time next year in the low to mid \$5.

It is typically recommended to spread out your sales of commodities to spread out your risk. No one ever went broke selling grain at profitable price. You will never capture the peak of the market with all your bushels. If you are nervous about locking in a price for a portion of your 2021 crop because the market may go higher maybe you want to think about buying call options. Keep in mind, buying calls to hedge against sales cannot be a practice you do in some years and not others. Inevitably you will miss the years they work well if you try to do it this way. If you would like to know more about options check out this Grain Price Options Basics factsheet from Iowa State University.

Maybe you would like some guidance on writing a marketing plan? Ed Usset, Grain Marketing Economist for the Center for Farm Financial Management at the University of Minnesota has sample Grain Marketing Plans on his website. He also has several online Grain Marketing Educational tools where you can learn at your own pace. These games allow players to sell cash grain, forward contract of later delivery, or use futures contracts and/or options to price grain harvested. I encourage you to give them a try.



## Recruiting Farms for Dairy Farm Business Summary Program

Have you ever thought it would be helpful to have a clearer picture of your business performance? Would you like to compare your dairy business to others in the industry? Do you have decent financial records?

If you said “Yes!” to any of these questions, the [Dairy Farm Business Summary](#) could be a great fit for you and your farm. By participating, you will work with a CCE farm business management educator to complete a detailed financial analysis of your farm using 2020 data.

The DFBS is designed to enable producers to:

- ⇒ analyze their financial situation
- ⇒ set future goals
- ⇒ make sound financial decisions



**Dairy Farm Business  
Summary and Analysis (DFBS)\***

The DFBS also allows producers to compare their business to an average of other producers.

*“The DFBS has enabled our farm to make solid business decisions on expansions and monitoring income and expenses comparing ourselves to other farms in our area, state and country. Without the DFBS, we believe we will lose critical information that keeps us competitive and eventually lead to an unstable food supply in our region and statewide.”*

*-- Operator of 360-cow dairy farm in Albany County, DFBS participant for 20 years.*

Records submitted by dairy farmers provide the basis for extension education programs for farmers, applied research studies and classroom teaching. Individual farm data are kept strictly **confidential**. Participation in the project is **free of charge** for New York farmers.

**Contact Mary Kate MacKenzie at [mkw87@cornell.edu](mailto:mkw87@cornell.edu) to learn more or sign up!**

## Still Taking Surveys of Dairy x Beef Use on Dairies in New York

Are you a dairy producer in New York State? The usage of beef on dairy genetics has steadily grown over the last few years, and we are working towards understanding the trends and markets of this strategy. Has your farm used beef sires as a part of your breeding strategy?

Even if you have not used beef sires in your dairy herd, you are encouraged to take the following survey to fully quantify the usage of beef sires. If you have not used beef sires, the survey should only take a minute to complete. We ask you to take this survey, put together by CCE Regional Dairy Specialists. This survey can be accessed using the QR code below, or at the following link:

[https://cornell.ca1.qualtrics.com/jfe/form/SV\\_4HHU14xa0XN4xg1](https://cornell.ca1.qualtrics.com/jfe/form/SV_4HHU14xa0XN4xg1)

The survey should take approximately 15 minutes to complete. You can start it now and access it again later for completion, if needed. Your participation in this survey will help CCE to compile data on usage of beef sires on dairy farms in New York State Assemble common practices & gather financial parameters for marketing dairy x beef calves in New York State and provide information on the current dairy x beef market.

The survey will be open for several months, starting mid-October. For questions, please contact Betsy Hicks ([bjh246@cornell.edu](mailto:bjh246@cornell.edu)), Regional Dairy Specialists with Cornell Cooperative Extension.



*We sincerely appreciate your participation and we look forward to sharing our results with the dairy industry!*

**Did you miss our latest sessions on...**

## Critical Calf Care

### YouTube Playlist & Box Files:

[https://www.youtube.com/playlist?](https://www.youtube.com/playlist?list=PLPeiM7kIdN2oLNe_4VclxZrB_ZIZOrxTC)

[list=PLPeiM7kIdN2oLNe\\_4VclxZrB\\_ZIZOrxTC](https://www.youtube.com/playlist?list=PLPeiM7kIdN2oLNe_4VclxZrB_ZIZOrxTC)

<https://cornell.app.box.com/v/criticalcalfcare>

Not to worry, we have you covered! All of the sessions have been recorded and resources are available for you to download. Topics covered included recognizing and diagnosing disease, dystocia and difficult calvings, record keeping and the economics of disease, hydration and electrolytes, scours and nutrition, emergency situations, and an expert panel. Focusing on calf care and these areas will promote the success of your herd. For more information on calf care or the series, reach out to Betsy Hicks, Dairy Management Specialist at [bjh246@cornell.edu](mailto:bjh246@cornell.edu).

