

AG FOCUS



Cash Rent Expense for Farm Land - 2019 Survey Data are Available

by John J. Hanchar

Summary

- Cash rent expenses per acre vary considerably over counties in the NWNY Region depending upon productivity differences, intended use and other local supply and demand factors.
- Results from initial, late 2008 survey efforts by the United States Department of Agriculture/National Agricultural Statistics Service (USDA/NASS) through the most recent efforts for 2019 are available online.
- Survey results suggest that for 2019, cash rent expense for non-irrigated cropland by county over the NWNY Region varied from 49 to 113 dollars per acre.

USDA Survey Results Available for 2019 and Earlier Years

Cornell Cooperative Extension (CCE) staff often receive calls from individuals asking “What is the going cash rent for farm land in my area?” Many in the CCE system have ideas based upon word of mouth and perhaps some limited data for the local area that they serve.

Not surprisingly, actual cash rent expenses for farm land vary over some range. Variability in productivity, intended use and other local supply and demand factors yield a wide range of cash rent values.

Prior to 2008, the lack of a consistent data set characterized the situation. The availability of data by county changed when USDA/NASS responded to customer requests and new requirements of the 2008 Farm Bill. Today, results from initial, late 2008 survey efforts by the USDA/NASS through the most recent efforts for 2019 are available online.

The averages reported in Table 1 were obtained by going to:

<https://quickstats.nass.usda.gov/>

and using the query menu on the page to make the following selections:

Program: Survey

Sector: Economics

Group: Expenses

Commodity: Rent

Data Item: Rent, Cash, Cropland Non-Irrigated ...

The pull down menus within the “Select Location” and “Year” sections allow for the selection of desired locations and years, respectively.

Table 1. Cash Rent Expense for Non-Irrigated Cropland by NWNY Region County in Dollars per Acre by Year.

County	Average Cash Rent Expense, Non-Irrigated Cropland (Dollars Per Acre)		
	2016	2017	2019
Genesee	73	77	77
Livingston	68	76	100
Monroe	57	56	69
Niagara	45	52	49
Ontario	65	74	
Orleans	69	73	104
Seneca	67	63	68
Wayne	59	62	
Wyoming	96	94	113

(Continued on page 3)

A partnership between Cornell University and the CCE Associations in these nine counties:

Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne & Wyoming

Postmaster: Send Address Changes: NWNy Team, Attn: Brandie Waite, 420 East Main St., Batavia, NY 14020

Direct all inquiries on advertising space/rates to: Brandie Waite at 585-343-3040 x138 or bls238@cornell.edu



Margaret Quaassdorff
Dairy Management

Genesee County
585.343.3040 x 133 (office)
585.405.2567 (cell)
maq27@cornell.edu



Libby Eiholzer
Bilingual Dairy Management

Ontario County
607.793.4847 (cell)
585.394.0377 (fax)
geg24@cornell.edu



Nancy Glazier
Small Farms, Livestock

Yates County
315.536.5123 (office)
585.315.7746 (cell)
nig3@cornell.edu



John Hanchar
Farm Business

Livingston County
585.991.5438 (office)
585.233.9249 (cell)
jjh6@cornell.edu



Jodi Putman
Field Crops & Soils

Livingston County
585.991.5437 (office)
585.208.8209 (cell)
jll347@cornell.edu



Ali Nafchi
Precision Ag

Genesee County
585.313.6197 (cell)
amn93@cornell.edu



Joan Sinclair Petzen
Farm Business Management

Wyoming County
585.786.2251 (office)
716.378.5267 (cell)
jsp10@cornell.edu



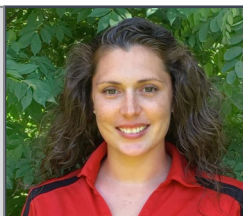
Mike Stanyard
Field Crops & IPM

Wayne County
315.331.8415 x 123 (office)
585.764.8452 (cell)
mjs88@cornell.edu

To simplify information, brand names of products may be used in this publication. No endorsement is intended, nor is criticism implied of similar products not named.

Every effort has been made to provide correct, complete and up-to-date pesticide recommendations. Changes occur constantly & human errors are still possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying pesticides.

By law and purpose, Cooperative Extension is dedicated to serving the people on a non-discriminatory basis.



Brandie Waite
Administrative Assistant

Genesee County
585.343.3040 x138 (office)
bls238@cornell.edu

**For more information about our program,
visit us at:
nwnyteam.cce.cornell.edu**



Cash Rent Expense for Farm Land - 2019 Survey Data are Available

(Continued from page 1)

Notes: 1) Source: USDA/NASS. <quickstats.nass.usda.gov>, accessed 02/09/2020; 2) Query results rounded to the nearest whole dollar. 3) Values not reported for Ontario and Wayne Counties for 2019.

Please note that the values reported in Table 1 are averages. Individual observations likely vary over a wide range of values. Averages for some counties are also available for irrigated crop land and pasture land.

For valuable resources on renting farm real estate, visit our website at <https://nwnyteam.cce.cornell.edu>. Click on the “BUSINESS” tab, and enter “renting farm real estate” in the search bar. Also, the [Ag Lease 101](https://aglease101.org/) website at <https://aglease101.org/> is a valuable resource.

To learn more contact John Hanchar or Joan Petzen.

Upcoming Webinars

March 9, 2020 - Noon (CST)

The ins and outs of a 30,000 pound herd average

Scott Pralle and Pam Selz-Pralle,
Wisconsin dairy producers

<https://hoards.com/flex-309-Webinars.html>

March 10, 2020 - 8:30AM (EST)

Changing the Game with Dairy Analytics

Dan McFarland, Penn State

<https://extension.psu.edu/technology-tuesdays>

March 23, 2020 - 1:00PM (EST)

Managing with multiple generations

Lisa Holden, Penn State

<https://extension.psu.edu/dairy-management-mondays>

Inside This Issue

Cash Rent Expense for Farm Land - 2019 Survey Data are Available

by John J. Hanchar1

Be on the Lookout for Tall Waterhemp in 2020

by Mike Stanyard4

From a Farm Near You, Butter Meat Co.

by Nancy Glazier7

Clear, Concise and Connected

by Margaret Quaassdorff9

State & Federal Regulations When Onboarding New Employees

by Libby Eiholzer10

A Variable Seeding Rate:

by Ali Nafchi12

You Don't Say...

by Timothy X. Terry.....13

Creating a New York Soybean Yield Database

by Jodi Putman14

Be on the Lookout for Tall Waterhemp in 2020

by Mike Stanyard

There have been plenty of presentations this winter on glyphosate resistant weeds. For good reasons. These include the big three: Marestalk, Tall Waterhemp and Palmer Amaranth. Unfortunately for us in NWNY, we have all three of them. Marestalk is the most widespread, waterhemp is coming on strong and Palmer has only been found in three small locations. In 2019, we learned a lot about our waterhemp population so I want to focus on this weed in this article.

