

# Erie County Ag News

Cornell Cooperative Extension | Erie County

SPRING/SUMMER 2018



## UPCOMING AGRICULTURAL EVENTS AROUND WNY

### WNY Fresh Market Vegetable Twilight Meeting

Vegetable discussion and presentation on pest management tool. DEC credit available. Eden, NY.

June 19<sup>th</sup>, 2018 • See page 19

### 2018 Hops Production Conference

Discussion and Tour. Focus on effectively marketing your hops. Portland, NY.

June 30, 2018

See page 19

### Master Food Preserver Training

Go beyond the basics of Food Preserving in this 3-day intensive training. Buffalo, NY.

June 26-28<sup>th</sup>, 2018

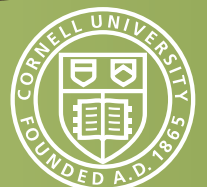
See pages 7

### 7<sup>th</sup> Annual Golf Outing

Proceeds to benefit Cornell Cooperative Extension of Erie County. More details on our website, [erie.cce.cornell.edu/](http://erie.cce.cornell.edu/).

July 31<sup>st</sup>, 2018

See page 12





# Ag Staff

# Contents

Cornell's Annual In-Service Offers an Excellent Opportunity to Learn and Connect.....3-12

Their Grapes Grow Sweet.....4-5

Nitrogen Fertility Options for Organic High Tunnels.....6

Master Food Preserver Training.....7

Winter Meetings Highlight Results.....8

Project to Expand Access to Local Farm Produce in Buffalo Low-Income Communities.....9-10

Exciting New Resources for Local Food System Professionals.....10

A Craft Beverage Industry that Continues to Impress, from the Top on Down!.....11

Manure and Road Reminder.....12

Changes to the Margin Protection Program for Dairy Producers.....13-15

In Case You Missed it: The First NYS Concord Summit at the Grape Discovery Center..16-18

2018 WNY Fresh Market Vegetable Twilight Meeting.....18

Pasture & Farm Walk Offered to Area Producers at Garry Wilson Beef.....19

2018 Hops Production in the Lake Erie Region Conference.....19

Germination Chamber Case Study.....20-21

Blueberries: Is Supply Developing More Rapidly than Demand?.....22-24

Farm Shops – Part 2.....24-25

Erie Co. 4-H Tractor Certification Program 25

Harvesting Aesthetics & Forest Sustainability .....26-27

What is it?.....28



**Sharon Bachman**

sin2@cornell.edu

Agriculture and Natural Resources Educator

Sharon wears many hats including Invasive Species Management Integrated Pest Management in the areas of fruit, field crops and forestry; Agricultural Environmental Management Practice Education; Soil Testing and Nutrient Management; Pesticide Use and Safety; Diagnostics in coordination with Cornell faculty and staff; and Master Gardener Technical Support.



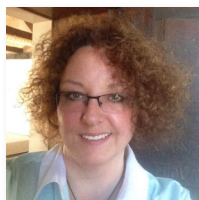
**Megan Burley**

msb347@cornell.edu

Farm Business Management Educator

Megan works with all farmers from rural to urban, dairy to small fruit from a farm business management perspective.

She is also working with refugees in Buffalo on a Beginning Farmer Project and runs a beginning farmer discussion group.



**Eva McKendry**

ebm73@cornell.edu

Administrative Assistant

Eva designs the Erie County Ag News, creates graphics and support materials for CCE-Erie, updates much of the content on our website, and keeps you up to date with social media. She is happy to answer your questions and register you for our classes.



**Darcy Telenko**

dep10@cornell.edu

Vegetable Specialist for the Cornell Vegetable Program

Darcy's programming focuses on Fresh Market Vegetable Production with emphasis on weed, and disease management. She is also part of the newly established Climate Smart Farming Extension Team.



**Cheryl Thayer**

cbt32@cornell.edu

Local Food Distribution & Marketing Specialist, Harvest NY

Much of Cheryl's programmatic work focuses on finding solutions to some of the more pressing systemic barriers that hinder the development of the regional food system in Western New York.





# Cornell's Annual In-Service Offers an Excellent Opportunity to Learn and Connect

by Sharon Bachman, Agriculture and Natural Resources Educator

## PMEP Updates on Important Pesticide Issues

Day one opened with two presentations related to pesticides. The first by Mike Helms, with Cornell Pest Management Education Program (PMEP), covered regulations related to contracted bees. The restrictions on the label will be crop specific. Growers do not have a way to measure when level of concern (LOC) is exceeded. Be specific about crop in your contract with the bee provider, for example "Bees are here to pollinate apples in flower." There are considerations for if the crop bloom is indeterminate or determinate. If you have questions about this topic, we can work with Mike Helms with Cornell Pest Management Education Program to get answers.



Professor Andrew Hayes who teaches Environmental Toxicology at Cornell discussed issues related to the use of Glyphosate. He discussed hazard assessment vs. risk assessment, the regulatory framework for mitigating risks, some basic principles in toxicology and gave an overview of science-based discussions of the health effect of glyphosate. These are some of his points:

- Consider Risk Perception vs. Actual Hazard
- Risk = hazard x exposure.

- Chemicals we use are engineered (packaged) so they will not pose unreasonable risk
- Reference Dose – adds a 100 fold safety factor
- Reference dose considers the entire risk cup or ways one may be exposed to the chemical
- Surfactants (non-ionic, called detergents) are more dangerous than glyphosate.
- RoundUp is a chelator
- Some researchers may draw spurious correlations from the data, not using pure science.
- For glyphosate – 5% breaks down in 40 days, ½ life is 2-3 years. It does become rapidly in-activated.
- Data used by chemical manufacturers comes from independent laboratories who would not want to damage their business reputation by not providing accurate, science based analysis.

## Food and Farm

In a lunch session, Sarah Meyers, from Hobart William Smith, presented on food and farm programs on their campus including the Real Food Challenge, where they measure the % real food served in their dining hall (9 – 12%); their dining hall participate in a project called Food Recovery Plate – Pan to Plate, they have a little free farm-stand on campus and



programs called Farm Cross Fit and Fields of Learning.

At the next session researchers from the UK, NC University and Dr. Tony Shelton, Professor of Entomology at Cornell, discussed using genetic engineering to manage invasive species including vertebrate populations. Dr. Shelton discussed the Diamondback Moth Project which would benefit vegetable growers.

The last session of the day in the Consumer Horticulture track took us on tours of Cornell's

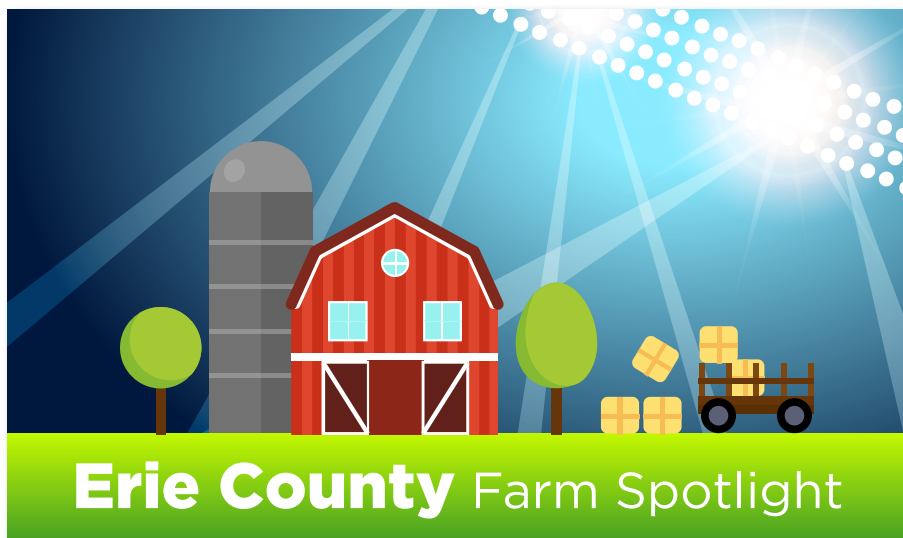
Plant Pathology and Insect ID Labs. Lab staff discussed new technology available to them, oak wilt and how deer keds are often mistaken for ticks (but thankfully, don't carry Lyme disease.)

Day two was spent sharing experiences and working with partners to further develop Seed to Supper in New York. Christine Hadeckl, from the Oregon State Food Bank, who started the effort attended. I had the opportunity to discuss ideas with those implementing Seed to Supper in other areas of the state including Utica.

On the final day, I started by attending a consumer

*Continued page 7*





## Erie County Farm Spotlight

### Their Grapes Grow Sweet

by Megan Burley, Farm Business Management Educator

The Andolina's have been farming for many generations. Tony Andolina, owner of Andolina Farms in Brant, NY said "we've been farming for as long as I can remember. The history of our farm family can be traced back to my great grandfather." Although Tony does not farm in the same place his great grandfather did, he worked with his dad on the

family dairy and in 1991, at the age of 26, Tony decided it was time to leave the family dairy and start his own farm. He bought 40 acres in the town of Brant and started out with a ½ acre of strawberries and about 30 acres of concord grapes. "Grapes were easier to market back then. There was a demand for Concord and juice companies were willing to contract to buy grapes to make juice and jelly. I started out with a contract with Carriage House. They would buy my grapes and process them to make juice and jelly." Over the years the demand has waned for Concord grapes so many of the grape farmers in western NY have had to seek other markets or go out of business.



Tony still has about 35 acres of Concord grapes, his farm does not contract to the remaining juice companies but he does lease most of his grapes to other grape growers who have managed to keep their grape contracts with local juice companies. With the remaining grapes Tony has had to find new markets for his fresh grapes. Concord grapes are a common item in the fall in western NY. Many times you can drive through the

---

*"With anything you have to love what you do. Without a passion for agriculture and farming the challenges, and there are many, make it almost impossible to keep going."*

---

south towns of Erie County and see small road signs advertising homemade grape pies. Since Concord grapes are so seasonal and take some effort to eat (slip the grape from the skin and spit out the seeds) it can be and has been challenging to find a market. "I've worked with several small grocery stores in western NY to use as an outlet for our grapes but they now have corporate pressure and it is much easier for them to order from their corporate warehouse leaving the local growers without a market for grapes. " "We also go to several produce auctions in the area, including the Genesee Valley Produce Auction in Centerville, NY. Here we are at the will of the buyer, some days

**Concords picked and ready for market**





none of the children are interested in coming back to the farm. I think this is because they've realized it's hard to support a family with the income we make on the farm. Up until a few years ago I've always had an off farm job to help with the family finances." Even though there may not be a next generation Tony is still exploring the option of adding a juice press to the farm business. "The initial investment in a juice press is very expensive, it is hard to say if it would pay for itself." If they did buy a press they would want it to include other juices like apple. "This would provide us with a new market but it would also increase our expenses and labor need."

we get the price we need but other days our grapes sell for way less than what they are worth. We also offer you-pick grapes, this is a niche market and our customers are usually seeking grapes to make homemade juice or wines." Along with the grapes, the Andolina's grow about 3 acres of strawberries, fresh market vegetables including sweet corn, and make maple syrup during the off season. "We've been



**Waiting for customers at the Andolina Farms Fruit Stand**

making maple syrup all my life. We do it because it provides us with some income to get things started in the spring." Tony taps about 300 trees and sells the syrup at the family farm stand and also sells some wholesale.

