

# FARM & GARDEN



Cornell University  
Cooperative Extension  
Chemung & Tioga Counties

## NEWS AND NOTES FOR FARMERS & GARDENERS IN CHEMUNG AND TIOGA COUNTIES

February 2019

### News From CCE

By Barb Neal, CCE Tioga

Happy February! The month has certainly started with some amazingly warm weather—and I for one appreciate it!

There are so many workshops that are being held in our counties and in our region that they threatened to dominate the whole newsletter! Take your time and read about these wonderful presentations—and commit to attending at least one of them.

What will it be? Mushrooms, maple syrup, vegetable gardening, farm taxes? There is truly something for everyone.

I have been swamped with calls about growing the now legal hemp plant. **If you are interested in growing hemp please let me know.** The permit application window for CBD hemp has closed, but there are some big processors moving into the area and they are looking for growers to work with. Applications for fiber/grain hemp are rolling and will be accepted by Ag and Markets.

Want to pass on your love of farming to your children or grandchildren? Start by having them take the tractor safety class offered by 4H. See the details below.

See you at the workshops!

### Tioga County 4-H Tractor and Machinery Operations Certification Program

Tuesday Feb. 5, 2019 in the auditorium of the Ronald E. Dougherty County Office Building, 56 Main St., Owego, at 7:00 p.m.

The cost of the program is \$35.00 for non 4-H members and \$25.00 for 4-H members. Registration forms and brochures can be picked up in advance from the Cornell Cooperative Extension, Tioga County Office, 56 Main St., Owego, NY. Dates for the remaining classes which will be held at various farm and equipment dealers in Tioga County are: Tuesdays: February 12, 26, March 5, 12 and 19 from 7:00 to 9:00 p.m. each night. Three classes will be held on Saturdays, February 23, and March 2 from 10:00 a.m. to noon, and March 23 from 9:00 a.m. to noon. To find out more about the Tioga County 4-H Program contact the 4-H Office, Cornell Cooperative Extension, Tioga County at 687-4020 or visit our website at [tioga.cce.cornell.edu](http://tioga.cce.cornell.edu). program and employment opportunities. Contact Jody Tatich [jdt22@cornell.edu](mailto:jdt22@cornell.edu) if you have any questions.

### Inside this issue:

- Ag Workforce project
- Old Skills, New Food
- Kingbird Farm profile
- Theobroma cacao
- Better apple pollination
- Lots of workshops
- And more!



Barb Neal, CCE Tioga Agriculture and Horticulture Educator, [ban1@cornell.edu](mailto:ban1@cornell.edu)

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Mary Kate Wheeler, SCNY Farm Business, [mkw87@cornell.edu](mailto:mkw87@cornell.edu)

## Workshop: Starting Your Vegetable Garden

**February 20, 2019; 2:00 – 3:00 PM.**

Starting a vegetable garden at home is a great way to spend time with children or spend time outdoors in the sun. Planting a garden with vegetables also rewards you with nutritious fresh vegetables, enjoyment and economic savings. Join Cornell Cooperative Extension of Chemung County to learn how to start a vegetable garden. No space? Don't worry! We will also talk about square foot gardening, vertical gardens, container gardening, etc.



**Speaker:** Jingjing Yin, Horticulture Educator at CCE of Chemung County

**Place:** Steele Memorial Library (IT room), 101 E Church Street, Elmira, NY

**Workshop fee:** Free, [but a \\$3 suggested donation helps support our Horticulture program.](#)

## **2019 Peter Levatich Memorial Seminar for Rural Landowners Enjoying Your Woods for More Than the Trees**

Saturday, February 9<sup>th</sup> 9:30 am to Noon

@Spencer-Van Etten High School, State Route 34, Spencer



February 9<sup>th</sup> from 9:30 am to noon at the Spencer-Van Etten High School on state route 34, Spencer. The Southern Finger Lakes Chapter of the NY Forest Owners Association ([www.nyfoa.org](http://www.nyfoa.org)) invite you to their popular annual seminar to learn about "**Selling Timber from Your Woods: What's It Worth and How To Do It Right!**" This year's speakers feature NYS Extension Forester Peter Smallidge and consulting forester Jim Shuler. Other foresters will also be on hand, so bring your questions! Attendance is free and open to the public. Light refreshments and door prizes. Pre-registration is NOT required, but questions can be referred to Brett Chedzoy at Schuyler CCE: [bjc226@cornell.edu](mailto:bjc226@cornell.edu),



or by phone: 607-535-7161. In the case of cancellation due to extreme weather, notification will be posted by 9:00 p.m. on Friday, Feb. 8<sup>th</sup> at CCE's forestry forum: [www.cornellforestconnect.ning.com](http://www.cornellforestconnect.ning.com)

For more specific information about the Chemung County Master Gardener program, please contact Jingjing Yin at 607-734-4453 or [jy578@cornell.edu](mailto:jy578@cornell.edu).