Tall waterhemp is in the pigweed family and is a cousin to our commonly known redroot pigweed. Our first plants were found in 2014 in northern Seneca County and it rapidly spread south towards Waterloo and north into Wayne County. Small pockets were subsequently found each year across the region and going into the 2020 season we have populations in 12 different counties (Figure 1). The plants put out a lot of seeds per plant (300,000), have a high germination rate, emerge throughout the whole growing season and have small seeds that are spread easily.

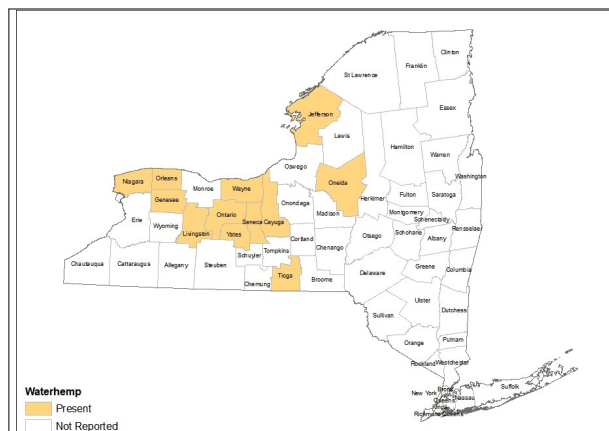


Figure 1: Known NY Waterhemp Locations. This map is current as of February 17, 2020. Location reporting by Cornell Cooperative Extension and Cornell University staff. Produced by C. Marschner of Cornell University; funded by NIFA USDA McIntire Stennis # 2018-19-268

How can you identify if you have waterhemp? Unfortunately, most find out the hard way when they spray a field with their normal herbicide program and it doesn't die. However, there are four key characteristics that I look for when scouting for waterhemp (Picture 1).



Picture 1: Waterhemp leaf. Photo: M. Stanyard / CCE NWNY Team

1. Their leaves are much more narrower than other pigweeds
2. Their stem is clean and has no small hairs on it like redroot pigweed
3. In the sunlight, their leaves have a sheen to them
4. If you bend the petiole back over the leaf, it is never longer than the leaf (as is Palmer amaranth)

Waterhemp has been found to be resistant to multiple herbicide modes of action in the Midwest. Since our populations seemed scattered enough to have been introduced from different sources, we were not sure what herbicide classes they would be resistant to. Last year we collected waterhemp seeds from a couple of the sites to be tested. Bryan Brown, weed specialist from the NYS

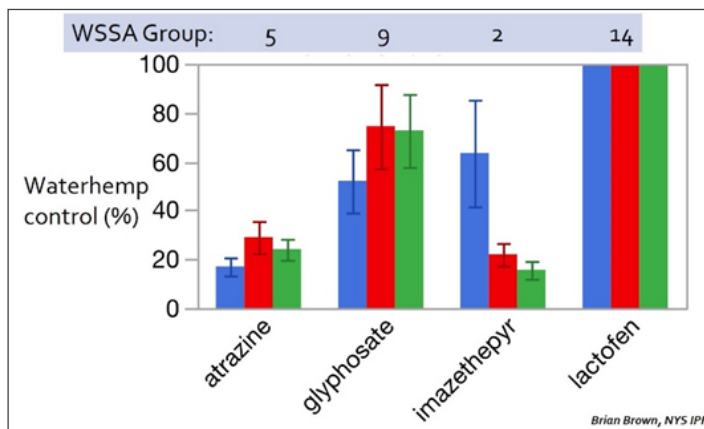


Figure 3: Known Waterhemp Herbicide Resistance in NY. Bryan Brown / NYS IPM Program, Cornell University

(Continued on page 5)

(Continued from page 4)

IPM Program, grew plants from these populations and then sprayed the seedlings with four different modes of action. These populations were very similar in that some of each population were resistant to Groups 5 (atrazine), Group 9 (glyphosate), and Group 2 (Pursuit). All were completely susceptible to Group 14 (Cobra) (figure 3). There are some populations in Mississippi that are resistant to six modes of action. Glad we don't have that one!

To find out what herbicide timings and programs would work best for growers, we cooperated with a grower in Seneca County who had a bad waterhemp population in 2018 that resulted in a severe yield loss. We collaborated with Bryan Brown and Venancio Fernandez of Bayer on a grant from the NY Farm Viability Institute to set up herbicide trials testing pre and post emerge programs in soybean and corn. A field day walking tour was held on July 23 to show the results. Bryan also presented the results at this year's 2020 Corn and Soybean & Small Grain Congresses. To view the full results, go to:

<https://nysipm.cornell.edu/resources/project-reports/>

KERSCH'S AG LIME, LLC
Calcium Lime - Magnesium Lime
Gypsum - Organic Gypsum
BEST SERVICES - PRODUCTS - PRICES
For Sale: New and Used
Lime - Litter - Fertilizer Spreaders
KERSCH'S AG LIME, LLC
510 Wyoming Road, Wyoming, NY 14591
Call Chris 585-356-9162
844-388-LIME (5463)
Fax: 585-584-3264
Serving Agriculture Since 1950



"The successful adaption and execution of precision agronomy relies on the support of outside parties. Dairy One's Integrated Farming Solutions is one of those parties we rely on."

- Andy Hourigan, Hourigan Family Dairy, Syracuse, NY

 **Dairy One**
800-344-2697 • www.dairyone.com



WESTERN NEW YORK ENERGY

- We support our local NY corn farmers by providing competitive bids for your old and new crop corn, including on-farm pricing. Payment within 2 days.
- Give us a call to discuss our high protein (31%+), low fat Dairy Distillers Grain.
- Bulk commodity and grain transportation services available through our subsidiary, Shelby Transportation. Give us a call for a transportation quote.

Call now for more information:

Corn: (866) 610-6705

Distillers Grain: (315) 247-1286

Shelby Transportation: (585) 734-4747



**CALEDONIA
DIESEL**



FULL-SERVICE MACHINESHOP

- Gas Engines * Diesel Engines * Natural Gas Engines * Heavy-Duty Machining

Engine Assembly & Machining

- Boring Honing * Decking Line Boring * Magnafluxing *
- Crank Shaft Balancing * Crank Welding & Grinding * Flywheel Resurfacing

2905 Simpson Road, Caledonia, NY 14423 585-538-4395



WWW.CALEDONIADIESEL.COM



From a Farm Near You, Butter Meat Co. by Nancy Glazier



Butter Meat Co. logo.