It is hard to say what the future looks like for Andolina Farms. Tony said, "Currently



**Tony's parents manning the Farm Stand during Strawberry season**

Tony is also a very active member of Erie County Farm Bureau and Erie County 4-H. He said "currently there seems to be a lot of interest from the next generation coming into agriculture in Erie County. The Farm Bureau board has a lot of new members who bring new ideas to the table." When asked if he had any advice for the next generation of farmers he said, "With anything you have to love what you do. Without a passion for agriculture and farming the challenges, and there are many, make it almost impossible to keep going." If you want to learn more about Andolina Farms you can find them on Facebook. ■

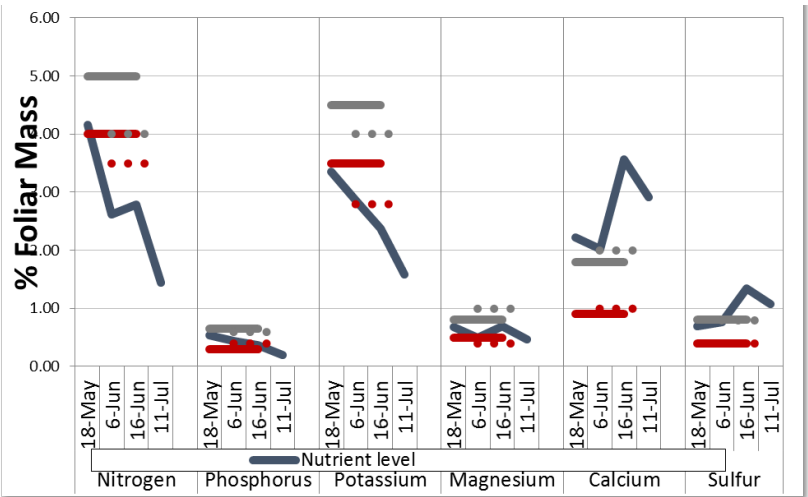


# Nitrogen Fertility Options for Organic High Tunnels

by Cordelia Machanoff and Judson Reid, CCE Cornell Vegetable Program;  
from VegEdge Newsletter

It is transplant season for high tunnel tomatoes, particularly on farms that have just completed an early spring greens crop. Now is the time to plan for fertility for the longer season tomato crop. Conventional high tunnel growers can rely on soluble fertilizers which are injected through drip irrigation at a precise rate. However, organic tunnel fertility is more challenging, particularly in regards to long season nitrogen delivery. Most organic nitrogen sources are not injectable and must be applied prior to planting. These often come with unbalanced ratios of other nutrients such as phosphorus, calcium and magnesium. Several years of foliar sampling in high tunnel tomatoes throughout NYS has shown that organic high tunnel tomatoes generally start out with sufficient or even excess nitrogen, but go into a mid-season dive in foliar nitrogen levels.

Given the longer season and higher yields of tunnel tomatoes, a nitrogen fertilizer to inject or side-dress will help prevent mid-season deficiencies. We recommend 125-150 pounds of nitrogen per acre per season for high tunnel tomatoes, so a typical 3,000 ft<sup>2</sup> (0.07 acre) high tunnel will need roughly 9-11 pounds of total nitrogen. A foliar test result of 4-5% N during vegetative growth and 3.5-4% N during fruiting is ideal. We have developed the charts below as a resource for growers in need of pre-plant and in-season organic nitrogen sources. This includes traditional organic N sources, as well as some newer products. Regular foliar testing to monitor nutrient levels in the crop will inform how the pre-plant fertility is holding up, and whether additional nitrogen is needed. Prices may vary among vendors of the products listed.



**Figure 1.** Nitrogen (as well as Phosphorus and Potassium) falls below acceptable ranges, decreasing in foliar samples over the season (horizontal bars represent acceptable levels in vegetative and fruiting stages of tomato crop). In season foliar sampling and fertilizer amendments can prevent these deficiencies.

**Table 1.** Pre-plant organic nitrogen sources.

Name	Analysis (NPK)	\$ per pound of nitrogen (average)	Release Rate	Notes
Alfalfa Meal	3-1-2 (varies)	\$20+	Medium	Incorporate well into the root zone.
Composted plant material	Variable, usually around 2-1-1	Variable	Slow	Need to test for nutrient content. Will help increase organic matter and improve tilth. Don't rely on it alone for nitrogen.
Feather meal	13-0-0 (varies)	\$8	Medium	Can be hot – incorporate well to avoid hotspots.
Soybean meal	7-1-2	\$13	Medium	Apply 2 weeks prior to transplant to avoid burning plants.

**Table 2.** In-season organic nitrogen sources.

Name	Analysis (NPK)	\$ per pound of nitrogen (average)	Release rate	Notes
Blood meal	12-0-0	~\$15	Very Fast	Hot, can burn roots. Not soluble (can side dress)
Chilean nitrate (Sodium nitrate)	16-0-0	\$3	Very fast	High salts. If Certified Organic check with certifier prior to use.
Nature's Source	3-1-1	~\$50	Fast	Soluble. Made from oilseed extracts.
Pure Protein Dry	15-1-1	\$200	Fast	Codfish hydrosolate. Soluble (can be injected)
Verdanta PL-2 (Bioworks Inc)	2-0-6	~80	Fast	New soluble product made of fermented sugar cane. Low salt index. High K.
Ferti-Nitro Plus	13-0-0	\$53	Fast	Soy protein derivative.
Wisgeranic	3-1-1	In development	Fast	Derived from food waste

Same high tunnel tomatoes that were not supplied with sufficient nitrogen at the beginning of the season (left) and about a month later (right).

Photos: Cordelia Machanoff,  
CCE Cornell Vegetable Program



horticulture session with presentations by Nina Bassuck, of Cornell's Urban Horticulture Institute, on characteristics of quality compost and the scoop and dump method for improving landscape planting sites. Next a CCE Dutchess Educator discussed her project to create compost outreach materials and finally, Hannah Shayler from Cornell's Waste Management Institute provided info on their website updates, which you can find at <http://blogs.cornell.edu/healthysoil/>. I work with Hannah on a statewide program work team addressing healthy soils for community gardens.

For the second session of the morning I attended updates from three Partnerships for Invasive Species Management (PRISM) on the eastern side of the state. The St. Lawrence group has recently completed a study of the Cultural Impacts of Invasive Species. A key result shared was that for their region, over 92% surveyed indicate that invasive species affect their general happiness and 74% stated that invasive species have a negative impact on their livelihood. Their survey captured a comment from a young couple starting out, "We don't have a lot of money. Last weekend my husband and I both got a rash from some poisonous hog plant that we were removing from our yard. We don't have health insurance and we had to pay a fortune to the doctors and for medicine, now we don't have enough to buy food until next week." A real example of the impact of invasive species. The Lower Hudson PRISM discussed their efforts in monitoring 1,300 miles of trails for invasive species with volunteers and then the Capital Region, a PRISM managed by a CCE Association, shared information on their education and outreach efforts.

*Continued page 12*



# Master Food Preserver Training

**3 Day Training: Tues – Thurs, June 26–28, 2018**

**8:30 AM – 4:30 PM**

to be held at

PS 93 Southside Elementary School,  
room 156, 430 Southside Pkwy., Buffalo

Cornell Cooperative Extension of Erie County will be offering a 3-day Master Food Preserver workshop for those who would like to go beyond the basics of home food preservation, either for personal use or to help others learn how to safely preserve food. Participants in the 3-day intensive course receive a comprehensive food preservation note-book.

Using the safest, most updated information available, participants will learn the science of food preservation including food safety, gain hands-on experience with boiling water bath canning, pressure canning, jelled products, and quick pickling, plus observe demonstrations of freezing, drying, and fermentation. No prior experience in food preservation is required. For those seeking to progress toward obtaining a Master Food Preserver certificate from Cornell Cooperative Extension, a post-test will be given the third day of the workshop.

**When:** Workshop sessions will run June 26, 27 and 28<sup>th</sup> from 8:30 AM – 4:30 PM each day.

**Cost:** Cost for the three-day workshop is \$300, and includes lunch each day.

**Register:** online at [erie.cce.cornell.edu](http://erie.cce.cornell.edu) Space is limited, so register early. Advanced registration is required no later than June 15<sup>th</sup>. Registration is not complete until payment has been received. Fees are non-refundable.

For persons with disabilities requiring accommodations, please contact Sharon Bachman at 652.5400 x150 by 4:30 PM on June 20<sup>th</sup>. 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.

For more information, contact Eva McKendry,  
[ebm73@cornell.edu](mailto:ebm73@cornell.edu), 716.652.5400 x176.

Register at: [erie.cce.cornell.edu](http://erie.cce.cornell.edu)



# Cornell Vegetable Program

## Winter Meetings Highlight Results from NYFVI Supported Research Projects

Darcy Telenko, CCE Cornell Vegetable Program

Over 170 vegetable growers attended winter programs featuring CVP research highlighting two New York Farm Viability Institute (NYFVI) funded projects “Minimizing wildlife impacts on yield and food safety risk in vegetables by utilizing repellency tactics” and “Application of electromagnetic electrical conductivity measurements for precision agriculture for NYS vegetable growers.” These sessions and workshops were presented at the 2018 Empire State Producers Expo, Western NY Fresh Market Meetings in Niagara (Lockport) and Monroe (Irondequoit) counties, and the 2018 Eastern New York Fruit and Vegetable Conference.

The 2018 Empire State Producers Expo in Syracuse, an annual event supported by the NYS Vegetable Growers Association and Cornell Cooperative Extension (CCE), kicked off the winter vegetable meeting season. The entire CVP team consisting of Julie Kikkert, Robert Hadad, Christy Hoepting, Judson Reid and Darcy Telenko participated in the 3-day program alongside nearly 23 Cornell

CCE Educators organizing educational sessions to support the NYS vegetable and fruit industries. In addition to the Wildlife and Precision Irrigation Sessions, CVP specialists hosted sessions on biopesticides, processing vegetables, sweet corn, cabbage, weed management, high tunnels, soil health, onion pest control, food safety, and climate smart farming. Attendance reached over 850, with over 110 presentations given by CCE personnel and highly regarded speakers from across the country. Five panel discussions featured 13 farmers sharing their experience and insights.

Over 790 DEC credit hours were received by NY growers and professionals offered during 28 education sessions.

Thirty-one Certified Crop Advisor (CCA) credits were also available with 112.5 CCA credits earned. Between sessions, attendees visited the trade show featuring 116 commercial vendors and non-profit exhibitors. Conference proceedings are published online at <http://www.hort.cornell.edu/expo/2018proceedings.php>.