For more information about the Tioga County Master Gardener program, please contact Barb Neal at 607-687-4020 or [ban1@cornell.edu](mailto:ban1@cornell.edu).



## Cooking Classes—So Much Fun! And Tasty!

Well, the cooking classes got off to a rough start, in that educator Barb Neal was sick the first week and then the second week was postponed due to snow. But we prevailed, and have had two wonderful workshops. We have made mozzarella cheese (and ricotta cheese, but not by design), taste tested tomatoes and apples, canned applesauce and learned some basic knife skills.

Public service announcement: by unanimous acclaim, our favorite apple of the 11 we tried was Shizuka, a green apple from Cornell Orchards. It was given a thumbs up by all seven of us! Also by acclaim was the brown and somewhat ugly Kumato tomato from Wegmans. Despite its not particularly appetizing color, the taste is really close to home-grown! Join us for the rest of the cooking classes!



- 1. Combining plant-based proteins**—We will introduce basic nutritional science and why you need a balance of proteins, fats and carbohydrates. We will prepare a protein-rich vegetarian meal and learn place setting as we serve it. We will also discuss vegetable gardening and introduce the concept of Katie's Krops and Seed to Supper. **February 23rd**



- 2. Learning from Indigenous Cultures**—We will learn about indigenous cropping systems and focus on the Three Sisters: corn, beans and squash. We will grind our own Iroquois white corn, and then make a traditional snack using each of the three sisters, drizzled with maple syrup. **March 9th**

- 3. Homemade potato-leek pizza**—we will make our own pizza dough, discuss the microbiology of bread, mill our own flour, discuss how leeks and potatoes can be grown at home, and learn basic knife skills. **March 30th**

- 4. Yogurt, berry and granola parfaits**—we will make our own yogurt and granola, discuss how yogurt is created using live bacteria, learn how to plant and care for blueberry bushes and strawberry plants, and learn about vitamins and minerals in your diet. **April 27th**

Classes are free, and run from 10 am to noon. Please call 607-687-4020 to register.

# The Tree of Love: Better Living Through Chemistry

Paul Hetzler, CCE St. Lawrence

It's impossible for a parent to choose a favorite child—or at least that's what I tell my kids—and it's almost as difficult for an arborist to pick a single best-liked tree. For different reasons, I have many pet species. One of the, um, apples of my eye is a species I've never laid eyes on, but it's one I've appreciated since early childhood.

Native to Central America, the cacao tree (*Theobroma cacao* to arborists) grows almost exclusively within twenty degrees latitude either side of the equator (in other words, where most of us wish we were about now). The seeds of the cacao tree have been ground and made into a drink known by its Native American (probably Nahuatl) name, chocolate, for as many as 4,000 years.

The cacao is a small tree, about 15-20 feet tall, bearing 6- to 12-inch long seed pods. Packed around the 30-40 cacao beans in each pod is a sweet gooey pulp, which historically was also consumed. After harvest, cacao beans go through a fermentation process and are then dried and milled into powder.

In pre-contact times, chocolate was a frothy, bitter drink often mixed with chilies and cornmeal. Mayans and Aztecs drank it mainly for its medicinal properties (more on that later). In the late 1500s, a Spanish Jesuit who had been to Mexico described chocolate as being “Loathsome to such as are not acquainted with it, having a scum or froth that is very unpleasant taste.” It’s understandable, then, that it was initially slow to take off in Europe.

Chocolate became wildly popular, though, after bril-



Image from Bugwood

liant innovations such as adding sugar and omitting chili peppers. Another reason for its meteoric rise in demand is that it seemed to have pleasant effects. One of these was similar to that of tea or coffee. There isn't much caffeine in chocolate, but it has nearly 400 known constituents, and a number of these compounds are uppers.

Chief among them is theobromine, which has no bro-mine—go figure. It's a chemical sibling to caffeine, and its name supposedly derives from the Greek for “food of the gods.” Even if people knew it more closely translates to “stink of the gods,” it's unlikely it would put a damper on chocolate sales.

These days chocolate is recognized as a potent antioxidant, but throughout the ages it's had a reputation for being an aphrodisiac. I assume this explains the tradition of giving chocolate to one's lover on Valentine's Day. Does chocolate live up to its rumored powers? Another stimulant it contains, phenylethylamine (PEA), may account for its repute.