Courtesy of:

<https://www.facebook.com/buttermeatco/>

I paid a visit to a new store, Butter Meat Co., in Perry, Wyoming County. Entrepreneur Jill Gould has started a business selling mature beef from retired organic dairy cows. Mature beef has been trending in high-end restaurants across the country. Mature animals have lived a full long life. Jill recommends cooking the meat longer to bring out the flavors. A quick grill or sizzle isn't the right cooking method for mature meat.

After graduating from Cornell, Jill took a job with Walmart as a produce buyer, then on the supply chain team for Blue Apron, a meal kit service. She married Steven Gould and is currently sourcing market cows from his family's dairy, Har-go Farms. She started slow, selling to restaurants and friends, and hosting invitation only dinners. Her original plan was to rent warehouse space with a loading dock for wholesale, but soon discovered that would be an expensive enterprise. She decided to settle on a retail setting with lots of freezer space and room to add other products. Her current hours are Thursday through Saturday; this tends to be a slower time of the year, and it gives her time to make adjustments as needed.

The dairy industry has a strong infrastructure in place in WNY. The lacking piece is the end product - market cows, particularly on the organic side. Jill is hoping to capture that value with her meat sales. She has processing done at Leona Meats, Troy, PA, which has organic certification. Jill is a certified organic handler and marketer to maintain organic status. She gets some value added products made, such as sausages. She has found the organ meats are very popular as well. Her goal is to utilize as much of the carcass as possible. She is currently getting a low number processed at a time so she can adjust her cut sheet to accommodate what's selling. She works to promote various cuts with different strategies: meal prep, weeknights, fun projects and party time. Summer may bring some fresh meat sales, focusing on burger kits and other summer grilling options.

Sales will soon outgrow the farm's supply. Jill is working to develop specs for purchasing from other organic dairies. She is also looking to keep transport time for these cows to a minimum, if possible, and has ideas how to accomplish that long range.

The village has seen an uptick in growth in recent years with some exciting businesses opening. Jill feels the group effort of the retailers will help keep all the businesses thriving. Check out Butter Meat Co., at: 1 N. Main St., Perry, or <https://buttermeatco.com/>.



Have a cup of coffee while you pick up your meat.

Photo: N. Glazier / CCE NWNV Team



Products from local farms Jill has for sale in her store.

Photo: N. Glazier / CCE NWNV Team

2020 Agronomy Scout School

Saturday, April 4, 2020

Brought to you by the NWNY and SWNY Dairy, Livestock & Field Crops Teams!

A partnership between Cornell University and the CCE Associations in these fourteen counties: Genesee, Livingston, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne, Wyoming, Allegany, Cattaraugus, Chautauqua, Erie, and Steuben.

Registration

Pre-registration is required, no walk-ins.

Registration Deadline: Wednesday, April 1, 2020

Register by calling: Brandie Waite 585-343-3040 x138 or email: bls238@cornell.edu online at:

<https://nwnyteam.cce.cornell.edu/events.php>

For event information contact: Field Crops Specialist, Jodi Putman at 585-208-8209 / jl1347@cornell.edu or Josh Putman at 716-490-5572 / jap473@cornell.edu

Cost: \$75.00/person

Location: State University of New York at Geneseo

Program Agenda

8:00 - 8:45 AM - Registration

8:45 AM - Introduction to field scouting

9:00 - 10:00 AM - Crop production and biology

10:00 - 12:30 PM - Breakout Sessions

A) Soil Health

B) Fertilizer Formulations

12:30 PM - LUNCH

1:30 PM - 4:30 PM - Breakout Sessions

A) Weed Identification

B) Disease Identification

C) Entomology

4:30 PM - Herbicide Mode of Action & Resistance

5:30 PM - ADJOURN

4 - DEC Points & CCA Credits Pending!

Cornell Cooperative Extension

STRONG at the ROOTS



FARM CREDIT EAST

TAX PREP • PAYROLL SERVICES • BENCHMARKS • APPRAISALS • RECORD-KEEPING • ESTATE PLANNING • TAX PLANNING • FARM BUSINESS CONSULTING

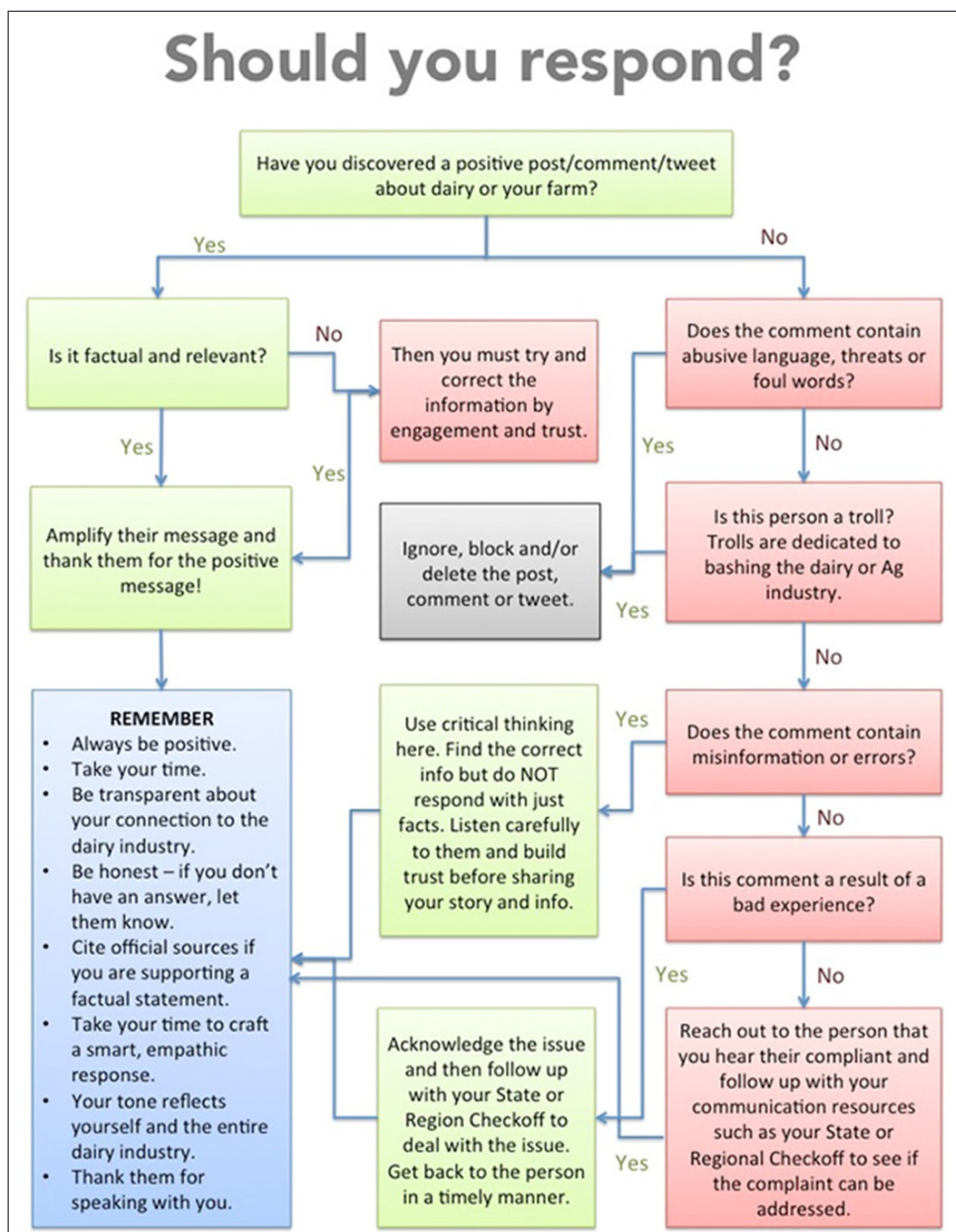
TAX PREP SERVICES Just like you, Farm Credit East has roots in agriculture. In fact, we were made in agriculture. That gives our tax specialists the expertise to develop a tax strategy geared to your ag business. Get every deduction and allowance the law allows. Look to Farm Credit East to keep your business Strong at the Roots.