Future meeting dates and information will be posted as available at <https://nysvga.org/>.

During these events the Wildlife Workshop Series featured talks about “Bird Management in Sweet Corn – Evaluating New Tools” by Darcy Telenko; “Laser scarecrows for preventing bird damage in sweet corn” by Dr. Rebecca Brown, University of Rhode Island; “Deer Management Program and Permit Process” by Ryan Rockefeller, NYS

DEC; and “Goose Management” by Paul Curtis, Cornell University. The Precision Irrigation Workshop Series included talks on “Precision Irrigation Opportunities for Growers: How and Why We Should Irrigate – an Example in NY Orchards” by Jaume Sanahuja, Cornell University; “Using Soil Electrical Conductivity Measurements for Precision Water Management in Vegetable Crops – Year 1 Research Update” by Darcy Telenko; and industry updates on irrigation equipment available to growers by various industry representatives.

These events provide a great opportunity to showcase research projects and share



updated information with growers across the state. Many growers walked away with new ideas to implement on their farms. A grower attending the Wildlife session at Expo stated he planned to implement “scare-eye balloons and/or [air]-dancers” next season. Following the workshop in Irondequoit, growers began constructing their own “laser scarecrow” to test in 2018. As we look toward the future, the CVP continues to participate in new research opportunities that will meet the changing needs and dynamics of our producers throughout the state. ■



# Project to Expand Access to Local Farm Produce in Buffalo Low-Income Communities

by Cheryl Thayer, Harvest New York



**Buffalo, New York** – Using a novel approach, Cornell Cooperative Extension of Erie County and Harvest New York, in partnership with Field & Fork Network, are launching a new project targeted at expanding access to community supported agriculture (CSA) shares to low-income consumers in Buffalo. This innovative program is cutting edge in Buffalo, and if successful, will be a model for communities across the country that are interested in community food system development that does not require revenue generation.

Funded by the United Way of Buffalo and Erie County, and the General Mills Foundation, the project team's primary goal is to develop an interdependent relationship between three key groups: (1) low-income consumers in Buffalo, (2) local CSA farmers, and (3) cost-offset providers, which could be health insurance companies, employers, and/or Medicaid providers. The concept of a cost-offset in this case can be likened to the type of wellness perk often offered by insurance companies, for example a discount on the cost of a fitness membership. What this project is proposing to do is offset the cost of healthy, whole food from Western NY farmers. If successful in garnering participation from the three key groups, the project can offer the following impacts:

1. Increasing healthy food access and consumption for low-income residents in Buffalo.
2. Supporting local farmers by increasing CSA shares sold and/or providing them with new customers, which can contribute to a stronger local economy.

Cheryl Thayer of Cornell Cooperative Extension Harvest New York, said "We're so thrilled to be spearheading this project in Buffalo. The CSA model has much to offer, from a bounty of delicious and diverse food items, to directly supporting our neighboring farms who are committed to environmentally-friendly farming practices. We know that the price of a CSA can serve as a real barrier to entry for consumers. What's special about this project is that it connects the dots between wellness, food, and farming, in a way that benefits all parties involved."

Diane Held, Executive Director of Cornell Cooperative Extension of Erie County said, "We are grateful to the United Way of Buffalo and Erie County, and the General Mills Foundation for funding this project to connect local food and farms with healthy living, core areas of our work to help Erie County residents and communities solve real life problems with research based solutions."

It is important to clarify that the grant funds are not going towards the CSA cost-offset itself, but will support developing the relationship between consumers, farmers and cost-offset providers, as well as supporting nutrition education and budget-friendly menu planning to ensure consumers are comfortable and able to use the diversity of crops provided in a typical CSA box.

Existing research from Kentucky University supports that participation in a CSA leads to improved health, particularly for consumers with poor health prior to CSA participation. Improved health outcomes include: reduced consumption of processed snack foods and meals, increased consumption of fruits and vegetables, more attention to health and nutrition, less need for medical care, and improved beneficial lifestyle changes, such as cooking at home. Likewise, in a program offered in Madison, Wisconsin, one partner health insurance company noted that participating in a similar program resulted in high member satisfaction and recognition as being an innovative leader in the field. And, participating farmers indicated that the program increased awareness of CSAs and created business and visibility for their farms.

"We are pleased to be a partner on this important project that could significantly change the food access landscape in Buffalo. As someone who has seen how impactful nutrition incentives can be,

*Continued next page*



# Exciting New Resources for Local Food System Professionals

by Cheryl Thayer, Harvest New York

Harvest New York is excited to share a few new resources that have been made available from some leading food system professionals from around the country.

## MarketSizer® and HubSizer® Toolsite

New Venture Advisors just released a MarketSizer® and HubSizer® Toolsite. This online portal (<https://www.newventureadvisors.net/tools/>) contains six free widgets that help food system planners and entrepreneurs conduct preliminary assessments of some of the most common types of local

food infrastructure: food hubs, commercial kitchens, frozen processing facilities and more. Visit the NVA Toolsite (<https://www.newventureadvisors.net/tools/>) and read the article on their blog to learn more.

Also, beginning on April 2, they will host a microblog



series focusing on each of the six different tools on the NVA Toolsite. Over six weeks, these short posts will dig deeper into the functionality and uses for each tool to illustrate what they can (and can't) do, and how easy to use and helpful they can be. Look for them on their blog. (<https://www.newventureadvisors.net/blog/>) Their first post will be on the Local Food MarketSizer® and how it can help determine local food supply and demand in your region.

## Delivering Community Benefit: Healthy Food Playbook



Created with support from the Robert Wood Johnson Foundation, Health Care Without Harm's "Delivering community benefit: Healthy food playbook" (<https://foodcommunitybenefit.noharm.org/>) supports hospital community benefit professionals and community partners in developing initiatives to promote healthy food access and healthy, local and sustainable food systems. The playbook and events throughout the year offer inspiration and tools to address food and diet-related community health needs throughout the community health engagement process. ■



*Continued from page 9:  
"Project to Expand..."*

particularly with our Double Up Food Bucks program, we know expanding this concept to providing subsidized CSA shares will be of great benefit to consumers and farmers alike across the Western NY community," states Lisa French, Co-founder & Executive Director of Field & Fork Network.

In the coming months, the project partners will be engaging consumers, farmers, and potential cost-offset providers in targeted discussions and focus groups to encourage project participation and to determine the potential barriers to participation, with the hope of launching a pilot of the project in 2019.

### About Cornell Cooperative Extension Harvest New York

Harvest New York is a regional Cornell Cooperative Extension team whose goal is to spur agricultural economic development in New York State. Six

project areas are covered by Harvest New York Specialists: Dairy Food Processing and Marketing, Local Food Distribution and Marketing, Urban Agriculture, Farm-Based Beverages, Livestock Processing and Marketing, and Farm Strategic Planning. For more information about Harvest New York, visit <https://harvestny.cce.cornell.edu/>.

### About Field & Fork Network

Field & Fork Network is a food and farming organization dedicated to building a thriving regional food system in New York by creating more economic opportunities for local agriculture and providing greater access to fresh local foods. For more information about Field & Fork Network, visit [www.fieldandforknetwork.com](http://www.fieldandforknetwork.com). ■

# A Craft Beverage Industry that Continues to Impress, from the Top on Down!

by Cheryl Thayer, Harvest New York

In late January, Harvest NY Specialist Cheryl Thayer was invited to present on the current state of the New York craft beer supply chain at the Farm Brewery Roundtable, hosted by Senator Pam Helming for the 54th District, and also the Chair of the Legislative Rural Resources Commission. The roundtable served as an excellent opportunity for elected officials and agency representatives to engage in a meaningful dialogue with brewers, farmers, malsters, CALS researchers, CCE Specialists, and industry associations about the successes and challenges inherent in the New York craft beer supply chain. It was evident that elected officials and agency representatives consider themselves vested partners in this nascent, but rapidly growing industry. Their support of and interest in the continued development of this important economic industry was echoed by all. Harvest NY was grateful to be invited to the table and afforded the opportunity to present to a very receptive audience. Only great things to come with this flourishing industry!



Following the roundtable, a few key resources have been made publicly available.

1. Governor Cuomo's office released a listing of all craft beverage operators in New York, by region and sector, which can be found at this link. ([https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/ListofFarmManufacturers\\_2\\_28\\_2018.pdf](https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/ListofFarmManufacturers_2_28_2018.pdf)) This is a tremendous resource for farmers that are looking for potential buyers of apples, hops, grains, grapes, and/or other assorted agricultural inputs.

2. The Harvest NY Brewery Supply Chain Analysis is now posted online at this link. ([https://harvestny.cce.cornell.edu/uploads/doc\\_42.pdf](https://harvestny.cce.cornell.edu/uploads/doc_42.pdf)) This report serves as a detailed analysis of the current state of the NY craft beer supply chain, with a strong emphasis on malting barley.
3. Cornell Field Crops updated their list of active New York malt houses buying grain, which can be found at this link. (<https://fieldcrops.cals.cornell.edu/small-grains/malting-barley/active-ny-malt-houses-purchasing-grains>) This is a great resource for growers, brewers and distillers looking to make supply chain connections. ■



Pictured from Right to Left:  
Assemblywoman Carrie Woerner, District 113; Jeff Williams, NY Farm Bureau; Paul Leone, NYS Brewers Association; Senator Pam Helming, District 54; Julie Suarez, Cornell College of Ag and Life Sciences; Kevin King, NYS Department of Ag and Markets; Cheryl Thayer, Cornell Cooperative Extension

*Calling all NY Farmers!*

The New York Center for Agricultural Medicine and Health (NYCAMH) is collecting feedback about PTO shield use among New York farmers. If you receive a letter or phone call from them, we urge you to participate!

As an added bonus – those who complete their survey will entered into a raffle for a **\$1,000 Tractor Supply Company gift card!**

If you have any questions, please contact Pam Tinc at NYCAMH (800-343-7527).

**800-343-7527 | [www.nycamh.org](http://www.nycamh.org) | @NYCAMH**

Bassett Healthcare Network  
New York Center for Agricultural Medicine and Health





## Manure and Road Reminder

by Karl Czymmek, Cornell CALS PRO-DAIRY,  
and Tonya Van Slyke, NEDPA

With warmer weather finally in the forecast, farms are poised to move a lot of manure in the coming weeks. Before transferring manure to fields, check soil conditions, tile outlets and weather forecast to see if prohibited or high risk conditions are present or if heavy or persistent rain is in the forecast. During wet weather, the CAFO Permit indicates that the Revised Winter and Wet Weather Guidelines should be followed. Manure may not be applied to saturated wet soils and conditions are considered to be "high risk" when significant rain is forecast within 48 hours or when tile outlets are flowing at least moderately from field drainage. Fields for application should be selected carefully in these conditions. It is always a good idea to monitor tile outlets during application.