## Planting dicamba tolerant soybeans in 2021?

*By Mike Hunter, CCE North Country Regional Ag Team*

Are you are planting dicamba tolerant (Xtend or XtendFlex Technology) soybeans in 2021? If so, one of the tools in the weed control toolbox will be the option to use one of the three registered dicamba herbicides for use on Xtend or XtendFlex soybeans. In October 2020, the EPA approved a five year registration of XtendiMax and Engenia herbicides. It also extended the registration of Tavium herbicide. Xtendimax, Engenia and Tavium are currently the only dicamba products registered for over the top use in dicamba tolerant soybeans in New York State.

If you will be applying XtendiMax, Engenia or Tavium herbicide in 2021, there are several updated use changes on the label.

### ***A few of the highlighted changes include:***

- Approved pH buffering agents (Volatility Reduction Agent or VRA) must be used with every application.
- Cutoff application date of June 30 or R1 growth stage, whichever comes first for XtendiMax and Engenia. June 30 or V4 growth stage, whichever comes first for Tavium.
- Increased downwind buffer increased from 110 feet to 240 feet. In counties with endangered species (outlined in the US EPA Endangered Species Protection Bulletin) have additional buffer requirements. Three counties in NYS (Genesee, Onondaga, Madison) are included in this bulletin.
- The 44 oz. per acre use rate of XtendiMax was removed from the label.

The annual dicamba training requirements are still mandatory for any applicator that applies one of these products. The annual training requirements can be fulfilled by completing an approved online training module.

You can find approved dicamba training modules at all these links:

<https://www.roundupreadyxtend.com/stewardship/Pages/default.aspx>

<https://www.engeniaherbicide.com/training.html>

<https://www.syngenta-us.com/herbicides/tavium-application-stewardship>

Planting dicamba tolerant soybeans will provide additional options for the control of multiple resistant marehail, a difficult to control weed that is slowly spreading across New York state. Switching to dicamba tolerant soybeans is unlikely a long term solution, as selection for resistant weeds will begin with the increased use of these new herbicides. Growers will need to carefully consider how to best use these traits by providing good stewardship to preserve this technology for the future.





# Crop Protection Workshop

Thursday, March 11, 2021

Meeting via Zoom 1:00 —3:00 pm

**1.8 DEC Recertification Credits in Categories 1A and 21 and CCA credits**

## Corn Disease Updates: Identification & Management

-Dr. Gary Bergstrom, Plant Pathologist, Cornell University

## Grass & Broadleaf Weed Control for Corn, Soybeans and Alfalfa

-Gar Thomas & Kate Wheeler, Sr. Business Representative, BASF

Register Online : \$15/person <https://scnydfc.cce.cornell.edu/event.php?id=1549>

Need help registering? Contact Donette at 607.391.2662/dg576@cornell.edu.

For Questions, contact Janice Degni at 607.391.2672/jgd3@cornell.edu.



## Pesticide Applicator Training *Virtual Workshop*

Agenda: Pesticide Laws & Regulations \* The Pesticide Label  
\* Protecting the Pesticide Handler \* Guidelines for Proper  
Handling of Pesticides \* Pesticides and the Environment \*  
Integrated Pest Management \* Core & Category Manual  
\* Review and Practice Exam

Register online: \$15/pp <https://scnydfc.cce.cornell.edu/event.php?id=1554>

Need help? Donette at 607.391.2662 /  
[dg576@cornell.edu](mailto:dg576@cornell.edu).

Questions: Janice Degni at 607.391.2672 /  
[jgd3@cornell.edu](mailto:jgd3@cornell.edu)

**Exams offered on 3/24, 4/7, 4/25, 5/5 at  
the DEC office, 1285 Fisher Ave., Cortland**

Pre-registration for exams:

<https://www.dec.ny.gov/nyspad>

**Pre-registration for EXAMS required.**

Order Manuals online at <https://store.cornell.edu/c-876-pmep-manuals.aspx>

**\*\*Manuals available at an additional cost and MUST BE ORDERED BY MARCH 12 to ensure that they will be received before the class date. Manuals needed for private applicators: Core Manual and Field and Forage (21); Commercial applicators need Core and 1A manuals.**





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## 2021 Cornell Guide for Integrated Field Crop Management Now Available

The Pesticide Management Education Program (PMEP) at Cornell University is pleased to announce the availability of the 2021 Cornell Guide for Integrated Field Crop Management. Written by Cornell University specialists, this publication is designed to offer producers, seed and chemical dealers, and crop consultants practical information on growing and managing field corn, forages, small grains, and soybeans. Topics covered include nutrient management, soil health, variety selection, and common field crop pest concerns. A preview of the Field Crops Guide can be seen online at <https://cropandpestguides.cce.cornell.edu>. Highlighted changes in the 2021 Cornell Field Crops Guide include:

- Revised pesticide options for economically important field crop pests.
- Updated corn, forage, and small grain variety trial and research data.
- New information on barley disease control.
- Revised insect IPM information and insecticide tables throughout the guide.