Batavia 800.929.1350
farmcrediteast.com/taxprep

Clear, Concise and Connected

by Margaret Quaassdorff

Social Media gives us a platform to communicate our key messages to our consumers, other farmers, and anyone who follows us. With social media we have a chance to connect on an emotional level with others, and share stories about our farm and industry that relate to, and benefit our community and its members. I recently graduated from the Young Dairy Leaders Institute, a three-phase leadership and communications training offered through the Holstein Foundation. One of the important things I learned was that YOU (yourself or your farm personality) are the message, and that you can make the most favorable impression on the audience if you are viewed as competent, credible and likeable. There are many ways to convey yourself as such, but it starts with genuinely knowing your stuff, and being able to share what you know with others in a clear, concise, and connected manner. Speaking about how what you are doing in your post makes you feel, brands you as a more relatable and trustworthy source. We, as members of the dairy industry, have one of the truest stories about sustainability, care, and nutrition, and it is time that we communicate that to others in ways that they hear, understand, and connect to us. If we succeed in getting our message out, there is a good chance that we will have an opportunity to interact with those who have heard our message, and it is important to be prepared. In our recent workshop “Social Media Preparedness”, farmer participants learned when and how to respond to different types of comments or posts involving the dairy industry. Refer to the flowchart for guidelines on how to develop a



Resource from Don Schindler with Dairy Management Inc.

proper social media response for any situation. Then, I encourage you to use your own platforms to share how you care for your animals and the environment to assure safe, wholesome food for the community.

State and Federal Regulations When Onboarding New Employees

by Jessica Skellie & Libby Eiholzer

There are numerous federal and state regulations to keep in mind as you are onboarding new employees. Some of the materials must be completed on or before the first day of work, but others can be completed within a longer timeframe. Use the information and resources below to help you organize the compliance portion of your onboarding program. Please keep in mind that these forms and requirements are subject to change, so it is important to check that you are using the most up-to-date versions.

This information should not be considered legal advice and questions should be directed to the appropriate agencies.

Required by Law

Federal

- [Form I-9](#) (US Citizenship and Immigration Services)
 - Verifies employment eligibility.
 - Complete on or before the first day of work.
 - Use the English version (*Spanish only permitted for businesses operating in Puerto Rico*. You may choose to make a copy of the Spanish version for employees to use as a guide).
 - Find [more information](#), or view [instructions in English or Spanish](#).
 - **The I-9 Form was updated on January 31, 2020.**
- [W-4](#) (Internal Revenue Service)
 - Employee's federal tax withholding allowance certificate.
 - Complete on or before the first day of work.
 - Use the form in the employee's native language (unlike the I-9).

Other Federal Requirements

Employee Postings and Notifications

- Use this [link](#) to generate a list of posters that should be on display, based on your business.

OSHA

- There are employer [responsibilities](#) under the Occupational Health and Safety law.
- Display the [OSHA Workplace poster](#) in a conspicuous area.

State

- [IT-2104](#) (NYS Department of Taxation and Finance)
 - Determines the employee's withholding allowance, along with the federal W-4.
 - Complete on or before the first day of work.
 - Find more information [here](#).
- [LS-309](#) (NYSDOL)
 - Pay notice and work agreement for farmworkers.
 - Notifies each employee in writing of conditions of employment at time of commitment to hire.
 - Provide in the employee's native language. Provide a copy for the employee to keep, save the original for the duration of employment plus 6 years.
 - Find more information under [New York State Wage Theft Prevention Act resources](#).

(Continued on page 11)

(Continued from page 10)

Other State Requirements

- Sexual Harassment Prevention
 - The policy should be distributed to all new employees at hire and displayed in a highly visible place.
 - Complaint forms must be available and accessible.
 - New hires must complete training within 30 days of hire and interactive training should be completed and documented for all other employees annually.
 - Find materials [here](#).

New Employee Reporting

- Find information [here](#).

Employee Postings and Notifications

- Find the NYS agricultural employer posting requirements [here](#).


Other Paperwork

- Animal Care Commitment (FARM Program/ Milk Cooperative)
- Safety Training
- Housing Orientation
- Farm Handbook
- Farm Policies
- Employee Contact & Emergency Contact Forms
- Direct Deposit Form

BUYING GRAIN SELLING FEED

Call to discuss pricing & risk-management tools available. We strive to maximize your grain price & minimize your feed cost. We **BUY HIGH, & SELL LOW**. Call us to discover how!

Avon
Batavia
Geneva
Groveland
Perry
York



(585) 226-8340
HowlettFarms.com



New York Farm Bureau
Member Services, Inc.

For your **always** **growing** side.

As a Farm Bureau member, you may be eligible for a discount on your farm insurance from the #1 farm insurer.¹

Let me know how I can help protect your farm or ranch.
GLOBAL GREEN INSURANCE AGENCY
315-946-6022
DAVIDM@GGIAUSA.COM

¹SNL Financial, 2017 (National) Market Share Report. Products underwritten by Nationwide Mutual Insurance Company and Affiliated Companies. Home Office: Columbus, OH 43260. Subject to underwriting guidelines, review, and approval. Products and discounts not available to all persons in all states. Nationwide, the Nationwide N and Eagle and Nationwide is on your side are service marks of Nationwide Mutual Insurance Company. The Farm Bureau and the letters FB are registered service marks of American Farm Bureau and used under license by Nationwide. © 2019 Nationwide AFC-0315AQ 2 (05/19) 11577516

Variable Seeding Rate by Ali Nafchi

The Variable Seeding Rate technology (with precision planters) allows growers to address the soil variation and change the seeding rate within a field. Farmers use the seeding rate recommendations provided by researchers for a hybrid, incorporated with their previous yield potentials to estimate their optimal seeding rates. Finding the management zones may be possible using various soil characteristics (Licht et al., 2015), but it may take a lot of time and effort to identify consistent patterns under different crop rotations or tillage regimes (Bunselmeyer et al., 2015).