Closely related to amphetamine, PEA facilitates the release of dopamine, the “feel good” chemical in the brain's reward center. Turns out that when you fall in love, your brain is practically dripping with dopamine. Furthermore, at least three compounds in chocolate mimic the effects of marijuana. They bind to the same receptors in our brains as THC, the active ingredient in pot, releasing more dopamine and also serotonin, another brain chemical associated with happiness.

Don't be alarmed at this news; these things are quite minimal compared to what real drugs can do. Consuming chocolate has never impaired my ability to operate heavy machinery (lack of training and experience have, though).

Most people would agree that chocolate is no substitute for love, but these natural chemical effects may be why romance and chocolate are so intertwined. Well, that and marketing, I suppose.

Dogs can't metabolize theobromine very well, and a modest amount of chocolate, especially dark, can be toxic to them. This is why you shouldn't get your dog a box of chocolates on Valentine's Day, no matter how much you love them. And assuming it's spayed or neutered, your pooch won't benefit from any of chocolate's other potential effects anyway.

# KINGBIRD FARM

## MICHAEL & KARMA GLOS

*"Shopping for us is opening the freezer and seeing what's there," says Michael Glos of Kingbird Farm in Berkshire, NY, "I think producing food is really rewarding."* With the help of their daughter, and occasionally farm interns, Michael and Karma Glos have turned their hundred acres of hillside land into a 20-acre productive farm producing a variety of organic meat, eggs, and vegetables.



Twenty years ago, after meeting out West, Michael and Karma dreamed of starting their own small farm to produce food for their personal freezer. With farmland in Washington and Oregon being so far from markets, they directed their search back East towards Michael's hometown of Ithaca, NY. Their farm did not always boast a large livestock barn, unique log

cabin, and several greenhouses but over the years of living in Berkshire, the Gloses have slowly added more buildings, barns, and pastures to their homestead.

Both interested in activities that "get them outside", the Gloses spend a majority of their time working their land, plowing and tilling with their work horses, tending the greenhouses, and caring for their cattle, pigs, and poultry. All their animals and produce are raised organically. At Kingbird Farm organic is more than a business; it's a lifestyle. The work at Kingbird farm is generally aided by the help of a farm intern although in recent years, as farm labor laws have gotten stricter, the Gloses have found it hard to employ interns. Michael also works half time doing agricultural research at Cornell.

The Gloses are regulars at the summer and winter farmers market in Ithaca, always bringing an ample supply of their fresh shallots, meat, garlic, and herbs to sell. Through their farmers market sales, the Gloses sell about 50% of their produce. Along with the farmers market, Kingbird Farm has an open, self-serve shop at the farm selling about 30% more of their products, and take many custom orders throughout the year.

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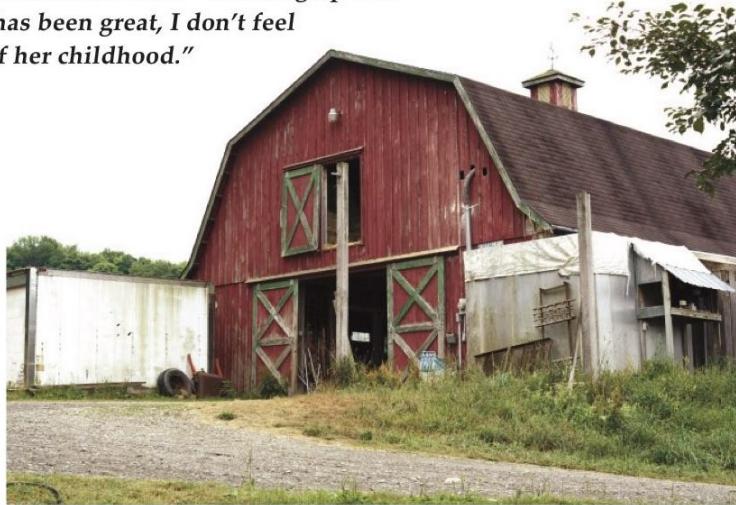
Cornell Cooperative Extension of Tompkins County and the Ithaca/Tompkins CVB are pleased to announce our 2019 **Agriculinary Tourism Conference** focused on helping farm and food venues build relationships and develop new initiatives to bring visitors and grow revenue. The conference will take place on Tuesday, March 5 at the Hotel Ithaca, at 222 S. Cayuga St. - 8:30 Registration, Program from 9:00-4:00, followed by networking/social hour.