Cornell Crop and Pest Management Guidelines are available as a print copy, online-only access, or a package combining print and online access. The print edition of the 2021 Field Crops Guide costs \$32 plus shipping. Online-only access is \$32. A combination of print and online access costs \$45 plus shipping costs for the printed book. Cornell Guidelines can be obtained through your local Cornell Cooperative Extension office or from the Cornell Store at Cornell University. To order from the Cornell Store, call (844) 688-7620 or order online at <https://www.cornellstore.com/books/cornell-cooperative-ext-pmep-guidelines>.

## The 2020 NY Hybrid Corn Grain Performance Trials Results are Now Available

This report includes a summary of our 2020 commercial hybrid corn grain trials. It shows results from four locations in New York, divided into the following two maturity ranges:

Base 50 Growing Degree Days Relative Maturity Early/Medium-early  
1900-2300 GDD 75-95 Days Medium 2300-2700 GDD 95-115 Days

This report is designed to aid seed company representatives, corn growers, and extension educators in evaluating hybrids for yield capacity, stalk and root strength, and maturity in various regions in New York. It also provides information for developing ratings for the Cornell Guide for Integrated Field Crop Management.

While many hybrids included in this report are widely grown, others are new or experimental hybrids. In considering these tables, remember that this data represents only one year. Test results should be considered over several years before final conclusions are valid. Results gathered over several locations are a better guide than results at any one location.

To view the report online visit: <https://tinyurl.com/NY-Hybrid-Corn-Trials-2020>

For information on entering hybrids in the 2021 trials, please contact Sherrie Norman at: [san9@cornell.edu](mailto:san9@cornell.edu) or 607-255-1322 or Margaret Smith at: [mes25@cornell.edu](mailto:mes25@cornell.edu) or 607-255-1654.



# Cornell Cooperative Extension

South Central NY Dairy and Field Crops Program

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## Upcoming Events Calendar

March 2, 9, 16, 23, 30 12 pm April 6, 2021 7:00 pm	<b>Pasture Prep: Virtual Ruminations for your 2021 Grazing Program</b> \$25.00 Advance Register for this six-part series <a href="https://scnydfc.cce.cornell.edu/event.php?id=1507">https://scnydfc.cce.cornell.edu/event.php?id=1507</a>
March 9, 2021 12:00 pm	<b>2021 NYCO (NY Certified Organic) Virtual Meeting</b> Register in advance for this meeting: <a href="https://cornell.zoom.us/join/https://cornell.zoom.us/join/register/tJcqdO2prj0jH9cAv1J-yuoQilpX5i7IEVZQ">https://cornell.zoom.us/join/https://cornell.zoom.us/join/register/tJcqdO2prj0jH9cAv1J-yuoQilpX5i7IEVZQ</a> FMI: Fay Benson <a href="mailto:afb3@cornell.edu">afb3@cornell.edu</a>
March 11, 2021 10:00 am - 3:00 pm	<b>New England Dairy Nutrition Conference (Virtual)</b> RSVP for your free ZOOM link registration: <a href="mailto:sue@nysta.mobi">sue@nysta.mobi</a>
March 11, 2021 1:00—3:00 pm	<b>Crop Protection Workshop</b> with Garfield Thomas & Kate Wheeler **1.8 DEC & CCA Credits Offered** \$15.00 Advance Registration Required: Register at <a href="https://scnydfc.cce.cornell.edu/event.php?id=1549">https://scnydfc.cce.cornell.edu/event.php?id=1549</a>
March 11, 2021 7:00 pm—9:00 pm	<b>Beginner Hay and Pasture School</b> \$5.00 Advance Registration Required Register at: <a href="https://ncrat.cce.cornell.edu/event.php?id=1499">https://ncrat.cce.cornell.edu/event.php?id=1499</a>
March 17, 2021 1:00—3:15 pm	<b>Pesticide Applicator Training</b> \$15.00 Advance Registration Required Register at: <a href="https://scnydfc.cce.cornell.edu/event.php?id=1554">https://scnydfc.cce.cornell.edu/event.php?id=1554</a>
March 18, 2021 7:00 pm—9:00 pm	<b>Advanced Hay and Pasture School</b> \$5.00 Advance Registration Required Register at: <a href="https://ncrat.cce.cornell.edu/event.php?id=1497">https://ncrat.cce.cornell.edu/event.php?id=1497</a>