As a result, farmers can explore new ideas and techniques to address the soil variations to increase their productivity and profitability as the optimum seeding rate can vary within a field with differences in soils and conditions. In addition, optimal seeding rates may need to be adjusted for different management practices.

The first step is to create the (3-5) zones based on soil variations, multiple year crop yield data, and prior knowledge of the field. In the next step as a basic approach, on the seeding rate prescription map (on SMS software), seeding rates can be set for different management zones, ranging from desired low to high rates per acre (Fig. 1). In process of writing the seeding-rate prescription map, the approximate saving on seed compared to the conventional flat rate system can be pre-adjusted. As a result, expect to see improvement of yield and uniformity in the harvest data (Fig. 2).

References:

[Influence of corn seeding rate, soil attributes, and topographic characteristics on grain yield, yield components, and grain composition](#)

[Corn \(Zea mays L.\) seeding rate optimization in Iowa, USA](#)

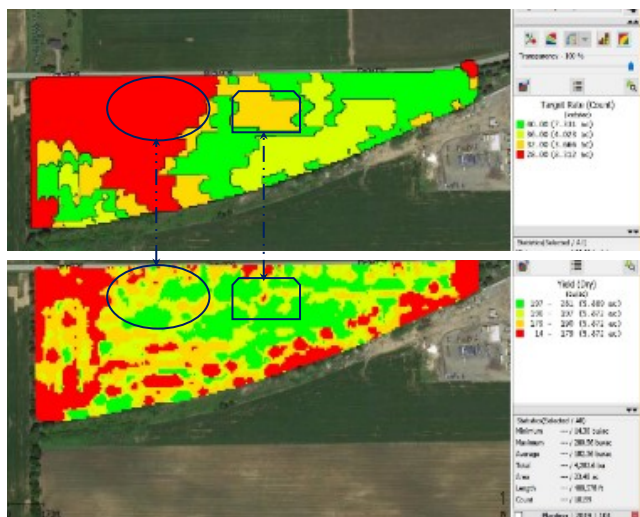


Figure 1. Variable Rate Seeding, prescription map generated based on multiple year crop yield and grower personal knowledge of the field ranged from 28,000 to 40,000 seeds per acre (kds/ac).

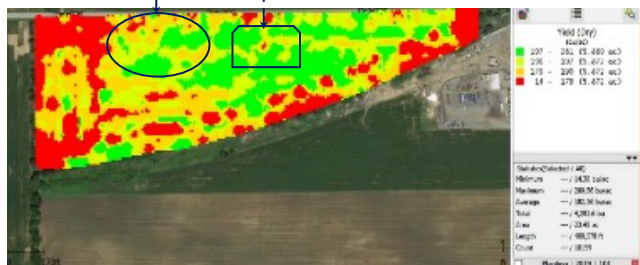


Figure 2. Yield map and harvesting data, ranged from 34 to 281 bushel per acre (bu/ac).
Area: 23.48 ac, Yield Min: 14.30 bu/ac, Yield Max: 280.56 bu/ac, Yield Ave: 182.36 bu/ac



Cornell CALS
College of Agriculture and Life Sciences

Spanish Webinars



Dairy Cow Management Webinars in Spanish

Manejo de Vacas Lecheras Seminarios Web en Español- Días Miércoles

These webinars will be presented entirely in Spanish. No registration needed. Recordings will be posted to the website after.

Van a presentar estos seminarios web completamente en español. No hay que registrarse. La grabación del seminario estará disponible en el sitio después.

Webinars are held from 12:30 - 1:00 p.m. on the last Wednesday of the month.

Los seminarios web son a los 12:30 - 1:00p.m. en último miércoles del mes.

Upcoming Webinar

Milk Quality Part 1 - Culturing and Types of Mastitis

March 25, 2020

Presenter: Dr. Paula Ospina

<https://prodairy.cals.cornell.edu/webinars/spanish-webinars/>

You Don't Say... Part II

by Timothy X. Terry, Harvest NY

The first three items on the list last month were:

1. **Never tell a contractor you aren't in a hurry.**
2. **Never tell a contractor they are the sole bidder.**
3. **Never agree to a "Gentleman's Agreement".**

Continuing on...

4. Never tell a contractor your budget. If you do they will usually make the bid fill the budget even if it could be done for less. Better to have them submit a bid for the work you need to have done. Better yet, have a copy of the design that you give to each bidding contractor (see #2). That way you can compare apples to apples when reviewing the bids. You may also want to provide a bid sheet that further breaks the bid down into labor, materials, and activities (sitework, erection, etc.). This gives you even more discernment when comparing bids.

Many contractors will up-charge on the materials. This is not unreasonable as they will be expending time, effort, and possibly equipment to get them onsite. Expect 10% - 20% and this may be a function of the size of the order. Smaller orders may have a larger upcharge because of fixed costs – it takes just as much time and effort to drive down to the lumber yard and haul back six- 2x4's as it does a full pallet of them. You could secure the materials yourself to save the upcharge. However, after doing this a few times you may come to appreciate the contractor's efforts.

5. Never delegate materials choice to the contractor. This differs from the previous paragraph in that this is the selection of specific materials and finishes. This is where you tell them what materials to purchase; even where to purchase them and the price to pay for them. In some cases this may not even be an option as the engineer may have already specified in the design documents the particular materials to be used to meet structural standards.

In the absence of this the contractor may use materials left-over or recycled from other jobs that may be inferior, overpriced, or just plain not right for the job. You may ask the contractor for his input or experience with certain materials, but ultimately it is your choice and responsibility.

6. Never pay a contractor upfront. While it is necessary to pay something upfront, like earnest money, to secure the contract and for the contractor to purchase the materials, it is foolhardy to pay the entire amount upfront. You have now given away all your leverage requiring them to do a good job and complete the work. Worse yet, they may disappear and not do any of the work.

This is where detailed contracts and payment schedules are worth their weight in gold. Usually a payment schedule is based on reaching a milestone in the project and often matches up with quarters or thirds of the project. Once a



Good contracts start and end with clear expectations on the part of BOTH parties. Photo: T. Terry / CCE Harvest NY

milestone is completed (foundation poured, frame erected, etc.) a check is cut to the contractor for $\frac{1}{4}$ or $\frac{1}{3}$ of the total amount. If appropriate, you may require a passing inspection on the milestone prior to payment. Withhold final payment until the project has been completed to your satisfaction. Satisfaction may include passing a final inspection, and in the case of CAFO projects, an in-your-hand copy of the as-built.