Some roads may still be very vulnerable to damage from repeated trips with heavy loads. If you are not on a first name basis with your local road officials, make it a point to reach out to have a conversation about steps you can take to reduce the wear and tear from your equipment traffic on roads.

For more information about PRO-DAIRY, go to: [prodairy.cals.cornell.edu/](http://prodairy.cals.cornell.edu/)



**Cornell CALS**  
College of Agriculture and Life Sciences

Over lunch, I joined the Climate Change Program Work Team, where they discussed their online courses - Climate Change Science, Communication and Action, targeted at Extension Educators, Master volunteers, state and local government, land trusts and agricultural non-profits, and others interested in an introduction to climate change science and how to communicate effectively; and the Climate Smart Farming Course. Their PWT is also exploring the possibility of creating a Climate Science 'Master' volunteer program.

Next I heard a part of a talk by Joellen Lampman, from NYS Integrated Pest Management (IPM), on outreach that has been funded and research they are conducting on ticks. IPM has looked at whether ticks may be present on Christmas trees (not likely!) and how yard leaf management impacts tick populations.

The last session of the day was about the Cornell Vegetable Variety Trial project. CCE Erie Master Gardeners will participate in a second year of this project where we establish specific varieties chosen by the statewide



Consumer Horticulture Educator. The MGs will plant, monitor and harvest the selected varieties, and report back on the ease of growing them, and how attractive they are to gardeners, including how they taste and their appearance. We will be conducting the project at the Seneca Babcock gardens and the Food Bank garden. You can find the link to the Selected List of Vegetable Varieties for New York State at <http://gardening.cals.cornell.edu/garden-guidance/foodgarden/>.

A lot to take in, but well worth it! ■



Help Support  
Erie County Extension Foundation  
**7<sup>th</sup> Annual  
Golf Outing**  
Saturday, July 21  
at the  
Concord Crest Golf Course  
for more info please visit:  
**[erie.cce.cornell.edu](http://erie.cce.cornell.edu)**

# Changes to the Margin Protection Program

## for Dairy Producers

by Andrew M. Novakovic, E.V. Baker Professor of Agricultural Economics  
in the Charles H. Dyson School of Applied Economics and Management  
at Cornell University



### The Legislative Changes to MPP-Dairy

Significant changes to the 2018 implementation of the Margin Protection Program for Dairy Farmers (MPP-Dairy) are included in The Bipartisan Budget Act of 2018 that was just passed. This briefing paper summarizes the legislative changes and begins to review the possible implications of the changes. As is common with any agricultural program legislation, USDA will need to review the law, make a few decisions about how to implement the changes and issue new or modified regulations that provide specific instructions about what farmers can do and when they can do it. It is anticipated that this process will happen fairly quickly.

### 2018 Program Sign-up is Reopened

The normal procedure has been for a dairy farmer to elect coverage levels under MPP-Dairy for the coming year in the month before the start of that year – a December sign-up deadline for a year that begins in January. As farmer dissatisfaction with MPPDairy became more apparent and grew, it was widely anticipated that few farmers would utilize the program in 2018. The new legislation instructs USDA to reopen the 2018 signup process and allow dairy farmers, including those who signed up and those

who did not, to elect their choices anew. Specifically, the bill states:

*The Secretary shall extend the election period for the 2018 calendar year by not less than 90 days after the date of enactment of the Bipartisan Budget Act of 2018 or such additional period as the Secretary determines is necessary for dairy operations to make new elections to participate for that calendar year, including dairy operations that elected to so participate before that date of enactment.*

This would seem to indicate that USDA can reopen the enrollment process in between February and April and allow farmers to make enrollment choices that apply to the entire calendar year. It seems logical that USDA would want to open the enrollment period sooner rather than later.

### Monthly Election

MPP-Dairy pays dairy farmers the difference between the Actual Dairy Producer Margin (ADPM) and the coverage level elected by the farmer. Thus, if a farmer chooses coverage at \$6.50 per cwt and the ADPM falls to \$6.10, the farmer is paid 40¢ per cwt on the amount of milk covered. The original language of the program calculates the ADPM each month but payments are based on the average of successive two-month periods: Jan/Feb, Mar/Apr and so on. This resulted in a few instances where a month fell below a coverage level but the adjacent month was sufficiently high to put the two-month average outside of the payment level. The new MPP-Dairy is converted to a monthly payment. Thus,

payments will be made on 1/12 of the production enrolled in any month that the ADPM falls below the producer's coverage level.

### Changes in Premiums

Three changes were made in the premiums and fees producers are required to pay.

First, the \$100 fee that everyone enrolled in the program was required to pay will be waived by farmers who meet USDA criteria as "beginning, limited resource, disadvantaged, or military veteran farmers".

Second, the dividing line between Tier 1 (lower) and Tier 2 (higher) premiums is raised from 4 million pounds of milk covered per year to 5 million pounds.

Third, the premium rates in Tier 1 are substantially lowered, as illustrated in Table 1. Beyond making the \$4.50 and \$5.00 coverage free of any buy-up premiums, the rates at all other levels are lowered 40 to 70%. Coverage levels of \$7 and above are especially more attractive under the new pricing plan.

*Continued next page*



Table 1. Premium for MPP-Dairy, exclusive of \$100  
Administrative Fee (dollars per cwt.)

Coverage Level Threshold	Tier 1 – 2014 to 2017	Tier 1 –2018	Tier 2
	4 M lbs. or less	5 M lbs. or less	above 5 M lbs.
\$4.00	0	0	0
\$4.50	\$0.008	0	\$0.020
\$5.00	\$0.019	0	\$0.040
\$5.50	\$0.030	\$0.009	\$0.100
\$6.00	\$0.041	\$0.016	\$0.155
\$6.50	\$0.068	\$0.040	\$0.290
\$7.00	\$0.163	\$0.063	\$0.830
\$7.50	\$0.225	\$0.087	\$1.030
\$8.00	\$0.475	\$0.142	\$1.360

## What Will or Should Dairy Farmers Do?

Although as of this writing the decision aid tool for MPP-Dairy on the Program on Dairy Markets and Policy website: <https://dairymarkets.org/MPP/Tool/> has not yet been updated, the changes to the program for Tier 1 are sufficiently improved to more than justify giving the program a hard look. The expected results for the ADPM (margin) are illustrated in the decision tool. Although they are currently shown as two-month averages, the changes to the structure of the program do not impact the projection of the margins. As is indicated by the decision tool and obvious from any prospective market analysis in the press, it is widely expected that margins will be well below the \$8 threshold and have a better than 50% probability of being below \$7 through June. Expected margins show improvement in July and August and the probability of payments for the last four months of the year are 1 out of 4 or 5 at the highest, \$8 level.

Every farmer must evaluate their own risk level and make their own decision, but the reductions in the

Tier 1 premiums warrant a second look at an enrollment and coverage decision.

If a farmer has an LGM-Dairy contract for any months of 2018, he will not be able to enroll in MPP-Dairy for those months.

## Changes to Livestock Gross Margin for Dairy

In addition to these changes to MPP-Dairy, which is an income support program operated by the USDA Farm Service Agency, the bill makes an important change that affects availability and appeal of the older Livestock Gross Margin for Dairy risk insurance program (LGM-Dairy).

LGM-Dairy operates somewhat similarly to MPP-Dairy in that it gives farmers an opportunity to establish protection against a contracted level of income over feed cost. The calculation of the margin under LGM-Dairy is different but more importantly LGM-Dairy is designed as a conventional insurance product. It is approved by the Risk Management Agency of USDA but sold through private agents, like any other crop insurance program. Perhaps most significantly, LGM-Dairy coverage levels and premiums vary from month to month depending on market

conditions, unlike MPP-Dairy which always offers the same choice of coverage options at the same price.

As a general rule, when margins are expected to be high, LGM-Dairy offers opportunities to “lock in” an attractive margin and an agreeable cost, but when margins are expected to be low, MPP-Dairy is likely to offer coverage that is both higher and cheaper.

A major limitation to the use of LGM-Dairy is that USDA could offer it at subsidized premium rates, relative to an actuarially fair premium, but it had a limited and relative small amount of money for subsidies. When that money ran out, the LGM-Dairy program had to be suspended until the beginning of the next fiscal year.

The Bipartisan Budget Act eliminates the previous and longstanding funding cap on premium subsidies for the livestock insurance products, including but not limited to LGMDairy. In and of itself this does not create new funding to support LGM premium subsidies but it creates an opportunity to expand funding for that purpose at a later date.

Continued next page

## Background

The U.S. Congress passed The Bipartisan Budget Act of 2018 as the culmination of a particularly difficult set of negotiations to provide ongoing authority for the federal government to pay its bills. This legislation primarily provides a budget framework that will subsequently allow Congress to approve a specific set of appropriations that will enable the federal government to pay its bills. The actual appropriations legislation still needs to be drafted, but the budget plan provides the blueprint for the specific spending approvals.

Beginning with the start of the Federal fiscal year on 1 October 2017, every member of Congress wanted to provide the legislative authority that is required for the government to spend money in support of its employees and programs, but there was considerable disagreement about how much to spend and on what. This created a political environment in which policies that really don't have much to do with a spending plan became part of the negotiation. Funding for military programs and immigration related issues were at the forefront of these negotiations, for example.

The Appropriations Committees of the Senate and the House of Representatives are the starting points for establishing spending approvals for government programs, outside of the so-called mandatory programs, like Social Security, where payments are made based on eligibility not a fixed spending allowance. These spending approvals

are essential for "discretionary" spending, including paying the salaries of federal employees. Although the authority of the Appropriations Committees is limited to establishing amounts of money that can be spent by government agencies for various programs and purposes, it is fairly common for members of Appropriations Committees to essentially modify or even create programs by assigning funding to do a certain thing in a certain way. This is sometimes referred to, in a not so complimentary way, as legislation by appropriation.

The Agricultural Act of 2014 created the Margin Protection Program for Dairy Producers. While it was certainly well



intended, MPP-Dairy has not proven to be a particularly helpful or effective support for dairy farmers, who have suffered below average returns since 2015. In its first two years of operation, farmers paid \$96 million in fees and premiums but only \$12 million was paid in "indemnities". Risk management experts would quickly point out that most people don't take out insurance with the hopes of getting paid – you don't want your house to burn or your car to be wrecked, but critics of the program would say, my house did burn and I didn't get a payment. In the face of this rampant criticism, industry advocates and sympathetic legislators sought ways

to make the program more helpful to dairy farmers. Unfortunately, this has proven very difficult in the normal course of generating a farm bill in the agriculture committees of the House and Senate simply because any changes that make the program more helpful necessarily make the program more expensive. Without specific approval to spend more money on MPPDairy, the agriculture committees had no room to improve the program. A similar situation emerged

with the cotton program that was established under the 2014 Agricultural Act.