Make every effort to be sure any subcontractors on the project are getting paid. Just because you're paying the general contractor doesn't necessarily mean the subs are getting paid. Failure to pay the subs could result in a lien on your property even if you've paid everything in full. A better practice would be to pay the subs directly, but this should be spelled out in the contract.

7. Never, ever, hire anyone illegally. Some contractors may offer to bring in people who aren't legally licensed to do the work to keep costs down. DON'T DO IT! You open yourself and your business up to a huge liability, especially if someone gets hurt. Ask your contractor to provide documentation of a business license and proof of insurance. Likewise with any subcontractors brought in by the general contractor (GC). They should be licensed and covered under their own policy or the GC's policy.

There you have it. Seven practices to avoid when working with contractors. They aren't difficult but they can be missed if you're in a hurry. Take your time. It takes time to do things right. If you're not careful you may get taken advantage of.

Conversely, most contractors are honest and hardworking. They have a business to run, employees to pay, and often, a family to take care of. Don't be difficult, pay promptly for

(Continued on page 14)

Creating a New York Soybean Yield Database

by Jodi Putman

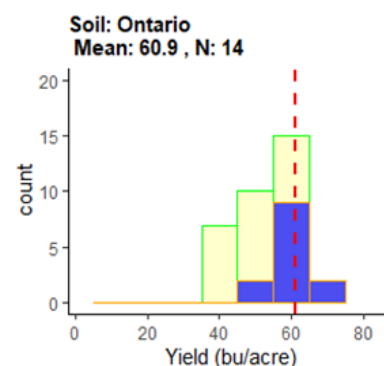
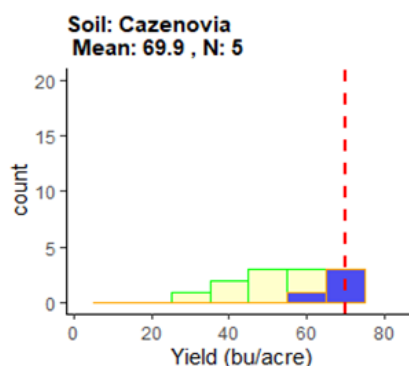
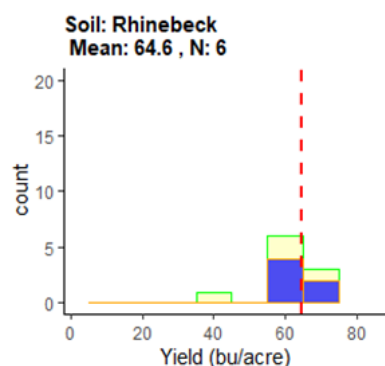
Yield monitor data allow for evaluation of both spatial and temporal yield variability for all fields, soil types, and management zones within a specific farm. This information can be used to identify yield limitations, evaluate alternative management practices, conduct on-farm research, assess nutrient balances and efficiencies, and determine yield potentials of soil types and fields. Altogether this knowledge is useful for development of management zones that can lead to increased yield and yield stability over time. When three years or more of data are available, the yield data can then be used to develop yield stability maps for farmers for improvements in nutrient management. The grain yield data obtained with yield monitoring equipment contain a variety of errors due to machine and operating characteristics such as (1) rapid velocity changes; (2) travel time/ crop flow delay between harvest location and the location of the sensors that read volume and moisture content; (3) start pass delay, end pass delay as flow ramps up/down; (4) unknown harvester width, (5) overlapped data near end of rows; and (6) stops in fields: crop throughput near 0 speed => erroneously high yields. Thus, data cleaning is needed before yield data can be used to set yield potentials and develop management zones.

In the past year, work has focused on soybean yield data as part of a regional project to evaluate soil type-specific yield

potentials on individual farms and to develop a yield potential database for soybeans, which currently does not exist. Once yield monitor data is cleaned a farm report will show the yield for (1) the farm per year of data submitted, (2) each of the fields for which we received yield records in the current year, and (3) yields per soil type within a field (current year as well). Calculated acres per field were derived from actual cleaned data points and hence will not match with the overall field acres based on the boundary file. Yield data are then grouped by soil type to generate “frequency distributions or histograms” so averages per soil type can be determined. Acres received and cleaned to date: 7,790 acres.

In blue are the results for the year for which the report is generated with average yields per soil type reported on those charts. In green/yellow you would see all the yield data (all years combined) for that soil type on your farm (i.e. each field that has that specific soil type represented is included in those soil-specific histograms). Thus, this becomes more meaningful as more years are added in the future. Additional farms and acreage with soybean yield data are needed to continue building the database. If you would like to participate, please contact Jodi Putman at:

jll347@cornell.edu .



You Don't Say... Part II

(Continued from page 13)

work successfully completed, and don't ask for freebies outside of the contract ("Since you're here could you..."). It's right and fair for them to make a profit...it just doesn't all have to be off of you.

Bonus Tip: Having worked on both sides of the contract I can tell you that little things to keep the crew happy go a long

way toward successful and timely completion of a project. Coffee & donuts or fresh cookies at breacktime, even iced tea and lemonade on a hot day cost little but score big points and usually yield an extra effort to make sure things are done just the way you like them. It also means they may move your name up on the list the next time you have a project to do. (Truthfully, no one wants to go work on the project of the local curmudgeon who tries to micromanage the work and reprimands anyone taking a breather.)

\$\$\$\$\$ WE BUY MACK, FREIGHTLINER, PETE, KENWORTH, Etc. TRUCKS and CAT, KOMATSU, CASE, HYUNDAI, IR, Etc. CONSTRUCTION EQUIPMENT \$\$\$\$\$

CALEDONIA DIESEL, LLC

2905 Simpson Road • Caledonia, NY 14423

585-538-4395 www.caledoniadiesel.com

OVER 325 TRUCKS AND OVER 150 PIECES OF CONSTRUCTION EQUIPMENT

<p>Allison Auto.</p>  <p>21 H. Alum.</p> <p>2007 MACK GRANITE C1713, Mack 335 HP, Allison Auto. Trans.; Double Frame; 21' Alum. Box; 18K F/A; 46K Rears On Camelback Susp.; Steerable Lift Axle; 8,995 Hours; 174,712 Miles; Sk. #5156 - \$62,900</p>	<p>46K Rears</p>  <p>Pre-Emission</p> <p>2005 PETERBILT 378; 475 HP CAT C15; Jake Brake; 10-Spd. Manual; 206" WB; 12,000# F/A; 46,000# Locking Rears on Chalmers Susp.; Polished Alum. Wheels; Dual Exhaust & Air Cleaners; 738,651 Miles; Sk. #5821 - \$46,000</p>	<p>Allison Auto 20/45</p>  <p>151,516 Miles</p> <p>2008 MACK GU813, Allison Auto. Trans.; Double Frame Tri-Axle Dump w/Wing-Cover Tab Style Box w/Behl Undercar; 20K F/A; 46K R/A; Top, Air Ride Susp.; 20K Non-Steerable Lift Axle; Will Separate Body from Chassis; 21' 8" OI Frame Behind The Cab; 206" C-T; Muffler Takes Up 12" OI These Measurements; 151,516 Miles; Sk. #6174 - \$64,900</p>	<p>6x6 Chassis w/Knuckleboom</p>  <p>1987 FORD 14000, Double Framed 6x6 Ratbed/Knuckleboom Truck; 330 HP Cummins M11; 18-Spd. Manual; w/Face 1270 Knuckleboom Crane; 18,740# F/A; 46K Rears; 13,200# Rear Mounted Lift Axle; 23'6" x 102" Ratbed; 248" WB; Will Separate Bed & Crane from Chassis; 29" Frame Behind Cab; 208" CT; 111,244 Miles; Sk. #6157 - \$26,900</p>
<p>550 HP CAT</p>  <p>Heavy Spec</p> <p>2006 KENWORTH T800; Flatbed Winch Truck w/Braden 30-Ton Winch; 550 HP CAT C15; 18-Spd. Manual; 16K F/A; 46K Full Locking Rears; 28'4" WB; 18'6" Deck; Air Ride Susp.; Flip Over 5th Wheel; Will Separate Deck & Winch from Chassis; 21" Frame; 206" CT; 4.30 Ratio; 235,224 Miles; Sk. #6148 - \$46,000</p>	<p>Allison Auto.</p>  <p>Heavy Spec</p> <p>2004 PETERBILT 320; CAT 330 HP; Allison Auto.; Refuse Truck w/180" WB; 18K F/A; 44K Rears; Can Separate Compactor from Chassis; 17" Frame Behind Cab; 148" CT; 14,873 Engine Hours; 69,512 Miles; Sk. #5209 - \$37,900</p>	<p>52K Rears</p>  <p>117,870 Miles</p> <p>2004 INTERNATIONAL 5600; 385 HP Cummins ISM; 8LL Trans.; Double Frame Dump Truck w/18K F/A; 52K Full Locking Rears; Hendrickson Susp.; 184" WB; Can Separate Body from Chassis; 14'8" Frame Behind Cab; 121" CT; 117,870 Miles; Sk. #5226 - \$32,900</p>	<p>(2) Available</p>  <p>KIT: 2) 2004 KENWORTH T800; 380 HP CAT C12; 8LL-Spd. Double Frame; Alter AC 15-700 Crane; (3) Outriggers; Chalmers Susp.; 4.33 Ratio; 310" WB; 18K F/A; 46K Rears; Can Separate Crane from Chassis; 25" Frame Behind Cab; 222" CT; 8,996 Hours; 133,460 Miles; 10,482 Hours Sk. #6227 - Price With Crane: \$62,900 - SE6000 UNIT 2003 w/430 HP CAT C12; 68K G.W.; Same Crane Specs - \$67,900</p>
<p>46K Rears</p>  <p>CAT 6NZ</p> <p>2003 KENWORTH T800; 475 HP CAT C15 6NZ Turbo; 8LL Manual Trans.; Clean Daycab w/12,800# Front Axle; 46K Rears On KW B-Bag Air Ride; 4.11 Ratio; 186" WB; Wetline; 447,898 Miles; Sk. #5925 - \$49,900</p>	<p>18K/60K Rears</p>  <p>CAT 6NZ</p> <p>2010 PETERBILT 365; 350 HP Cummins ISM Engine; Allison Auto.; Long Double Frame Cab & Chassis w/300" WB; 222" CT; 31" Frame Behind Cab; 18,000# F/A; 60,000# R/A On Hendrickson Susp.; 87,267 Miles; Sk. #5907 - \$59,900</p>	<p>Dozens of Mack Dumps!!</p>  <p>1999 MACK RD680S DUMP TRUCK; 400 HP Mack E7; Engine Brake; 8LL Trans.; Rubber Block Susp.; Tri-Axle; 19' Steel Body; 20,000# F/A; 46,000# R/A; 22.5 Tires; 248" WB; Spoke Wheels; EXPORT PRICED!!!; 777,148 Miles; Sk. #5902 - \$19,600</p>	<p>Clean</p>  <p>Heavy Spec Chassis</p> <p>2005 PETERBILT 357; 370 HP Cummins ISM; 8LL Trans.; Quad Axle Cab & Chassis w/Double Frame; 18K F/A; 44K Full Locking Rears; (2) 11K Steerable Lift Axles; Air Trac Susp.; 22" Frame Behind Cab; 212" CT; 302,500 Miles; Sk. #5831 - \$41,500</p>
<p>2002 KENWORTH T800</p>  <p>2002 KENWORTH T800; 475 HP CAT C15 6NZ; 10-Spd. Manual; Double Frame; Daycab w/20,000# F/A; 46,000# Locking Rears; NEWAY Air Ride Susp.; 5.29 Ratio; 204" WB; 16" OI Frame; 186,151 Miles; Sk. #6087 - \$39,500</p>	<p>Clean Plow Truck</p>  <p>2007 MACK C1713; Mack 370 HP; 9LL Trans.; Double Frame Plow/Sander 11' One Way Plow & Wing; Larau Sander CTR Drop Spinner; 20K F/A; 46K Full Locking Rears; Haulmax Susp.; 4.30 Ratio; 258" WB; 260,163 Miles; Sk. #6173 - \$31,000</p>	<p>20K/46K Lockers</p>  <p>2007 MACK C1713; Mack 427 HP; Allison Auto.; Double Frame Plow/Sander Truck w/Stratos 870-42 Spread w/Chemical Sprayer; 20K F/A; 20K Lift; 46K Full Locking Rears On Haulmax Susp.; Schmidt Controls; 240" WB; 19" Steel Box w/Top; 335,802 Miles; Sk. #6172 - \$43,900</p>	<p>Low Mile Vac Truck</p>  <p>2007 KENWORTH T800; CAT 380 HP; 15-Spd.; Vacuum Truck w/Almac Machine Works 3,440 Gal. Tank w/Dump & Rear Hatch; 270" WB; Air Ride Susp.; 16K F/A; 46K Full Locking Rears; 4.10 Ratio; 80,985 Miles; Sk. #6144 - \$69,900</p>
<p>Heavy Spec Chassis</p>  <p>2002 MACK CL713; 460 HP Mack E7; 18-Spd.; Double Frame Cab & Chassis; 20K F/A; 46K Rears; 232" WB; 24" Frame Behind Cab; 206" CT; PTO, Good Rubber; Mack Air Ride Susp.; 309,234 Miles; 17,880 Hours; Sk. #5929 - \$39,600</p>	<p>Long Heavy Spec Allison</p>  <p>2006 WESTERN STAR 4900SA; Double Framed Crane Truck; CAT 410 HP; Allison Auto. Trans.; 20K F/A; 46K Full Locking Rears; 16K Rear Mounted Lift Axle; 24" Steel Deck; Chalmers Susp.; 72" Spread; IMT16000 Drywell/Block Crane; Can Separate Crane & Deck from Chassis; 30'6" Frame Behind Cab; 202" CT; 264" WB; 274,074 Miles; Sk. #5946 - \$38,900</p>	<p>Dozens Available</p>  <p>2005 MACK C6N12; 350 HP Mack AC330; 10-Spd.; Clean, Good Running Single Axle Tractor w/12K F/A; 20K Rear; Air Ride Susp.; 149" WB; 764,211 Miles; Sk. #5885 - \$11,600 MANY OTHERS AVAILABLE</p>	<p>20K/46K Axles</p>  <p>2005 PETERBILT 357; CAT 305 HP; Allison Auto.; Clean Cab & Chassis; 20K F/A; 46K Rears on Haulmax Susp.; 17" Frame Behind Cab; 140" CT; 21'6" WB; New Drive Tires; 129,217 Miles; Sk. #4894 - \$59,900</p>
<p>455 HPI</p>  <p>2006 FREIGHTLINER FLD; Detroit 12.7L 455 HP; Allison Auto.; Clean Cab & Chassis w/18K F/A 46K Full Locking Rears; 4-Liner Susp.; 250" WB; 20 OI Frame Behind Cab; 178" CT; w/PTO; 106,821 Miles; Sk. #6187 - \$49,900</p>	<p>20K/46K Rears</p>  <p>2003 KENWORTH W800; 320 HP Cummins ISM; Allison Auto.; Clean, Low Mile Cab & Chassis w/20,000# Front Axle; (2) 11,000# Steerable Lift Axles; 44,000# Full Locking Rears On Chalmers Susp.; 5.40 Ratio; 250" WB; 21" Frame Behind Cab; 156" CT; Muffler Takes Up 12" Behind Cab; Sk. #6016 - \$64,900</p>	<p>20K/58K Rears</p>  <p>2010 INTERNATIONAL 5600; 425 HP Cummins ISM; Allison Automatic Trans.; 172" WB; Wetline; 20K Front Axle; 58K Rears On Hendrickson Susp.; 1,262,415 Rubber; 226,177 Miles; We Can Stretch This Tractor To Any Length For HD Cab & Chassis; Sk. #5943 - \$47,600</p>	<p>4,360 Gal. Low Mileage Tanker</p>  <p>2004 WESTERN STAR 4900S 430 HP CAT C12; 18-Spd. Manual; Clean, Low Mile Tank Truck w/4,360 Gal. Steel Tank & Bowie 3" Pump; 16K F/A; 46K Full Locking Rears; 252" WB; Chalmers Suspension; 133,613 Miles; Sk. #5979 - \$38,500</p>