Senator Patrick Leahy (VT-D) and Senator Thad Cochran (MS-R) are the Vice Chair and Chair of the Senate Appropriations Committee. Last Spring, they worked

out a fix for the dairy and cotton programs that they could include in their committee's appropriation legislation. This legislative language was included in the Bipartisan Budget Act that was just passed. ■





# In Case You Missed it: **The First NYS Concord Summit at the Grape Discovery Center**

Printed with permission from the Lake Erie Regional  
Grape Program's newsletter, *Vineyard Notes*

## Introduction:

Though the Concord Summit held at the Grape Discover Center in Westfield on Thursday was not the first summit held for Agriculture, joining the ranks of industrial hemp, dairy and a new farm-to-school program in summit topics, it was the first dedicated to the Concord grape. Elected officials, industry representatives, growers, researchers and administrators came together in a public forum to converse about ways to revitalize the Concord grape industry, whose heritage dates back to the 1800s in the Lake Erie region. In addition to integrating the Concord industry into the New York Grown and Certified program

and adding Concord products to the list of ten core products featured at Taste NY welcome centers across the state, New York State's Agriculture Commissioner, Richard Ball, wrapped up the summit by announcing several ways that NYS will do their part to help support the Concord grape industry.

## Key Points from the Head Table:

Richard Ball, New York State's Agriculture Commissioner, facilitated the discussion and asked questions of the panel. Lieutenant Governor Kathy Hochul welcomed guests with the affirmation that summits help to bolster interest in industries and pledged the support of Governor Andrew Cuomo in following through on the actions announced at the Summit. A longtime supporter of the region and its many agricultural industries, Senator Cathy Young addressed the audience with gratitude for their hard work and devotion to the "grape capital of America," adding that she would do

her part to help secure a strong future for the industry. Other elected officials who addressed the public were Assemblymen Andy Goodell and County Executive George Borrello.

Institutions of higher education were well represented at the summit. Dr. Virginia Horvath, President of SUNY Fredonia and Co-chair of the WNY Regional Economic Development Council gave her encouragement to the industry and asked for its members to consider ways that SUNY Fredonia could continue to collaborate on internships or other programs that could help bolster the Concord grape industry. Julie Suarez, Associate Dean of the College of Agriculture and Life Sciences at Cornell University, announced the release of a new table grape with Concord parentage (NY-98) as a product of Cornell's grape breeding program under the leadership of Dr. Bruce Reisch. Dr. Terry Bates, Director of the Cornell Lake Erie Research and Extension Laboratory, noted "the innovation of the growers here is farther along than other places" when describing the role of local growers in a national research project on Precision Viticulture. Dr. Gavin Sacks, Associate Professor in Food Science at Cornell University, has worked with colleagues in product development research involving Concord grapes and/or juice and described some of the innovative processes he and his team are using to facilitate of new opportunities for Concord as an ingredient.

Representatives from the industry on both a farm and processing level weighed in on the past, present and future of Concord. Tim Bigham, Field Supervisor with the New York Farm Bureau, expressed that the Farm Bureau would take ideas from the summit to pursue new policy development to help the Concord industry. Steve Cockram, General Manager of Grower's Coop, pointed out that juice consumption is declining in more than the grape juice sector and that legislators



Photo credit LERGP:  
Head table at the  
NYS Concord Summit  
on Thursday, April 12, 2018

should consider this when developing solutions. Dennis Rak, Director on Boards of Welch's and National Grape, Owner of AA Vineyards, a commercial production facility and nursery that provides clean planting material all over the U.S., showed his support for the NYS Department of Ag And Markets grapevine certification program to certify planting stock and said that he hoped that NYS could model some programs on the successes seen in Niagara-on-the-Lake and Tobacco programs in other states. Alan Rassie, president of Westfield Maid, urged elected officials to consider the need of growers "with no growers, there is no point in having a Concord grape summit", noting that growers had been "in survival mode" for the past several years due to low prices and often bear the brunt of the consequences when industry conditions decline. Nova Cadamatre, Director of Winemaking at Constellation Brands and a Master of Wine, voiced her concern for the "sustainability of our growers, many of whom have been with the company

for three generations." Dawn Betts, Co-owner of Betts Farms in Westfield, NY, described the successes of active collaboration with researchers on the farm and urged elected officials and the industry to continue to support research. Brent Roggie, general manager of National Grape Cooperative, brought the dichotomy of "absence claims" in advertising attention, exclaiming, "exactly what is in there anyway?!" He voiced that Concord should market "take the health and nutrition that we have and advertise what we are."

Other speakers came from associations and foundations with ties to the Concord industry. Patty Hathaway, President of the Concord Grape Belt Heritage Association, gave the opening remarks and hosted the event. Mark Bordeaux, Vice President of the NYS School Nutrition Association, pledged his support for integrating Concord grape juice in school lunches as part of the

Farm-to-School program, the product of a summit last year. Sam Filler, Director of the New York Wine and Grape Foundation, said "everyone is a believer in Concord grapes, supports the effort that is happening [at the Concord grape summit]." He gave a short presentation about the history of Concord, current market conditions and the future of the industry as they see it. NYWGF invests funding into promotion marketing and research to support the grape and wine industry.

### Key Outcomes:

After about two hours of discussion from the panel of speakers, Commissioner Ball cautioned the audience that "summits are not the end of anything, they are the beginning of a lot of work." He then outlined some things that NYS plans to do immediately and also some things that "are going to take some time to develop." There was not a clear differentiation between the action items in terms of their rate of completion, but they are listed below in the order they were announced:

- Continued support for advanced viticulture and enology sciences, specifically Dr. Sacks' denaturing work to remove Concord character from juice and create a neutral blending resource for wine production
- Re-invest in the vine certification program with Cornell University to ensure disease-free planting stock available in April of 2019
- Continue to support Cornell's breeding program to develop new varieties
- Facilitate development of new products and new markets by providing funding to food and beverage manufacturers to develop new product lines using Concord.
  - "Grape State of New York Competition"
- Fund market development matching grants

- Senator Young founded Wine and Grape Caucus to help funnel funds to NYS wine and grape industry and secured \$300,000 for the Food Venture Center at Cornell.
- Potential for tax breaks from NYS to growers looking to plant new cultivars.
- Focus on institutional purchasing of grape juice
- Host workshops to help facilitate new product development and connection with new markets and export opportunities
- Increase representation of Concord industry at domestic and international trade shows (May 2018 American Food Pavilion at the National Restaurant Show, October 2018 PMA Produce Marketing Show, December 2018 New York Produce Show and Conference)
- Start discussion with Commissioner of Health to look at incorporating Concord grape products in the WIC program
- \$1.2M investment in a "Vineyard Improvement Program" for renovation, planting of new vines, or diversification. This will be a cost sharing program for growers to

*Continued next page*



remove “poorly performing or underutilized vineyards, help growers with the cost of new planting stock...”

- Add Concord products as one of ten core products featured at Taste NY welcome centers statewide
- Concord grapes will be featured at the “Grape New York State Fair” with a day designated for grapes.
- Add a category at the Governor’s Cup craft beverage competition for Concord based signature brandy.
- Open New York State Grown and Certified program up to Concord processors (already an option for Concord growers) to communicate to consumer that a product is a New York product, it has food safety embedded in the process of its production, and there is an environmental stewardship aspect to the growing and production of that product.

## Conclusion:

Though stakeholders in the audience did not get a chance to ask questions or add to the discussion, there was a lengthy reception that followed the summit. This provided the opportunity for more candid discussion on the summit and its announced outcomes. It seemed that the summit generated an abundance of questions which will hopefully be answered in short order, especially with respect to the Vineyard Improvement Program. LERGP will do our best to provide a clear channel of communication between NY Ag and Markets and our members and keep you informed as the actions announced at the summit develop. ■

## 2018 WNY Fresh Market Vegetable Twilight Meeting

June 19, 2018

An early season fresh market vegetable discussion of issues and to present information on pest management tools. DEC pesticide certification credits (1a, 10, and 23) will be available for those that attend the entire meeting. Dinner will be served after the meeting at approximately 8:00 PM.

### Session Descriptions:

FSMA Update -- Robert Hadad, CCE Cornell Vegetable Program, will give an update on FSMA and implications for the 2018 season.

Scouting for Sweet Corn Pest -- Marion Zuefle, NYS IPM, will review and demonstrate how to scout and identify the major sweet corn insect pests. She will also discuss action thresholds and best IPM practices for insect control in sweet corn. She will discuss the Sweet Corn Pheromone Network and how growers can use this tool to help make decisions on their farm. Growers will be encouraged to participate in this hands-on activity and ask questions.



Weed Management in Vegetable Crops -- John Wallace, Cornell University and Bryan Brown, NYS IPM, will discuss major weed biology, identification, and weed management tools in vegetables. They will give an update on new herbicides and current tools available for both conventional and organic weed management. These will include tillage, competition, crop rotation, stale seed bed technique, cultural practices, fertility and herbicides. Growers will be encouraged to actively participate, ask questions.

Early Season Vegetable Pest Management Discussion and Crop Walk -- Darcy Telenko, CCE Cornell Vegetable Program, will lead a crop walk and talk about early season pest monitoring and management options in vegetables. Darcy will talk about programs available to monitor and track pests to help implement IPM practices on your farm. Darcy will lead a discussion on 2018 pest issues and review the best crop production practices for managing them. This may include host resistance, pesticides, or techniques that are available to minimize pest damage. Information will be provided for both conventional and organic growers at all levels of expertise. ■

**Date:** June 19, 2018

**Time:** 5:00 PM - 7:55 PM;  
dinner served at 8:00 PM

**Location:** W. D. Henry & Sons, Inc.  
7189 Gowanda State Rd  
Eden, NY 14057

**Cost:** This event is **free** to growers due to the support of sponsors! Since dinner will be provided, please call us or register at [cvp.cce.cornell.edu](http://cvp.cce.cornell.edu) to let us know you plan to attend so that we can place the dinner order.

**Host:** Cornell Vegetable Program  
Darcy Telenko 716-697-4965

## Pasture & Farm Walk Offered to Area Producers at Garry Wilson Beef

May 17, 2018 • 6:30 PM – 9:00 PM

Join us as we walk Garry Wilson's rented pastures where he grazes stocker cattle and discuss improvements. Nancy Glazier, Small Farm Specialist for Cornell Cooperative Extension's NWNy Team will lead discussion at 8962 Transit Rd, Stafford (approx. address) Thursday, May 17 starting at 6:30 pm. Garry will begin the discussion his objectives for the summer grazing season in regards to improvements, rotating the cattle through the pastures, and supplemental feed at the old railroad right of way. He has some ideas, but is open to suggestions. We will end the evening at Garry's home farm at 9420 Warsaw Rd., LeRoy for further discussion and refreshments.

**Registration is required** by May 15  
for planning purposes.

**Cost** for the event is \$10 per person.

**To register contact** Cathy Wallace at  
585-343-3040 x138 or cfw6@cornell.edu. ■



## 2018 Hops Production in the Lake Erie Region Conference

Saturday, June 30, 2018 | 9 AM - 4 PM

Cornell Lake Erie Research and Extension Laboratory

Meeting Room and Hop Yards | 6592 West Main Road, Portland, NY 14769

Come spend the day with talks in the classroom setting followed by time in the hopyard. The focus of this year's meeting will be how to effectively market your hops. The day will begin with registration and morning refreshments, morning classroom session, catered lunch, afternoon talks and hopyard tours with time for Q & A.

**Registration fee:** \$50 per person

### To Register:

Request a registration form by calling the number below and mail in to CLEREL or  
For credit cards please visit our website at:  
<http://lergp.cce.cornell.edu>

**Questions:** contact Katie at  
716-792-2800 or kjr45@cornell.edu

Class size is  
limited to 80  
-sign up early  
to reserve  
your spot



co-hosted with  
**Cornell Cooperative Extension  
Erie County**



# Germination Chamber Case Study

Name: Lenny Prezorski  
 Farm Name: Cold Spring Farm  
 4953 State Route 145, Cobleskill, NY 12043  
 Email: Imp1358@hotmail.com

Case study prepared by Crystal Stewart of Cornell, Cooperative Extension's Eastern NY Commercial Horticulture Program: enych.cce.cornell.edu or cls263@cornell.edu



"We begin germination on March 1st and continue until June. A wide variety of flower and vegetable seeds are germinated throughout this period. We go from impatiens to seedless watermelon and would especially like to be able to germinate light sensitive seeds."



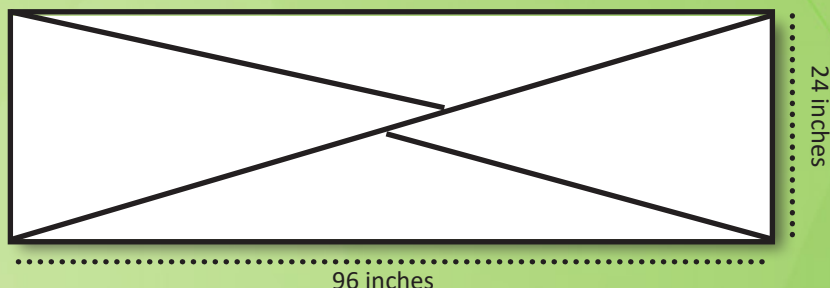
This chamber consists of a custom-fabricated metal frame with poly-coated racks. The insulation is solid foam board. Humidity and heat are provided by a water pan with a heat element placed in the bottom. The thermostat controls are mounted on the outside of the unit. Supplemental lighting is mounted on the top of the unit, providing illumination to the first row of trays.

Metal Frame Costs			
	# of Units	Unit Cost	Total
1.75" Square steel greenhouse endwall tubing	66	\$2.35	\$155.10
1/2" galvanized conduit for shelf supports	18	\$5.50	\$99.00
Fabrication cost	1	\$650	\$650.00
Casters, 4 inch rigid	2	\$22.99	\$45.98
Casters, 4 inch swivel	2	\$22.99	\$45.98
Insulation and Shelving Costs			
Close mesh pantry shelving	9	\$21.97	\$198
2-inch foam board (4'x8' sheets)	4	\$33.92	\$135.68
Tuff-R r12 insulation board 7/8"	2	\$31.95	\$63.90
Foamboard adhesive	2	\$3.58	\$7.16
Tek Screws, box of 30	1	\$5.49	\$5.49
Electronic Equipment			
Thermostat	1	\$116.72	\$116.72
LED lighting strip	1	\$201.15	\$201.15
Aluminum pan and heating element	1	\$61.53	\$61.53
Assembly of chamber			
Labor	10	\$20	\$200.00
<b>Grand Total</b>			<b>\$1,985.42</b>

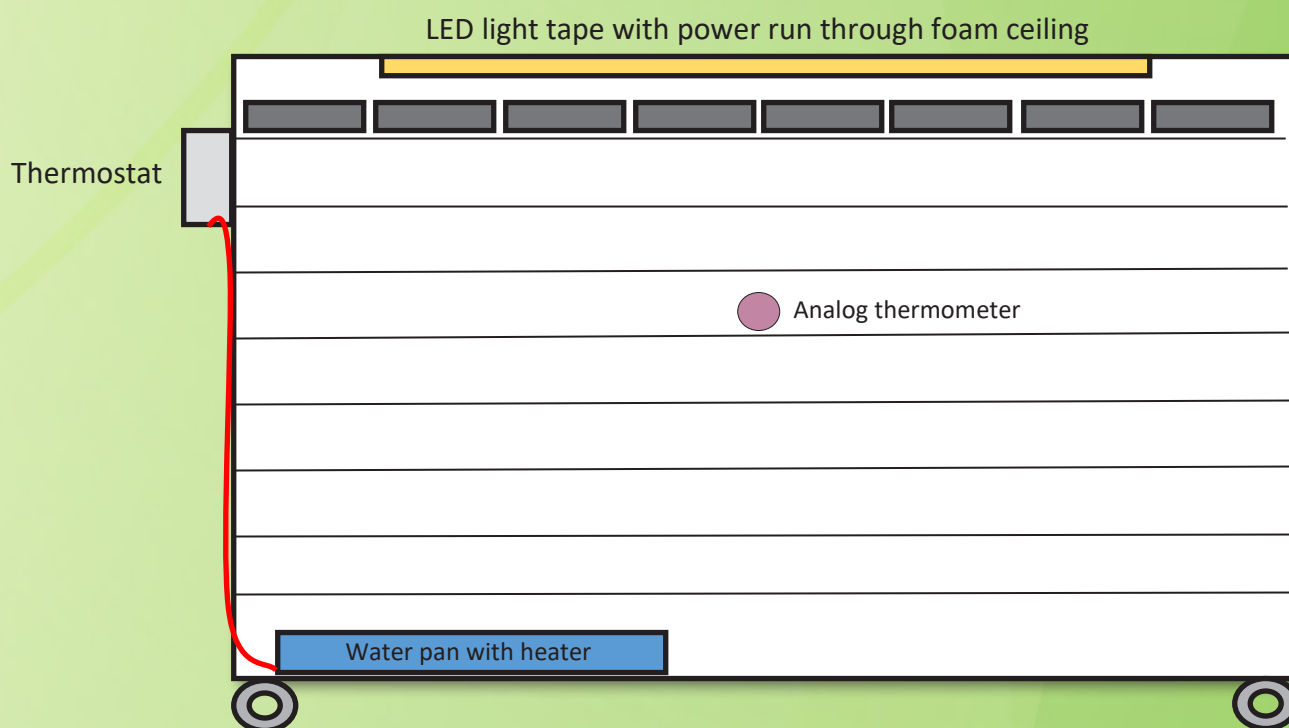
## Construction Sketches

### Top view of shelf support:

the dimensions of the unit are 24x96, with cross braces made of welded conduit on each shelf to support the wire mesh. Nine shelves are welded to the frame, which is described below. An LED light strip is mounted on the ceiling of the chamber.



**Side view:** the frame is made from square 1.75 inch steel greenhouse endwall framing material. Foam board is attached on the outside of the framing using Tek Screws. The door is a piece of foam board the size of the front mounted on a channel that allows it to slide. It is held in place by a 2x2 piece of lumber across the front (see picture next to profile)



This chamber is located inside the greenhouse, and is powered by an extension cord. Because the unit is in the greenhouse, high temperature controls have been a more significant factor than low temperature controls, which are automatically corrected by the heating element located in the chamber. During year one of use, high temperatures were regulated by opening the door of the chamber to release warm air. This strategy relies on human monitoring

and intervention, which is not ideal. In the future Lenny would like to install a thermostat-driven exhaust fan in the chamber.

The fact that the chamber needs venting for temperature control may contribute to sub-optimal relative humidity as moisture is lost during the venting process. This is a concern which growers wanting to site chambers in the greenhouse instead of a cooler head house should be aware of.

### Key Suppliers for this Project:

- **Waterproof LED strip light:** Allied Electronic: <http://www.alliedelec.com/>
- **Steel endwall framing:** Nolts Greenhouse Supply: <http://noltsgreenhousesupplies.com/>



# Blueberries:

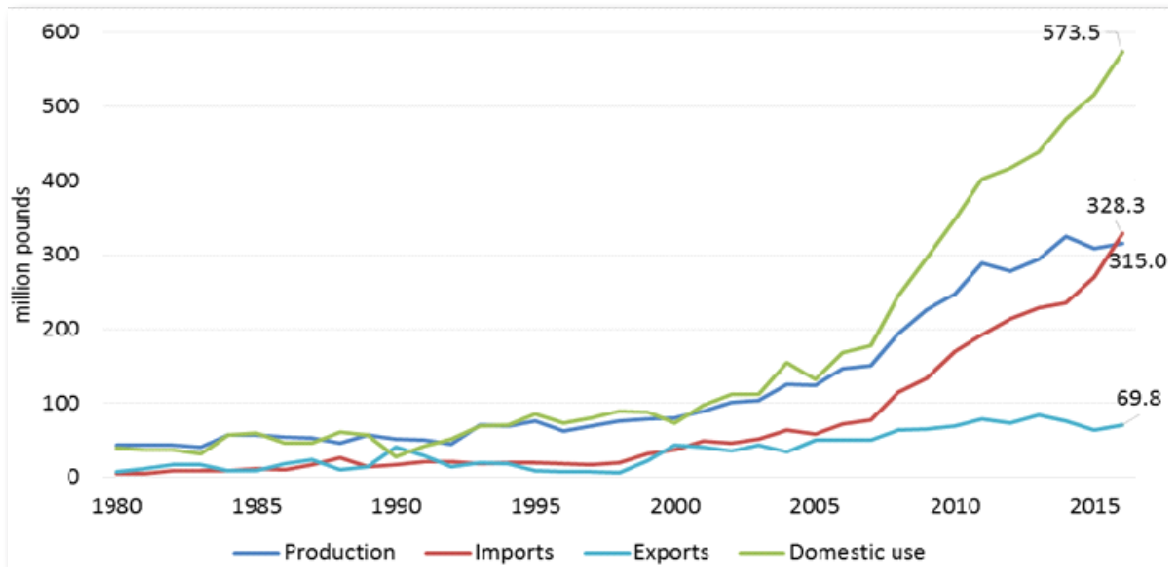
## Is Supply Developing More Rapidly than Demand?

Kristen Park<sup>a</sup> and Roberta Cook<sup>b</sup>

<sup>a</sup>Dyson School of Applied Economics and Management, Cornell University; <sup>b</sup>Fresh Produce Marketing Consulting, Dixon, California and Cooperative Extension Marketing Economist Emerita, Department of Agricultural and Resource Economics University of California, Davis

Berries fit global preferences for healthful eating, convenience, and flavor. They are easy to consume and the many different uses for snacks, salads, and baking favor the growing demand. Strawberries are the leading berry globally but other berries are rapidly gaining shelf-space in supermarkets led by blueberries. North America, including the U.S., Canada, and Mexico, has the most developed fresh blueberry market in the world with year-round availability from blueberry domestic production, exports, and imports (Figure 1). Approximately 573.5 million pounds of blueberries are consumed in the U.S. market.