\$\$\$\$\$ WE BUY MACK, FREIGHTLINER, PETE, KENWORTH, Etc. TRUCKS and CAT, KOMATSU, CASE, HYUNDAI, IR, Etc. CONSTRUCTION EQUIPMENT for \$\$\$\$\$

Cornell Cooperative Extension of Livingston County
NWNy Dairy, Livestock & Field Crops Team
3 Murray Hill Drive
Mount Morris, NY 14510

Nonprofit Org.
U.S. POSTAGE
PAID
Permit No. 298
Rochester, NY

Postmaster:
Dated Material
Please Expedite

March 2020



- 5 **Precision Ag Workshop - Lockport, NY**, 10:00am - Noon. CCE Niagara 4-H Training Center, 4487 Lake Ave., Lockport, NY. Various Precision Ag topics will be discussed. Free event! *For more information* visit: <https://nwnyteam.cce.cornell.edu/events.php>
- 6 **Precision Ag Workshop - Batavia, NY**, 10:00am - Noon. CCE Genesee, 420 E. Main St., Batavia, NY. Various Precision Ag topics will be discussed. Free event! *For more information* visit our website: <https://nwnyteam.cce.cornell.edu/events.php>
- 18 **Pesticide Applicator Training - Albion, NY**, 8:00am - 12:30pm. CCE Orleans, 12690 Route 31, Albion, NY. Training Classes 3/18 & 3/20, Certification Exam on 3/24. Cost: \$50 for both days. Questions: Contact Kim Hazel at 585-798-4265 x26 or email krh5@cornell.edu
- 20 **Precision Ag Workshop - Batavia, NY**, 10:00am - Noon. CCE Genesee, 420 E. Main St., Batavia, NY. Various Precision Ag topics will be discussed. Free event! *For more information* visit our website: <https://nwnyteam.cce.cornell.edu/events.php>
- 20 **Beef Quality Assurance Training - Canandaigua, NY**, 6:00pm to 9:00pm. Finger Lakes Livestock Exchange, 3865 NY-5, Canandaigua, NY. Cost \$15 per person, \$25 per farm. RSVP/More Information- by March 13, Allison Thomas, 585-394-1515 or file83@yahoo.com
- 21 **Foreign Animal Disease Preparedness & Response Planning**, featured at the NY Pork Producers' Annual Meeting, Quality Inn, 2468 NYS 414, Waterloo, NY. Registration starts at 7:45am, program at 8:30am. Pork producers are invited to attend an interactive pro-gram addressing the need for on-farm crisis preparedness, particularly focusing on African Swine Fever. You do not need to be a New York Pork Producers member to attend. Cost: \$10/person, lunch included. To register, download registration form at: <http://newyorkpork.org/wp-content/uploads/2018/12/2020-Annual-Meeting-Invite.pdf>

April 2020

- 3 **Precision Ag Workshop - Ovid, NY**, 1:00pm - 3:00pm. Ovid Fire Hall, 2136 Brown St., Ovid, NY. Free event! *For more information* visit: <https://nwnyteam.cce.cornell.edu/events.php>
- 4 **Agronomy Scout School- Geneseo, NY**, 8:00am - 5:0pm. SUNY Geneseo. Pre-Register by April 1. Cost: \$75 per person. 4 DEC Points & CCA Credits Pending! *See page 8 for information or visit:* <https://nwnyteam.cce.cornell.edu/events.php>

Helping you put knowledge to work

Cornell Cooperative Extension is an employer and educator recognized for valuing AA/EEO, Protected Veterans, and Individuals with Disabilities and provides equal program and employment opportunities.