Figure 1. U.S. Blueberry Production and Consumption, 1980-2016

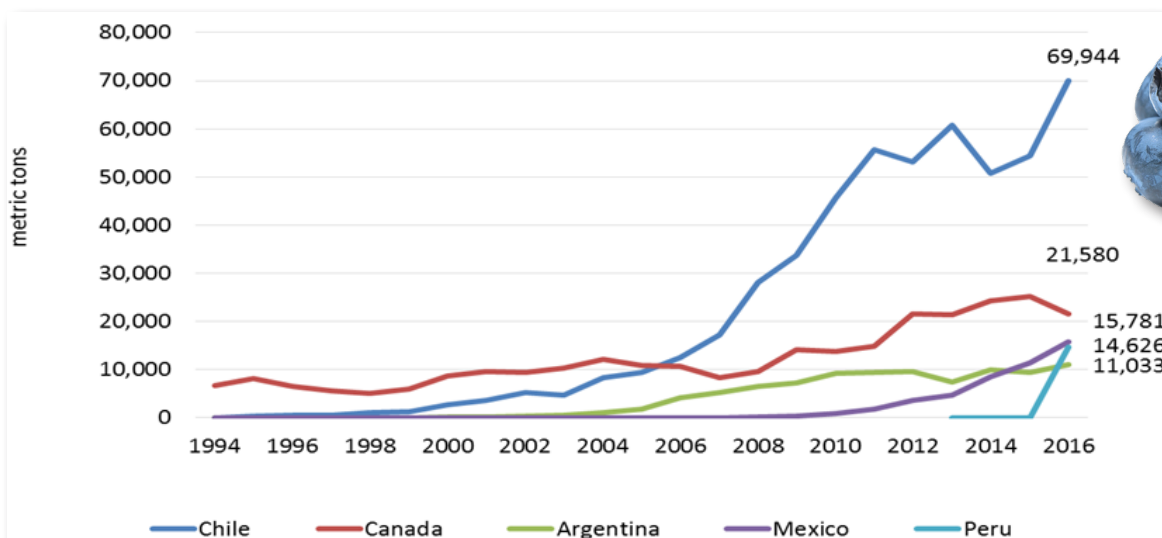


<sup>1</sup> Beginning in 1993, includes wild blueberry fresh-market production.

Source: USDA, ERS, 2017 Fruit and Tree Yearbook, Supply and Utilization tables. February 1, 2018.

U.S. blueberry consumption was given a boost in the mid '00's as imports from Chile and Argentina rose to supply consumers in the winter months, enabling retailers to dedicate year-round shelf-space to the berry category. Chile is the leading importer of blueberries to the U.S. (Figure 2).

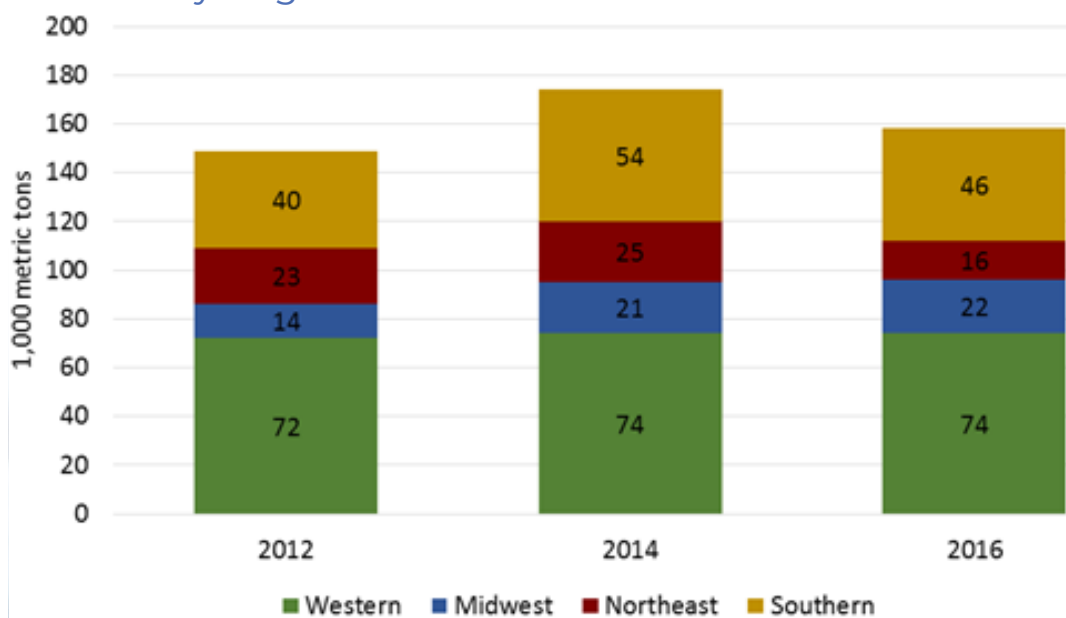
Figure 2. U.S. Blueberry Imports by Country of Origin



Source:  
USDA, ERS, U.S.  
Blueberry Industry  
and USDA, ERS,  
Fruit and Tree  
Nut Data, Data  
by Commodity.  
February 1, 2018.

The International Blueberry Organization (IBO) publishes a Global Blueberries Statistics and Intelligence Report that comes out annually, most recently in April 2017, with data for 2016. It incorporates data from the USDA. This indicates that about half of the U.S. production now occurs in Western U.S. (Figure 3). Lately, Southern U.S. and the Midwest have appeared to increase their production, while the Northeast production has varied widely.

**Figure 3.**  
**Fresh Highbush Blueberry**  
**Production in the U.S.,**  
**by Region**



Source: Global Blueberry Statistics and Intelligence Report, International Blueberry Organization (IBO), April 2017.

With so much growth in production and consumption in the last 10 years, the industry should be ready for changes. According to Roberta Cook in a recent presentation at the New York Produce Show, Global Symposium in December 2017, the U.S. tends to focus more on the domestic market than they do on exports. Because demand is increasing in other parts of the world, one would think there might be opportunity for U.S. exporters. For example, European retail chains are seeking more supplies. But Europe is quickly developing its own sources of supply, closer to market.

The good news is global demand is increasing fast for all the berries. Cook has a recommendation for U.S. growers interested in marketing blueberries to Europe. When exporting from the U.S. to Europe, you have to be global-GAP certified and meet some different requirements and maximum residue levels. Hence, firms in the blueberry industry that want to export to Europe need to think about it with a long-term approach, setting up operations so they have dedicated relationships with buyers to justify the certification and other requirements.

However, Cook cautions the industry that rapid expansion in global fresh highbush blueberry industry means risk of oversupplies. Within only three years, Peru has emerged as a significant player, surpassing Argentina. Moreover, many believe that within a few years it will surpass Chile's production as well.

Production of blueberries is increasing throughout Europe to meet local summer demand. Spain is the leader in supplying the European market and along with Portugal is developing production for the spring market. In addition, low-chill and no-chill varieties bring warmer areas into production, including Morocco. S. Africa

has started to increase production for the EU fall window. Cook predicts the Northern Hemisphere's fall window will see rapid growth in global supply & market share battles.

Quality issues may impact who supplies the markets.

- Argentina did not have to focus as much on quality because they had the fall market pretty much to themselves. This is no longer the case. Their blueberries require fumigation when entering the U.S. market, which can reduce quality. Argentina ships mainly by air in order to reach markets quickly, but is shifting some volume to boats in order to reduce costs in the increasingly competitive fall market.
- Peru can ship by boat using a cold treatment; if berries are held for a certain number of days at a certain temperature, they will meet APHIS requirements, and controlled atmosphere, post-harvest practices help ensure good arrival quality into the U.S. market.
- Mexico does not have to fumigate and has the advantage of proximity to market and overland shipment.

*Continued page 24*





*Continued from page 23:  
Blueberries...*

Mexico's new industry originally targeted the fall market; however, it has the ability to prune plants to produce in the winter time and into the early spring. This enables Mexico to potentially hit high prices when there is not a lot of Chilean fruit left in

the market and before the major production has started in the U.S.

The question is, is supply developing more rapidly than demand? Cook has the following insights and recommendations:

- Blueberry production is expanding rapidly, increasing global competition throughout the year. In the next five years, firms need to focus on quality and on providing services to customers to be competitive.
- Firms that are successful will be thinking globally. Fortunately, there are companies in the berry industry that are visionary, and firms on the retail

side can invest in the berry category quite confidently.

- Blueberries are much lesser known in Europe and may require more investment in marketing.
- U.S. blueberry demand has grown rapidly but growth rates are slowing as the market matures. This may contribute to supply-side consolidation in the North American market.

**"Smart Marketing"** is a marketing newsletter for extension publication in local newsletters and for placement in local media. It reviews elements critical to successful marketing in the food and agricultural industry. Please cite or acknowledge when using this material. Past articles are available at <http://dyson.cornell.edu/outreach/smart-marketing-newsletter>. ■



## Farm Shops – Part 2

by Timothy X. Terry, Harvest NY

In the last issue we started talking about farm shops and how things should be laid out. This issue we'll begin looking at some of the various components.

### The Floor

Having worked in many shops with floors that range from gravel and tracked in mud to concrete with an epoxy coating I can safely say the smoother the better. Some will say, "just screed it off and that'll be good enough." However, if you are using rolling tool boxes,

mechanic's creepers, and/or moving hoists with sliding chain falls, ridged and pitted concrete will be an object of perpetual frustration. Moreover, smooth concrete is much easier to seal, keep clean, and small parts are not as likely to be lost when dropped.

To achieve a smooth surface you'll need to level it with a vibratory screed and follow that with a bull float. This will consolidate the surface – push the aggregate down and bring the cream (sand, cement) up. Once the concrete has cured to the point where you can press your fingers into the concrete and leave a small impression but the cream doesn't stick to your fingers you can begin to do the final steel trowel finishing. (If you're not familiar with steel

trowel finishing or operating a power trowel, there are many how-to videos on YouTube.)

The concrete itself should be 4,000 psi minimum with proper steel reinforcing. (Yes, you will need steel reinforcing.) If you're planning on bringing in equipment weighing 20,000 lbs. or more you'll need the reinforcing to help control cracking and heaving. Plus, the steel gives you something with which to anchor the PEX piping if you'll be using in-floor radiant heating.

One more thing before we leave this subject: a good finish requires a good start. The subgrade should be well drained and compacted. If any part of the shop will sit on fill then it, too, should be well compacted or allowed to go through a freeze-thaw cycle. Install all drains, water supply pipes, electrical conduit, etc. prior to the final compaction. Installing a 6-mil poly vapor barrier will keep moisture from migrating out of the bottom of the slab too quickly. Remember, the hardening of concrete is a chemical (curing) not a drying (evaporation) process. Similarly

*Continued page 25*

# Erie County 4-H Tractor Certification Program

by Tammi Kron



Our 2018 program will be working with 5 youth beginning April 23. Youth will participate in 24 hours of instruction at Cornell Cooperative Extension of Erie County. Upon completion of instruction youth will participate in hands on opportunities in driving a tractor and proper implement handling.

Youth ages 14 and 15 years old seeking employment in production agriculture must comply with the training requirements of the U.S. Department of Labor's Hazardous Occupations Order in Agriculture (AgHOs) law.

As part of meeting the training requirements, youth must complete an approved training program. The National Safe Tractor and Machinery Operation Program (NSTMOP) is a comprehensive program that consists of 24 hours of intensive instruction that incorporates the use of task sheets accompanied by skills and driving instruction. After completing classroom instruction, each student must complete a 50-question written knowledge test and obtain a minimum passing score of 70%. Once a student successfully passes the knowledge test, he or she is then permitted to take the program's operating skills and pre-op/driving tests. Upon successful completion of all parts of the NSTMOP, the student receives a formal USDOL certificate of completion. ■

*Continued from page 25: Farm Shops*



you'll want to apply a sealer or some more 6-mil poly to the top surface to keep it from curing too quickly. You'll also want to wait at least four weeks before you drive anything heavy across the slab. Failure to do so could result in micro-cracks that can grow into more serious fissures over time.

## Doors

With larger equipment comes the need for larger doors. A 14' high opening should accommodate any-thing that can travel on the road. Width, however, may be a limiting factor. The long sides of the shop will likely be load bearing. In other words they are carrying the weight of the trusses, roof, etc., and, therefore, you'll need to support all that weight when spanning the door opening. Given this, most post

frame struc-tures are limited to 16'-18' wide doors on the side. For-tunately, the ends are not usually load bearing and of-fer more opportunity for wider doors. In fact, you could open the entire end like an aircraft hangar. (ex.- <http://www.hpdoors.com/index.asp?active=home> ) Be aware, large openings should be limited to the south and/or east walls. However, if large doors are installed opposite one another large equipment may be driven straight through eliminating the need to back things out, especially if they are multiple units (i.e. – tillage + finishing equipment). Install 36" entry doors at common access points. This will save having to open large overhead doors every time someone comes in or goes out.

## Office Space

Consider a 10' x 10' office as a minimum. A 10' x 12' or even a 12' x 14' would be better. This will give you enough room for a desk, file cabinets, manuals library, and a couple of chairs to meet with employees, con-sultants, suppliers, etc. If possible, tuck the office into a corner so that you can have outside windows on two sides.

Like the doors, place the office near common access points. It doesn't do anyone any good to have to walk to the far back corner to have a meeting, make a phone call, or look up a part number. Locating a bath-room (w/ shower) and a locker room next to the office will help fill out the corner and make efficient use of the space.

## And speaking of windows...

The more windows the better. This lets in natural light which can often mean not having to flip on a bank of lights just to get a single part or tool. Moreover, time-motion studies confirm that employees in windowed workspaces stayed on task 15% more than those in windowless workspaces. ■



# Harvesting Aesthetics and Forest Sustainability

Peter Smallidge, NYS Extension Forester and Director,  
Arnot Teaching and Research Forest,  
Contact Peter at pjs23@cornell.edu, or (607) 592-3640.

Forest harvesting, or logging, happens throughout New York. Harvesting is often described with unfavorable terms, but those terms or labels need to be considered relative to some standard or measure of performance. Labels such as good, bad, or ugly are subjective. As with any endeavor, the outcome of any individual harvest will exist somewhere along the full spectrum of results. However, there are attributes of harvesting, aesthetics, and sustainability that tell an important story about the practice of forestry in NY.

In all cases, the first rule of harvesting is that the cutting of trees should support the owner's objectives. Harvesting is a means to an end. Harvesting can simultaneously support multiple objectives that might include revenue, wildlife habitat, recreational access or forest health. Proper planning and execution of the harvest help ensure the objectives are satisfied.

One aspect of harvesting is that it necessarily applies economic principles and must satisfy some measure of financial or personal accountability. Harvests range from a woodlot owner cutting a few cords

of firewood to large intensive harvests that remove all of the trees on dozens of acres. In all harvests, the people working on the job have invested some amount of time, energy, machinery, labor and often money. They rightfully expect a return; the return might be non-monetary and as simple as the pleasure of heating your home with your wood. Or, the return might be part of a complicated business structure of acquiring a raw material for processing and eventually delivery of value-added products. The former example of firewood may not pass muster with your accountant, but the latter must be financially defensible.

Loggers are an inextricable part of forest practices. Loggers need to purchase and maintain equipment, make payroll for employees, buy and then sell the logs, and more (Figure 1). In this regard, the logger is not different from a farmer or plumber or dental hygienist. Each invests in their skill, acquires the resources they need to do their job, and anticipates some personal

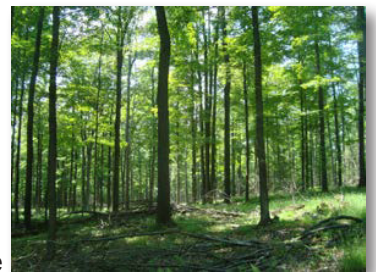


**Figure 1.** The logging crew on this harvest includes 3 to 4 workers, 6 pieces of equipment, and contracts with two log truck drivers. They take pride in sustainable harvesting, but also sustaining their livelihoods.

gain. Every logger is commercial in that they engage in commerce. As with any profession, just because money is involved doesn't presuppose a problem, nor should the influence of money justify mistreatment of other people or resources.

The question then becomes what constitutes mistreatment of the forest resource, and might contribute to a change in aesthetics or unsustainable practices. Aesthetics are important to most woodland owners, and harvesting changes the aesthetic of the woods. Aesthetics can be defined as judgements of sentiment and thus of beauty. The aesthetics of the harvest is in the eye of the beholder. The way a forest looks after a harvest may be a result of differences in the number of trees, the heights and diameter of trees that remain, the amount and height of woody material (known also as "slash") left behind, if there is damage to the residual trees, or the length and depth of ruts. The extent of disturbance in a forest harvest is not different, and maybe less so, than new house construction or the annual harvest of agricultural crops. Judging the aesthetic of a harvest is complicated by the decades of almost imperceptible changes that precede the harvest. Our attachment, context and expectations for a woodland influence our judgement of the harvesting activity.

The assessment of sustainability depends on how the forest changes relative to the outputs it will provide in the future. Will the future forest have at least the same benefits as the current forest? Forests are constantly changing, or in forester jargon as "developing." Most eastern forests originated after agricultural lands were abandoned. The trees of these second-growth forests are all about the same age (Figure 2), but have trees of different species and different sizes (think about a class of 6th graders... all the same



**Figure 2.** These hardwoods all started growing after agricultural lands were abandoned. Although different sizes, they are all the same age. The bigger trees are the "winners" and should be retained to produce the seed to grow the next forest.

age and species, but all different sizes). Eventually, many even-aged forests are harvested and replaced by the next forest. This pattern is similar to your even-aged vegetable garden that is weeded, and eventually harvested and replaced. While your garden is replaced annually, your forest might exist for a century or more before the final harvest.

Broadly, there are two types of harvesting. One type should improve the residual forest, the trees remaining after the harvest, by reducing the amount of disease, increasing the growth rate on the best quality stems, and/or adjusting the mixture of species to favor some species over other species. These changes relate to composition, quality and growth and are equivalent to the weeding you do in your garden. This type of forest harvesting includes the “intermediate harvests” (intermediate between the beginning and ending points of the forest as it develops) that have technical names such as: thinning, timber stand improvement, sanitation, or crop tree release to name a few. The other type of harvest removes the current mature cohort or age classes during one or more entries and allows a new age class to establish, or if already established to further develop. This second type of harvest might include several harvests over a decade or more and are called “regeneration harvests.” The common technical names of regeneration harvests include: clearcut, seed tree, shelterwood, or selection. All regeneration harvests ultimately involve the removal of the most mature age-class of trees to allow a younger age class to establish or to further develop if already established.

By knowing these types of harvests, and their intended outcomes, one assessment of sustainability can consider whether the intended outcome was attained. As an additional tool to assess sustainability, the misuse of the language of harvesting

may indicate an unsustainable activity. For example, someone suggesting the need to “thin the woods to let some new trees establish” is mixing the language of intermediate and regeneration harvests, and suggesting they will accomplish an ill-conceived outcome. If the intent is to improve the current forest, then the trees selected for harvest may exclude trees have one or more desirable criteria (Figure 3). In intermediate harvests, the

**Figure 3. This seed tree harvest retained the best quality sugar maple having full crowns and no evidence of dieback. These trees will provide seed to grow the next forest.**



average size of residual trees should typically increase as should their health and vigor. If the intent is to regenerate or favor an established new age class, then the harvest should provide appropriate conditions of sunlight and soil disturbance to ensure success.

There are some unfortunately common examples of unsustainable harvests. One example is typified by statements such as “just cut some of the over-mature trees”, or “cut the big ones to let the little ones grow.” These imply, usually falsely, that the larger trees are older than the smaller trees of about the same height. Certainly a seedling is younger than a canopy tree, but two trees in the canopy are almost certainly the same age. These examples of cutting practices are exploitive, and occur by cutting all trees above a certain diameter threshold or only the most valuable trees. These are called “diameter-limit” or “selective” harvests.

Another example, increasingly recognized as unsustainable, is a regeneration harvest that fails to manage the impacts of deer or the abundance of interfering vegetation. Deer and interfering vegetation are an article each, but either can result in an unsustainable regeneration harvest (Figure 4).



**Figure 4. Deer can significantly and negatively impact the sustainability of the forest. The fence in the harvested area shows what can happen if deer are excluded. By selective browsing, deer can impair or prevent the regeneration of the next forest. (Photo courtesy of Dr. Gary Alt)**

Aesthetics and sustainability are both important, and both can be managed to satisfy the objectives of the landowner. The first step is to hire a forester who understands your values relative to aesthetics and your commitment to sustainability. Then, if your forester doesn't suggest it, ask to participate in a New York Forest Owner Association walking tour of a managed woods (Figure 5) so you can visualize different types of harvests and how the forest changes with time after a harvest. ■

**Figure 5. Chapters of The New York Forest Owners Association sponsor walking tours of managed woodlands, called woods walks, to help members and others learn about sustainable woodland management.**





**Cornell Cooperative Extension**  
**Erie County**

21 South Grove Street  
East Aurora, NY 14052  
—Return Service Requested—

# Erie County Ag News

Cornell Cooperative Extension of Erie County Publication

SPRING/SUMMER 2018

## What is it?

### The clues are:

- First cultivated in Germany as a subsistence measure during World War I and is now grown commercially around the world for food.
- Can be cultivated indoors by using buckets and composted straw.
- Add's life to a party because he's a fun-guy.



Check **Facebook** for the answer!

***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.