For full program and registration information, click on the following link:

<https://business.tompkinschamber.org/events/details/agriculinary-tourism-conference-2019-189414>

Throughout the year, Kingbird Farm regularly hosts a Sunday night dinner, inviting a variety of farmers from around the area. At these dinners, they share stories of success and hardship over a meal composed of food from the represented farms. As well as learning from fellow farmers, Michael and Karma's daughter has been a great help to them over the years. Michael reflects "*Growing up here with my daughter has been great, I don't feel like I missed any of her childhood.*"



Many of Kingbird's loyal customers have enjoyed seeing the Gloses' daughter grow over the years as she has helped out at their booth at the Ithaca Farmers Market. As Michael and Karma's daughter heads off to Cornell this fall to pursue an interest in Plant Science, the Gloses will continue to work their land in the hills of Berkshire.

#### AT A GLANCE

YEARS OF OPERATION: 20

OPERATION TYPE: ORGANIC, CERTIFIED

PRODUCTS: VEGGIES, GARLIC,  
SHALLOTS, MEAT

PRIMARY MARKET: DIRECT TO  
CONSUMER, FARMERS  
MARKET

WANT TO LEARN MORE ABOUT  
KINGBIRD FARM?

VISIT THEIR WEBSITE AT  
[WWW.KINGBIRDFAIR.COM](http://WWW.KINGBIRDFAIR.COM)



## Natural habitats, bee diversity key to better apple production

By Krishna Ramanujan, Cornell Chronicle

A Cornell-led study, [published Jan. 18 in the journal Science](#), shows that apple orchards surrounded by agricultural lands are visited by a less diverse collection of bee species than orchards surrounded by natural habitats.

In turn, apple production suffers when fewer, more closely-related species of bees pollinate an orchard. Production improves in orchards surrounded by natural habitats, which then draw a broader selection of species to apple blossoms.

The researchers examined 10 years of data from 27 New York state apple orchards; the study accounted for the types of landscapes that surround these orchards, measured apple production and surveyed the species of bees that visited each orchard.

The researchers also reconstructed the evolutionary history and relatedness of New York native bee species to better understand species patterns that played out across these orchard bee communities.

This reconstruction is represented by a branching tree-like diagram of related species, called a phylogeny.

“Orchards that have bee communities that are more closely related to each other did worse in terms of their fruit production, and the communities that are more broad across the phylogeny did much better,” said Heather Grab, Ph.D. ’17, the paper’s first author and a postdoctoral researcher in the lab of Katja Poveda, associate professor of entomology and a co-author of the study. Bryan Danforth, professor of entomology, is a senior author of the study.

Species of bees exhibit different behaviors in how and when they pollinate flowers. Some species approach from the side, others from the top, and they each may feed at different times of day and with varied frequencies, all of which affect how completely an apple flower is pollinated.

Organs in apple flowers must receive a certain number of pollen grains in order to develop a full complement of seeds. When seeds do well, the tissue that supports those seeds, the fleshy part of the fruit, is

also more fully developed.

“If only half of the seeds mature fully, then the fruit is misshapen,” which in turn affects weight and salability, Grab said.

In this way, habitats that surround farms affect the diversity of bee communities and, thus, an orchard’s productivity.

Common species such as the mining bee (*Andrena regularis*), bumblebees (from the genus *Bombus*) and sweat bees (*Lasioglossum*), for example, were able to tolerate agriculture-dominated landscapes. At the same time, many other species of mining bees (*Andrena* genus), which are efficient apple pollinators, did not do well when orchards were surrounded by agricultural lands.

“We don’t know what the mechanisms are, but bee species that are more closely related to a species that does poorly are also likely to do poorly” in agricultural dominated landscapes, Grab said.

The phylogeny revealed that the bee species that visit orchards surrounded by farmlands are not a random sample, but represent sets of related species that are resilient to these habitats.



A Cornell-led study of bees in apple orchards revealed that a wider diversity of species had a positive effect on apple production. A carpenter bee visits an apple flower. Photo by Kent Loeffler/

*Co-author Michael Branstetter, a research entomologist at the United States Department of Agriculture-Agricultural Research Service in Logan, Utah, created the phylogeny. Other co-authors are Greg Loeb, Cornell professor of entomology; Mia Park, Ph.D. ’14, a postdoctoral fellow at North Dakota State University; and Eleanor Blitzer, a biologist at Carroll College.*

## **Workforce expert helps NY ag respond to challenges**

By Matt Hayes, Cornell Chronicle, January 11, 2019

Managing a growing business can be daunting, and workforce issues are among the greatest challenges. New York state's farmers and agricultural entrepreneurs are getting a big lift solving those workforce issues, thanks to Richard Stup.

A senior extension associate and agricultural workforce specialist in the College of Agriculture and Life Sciences and at Cornell Cooperative Extension, Stup addresses workforce challenges facing the agriculture industry through educational programs and applied research. The Cornell Agricultural Workforce Development program he leads helps farm and agribusiness managers build effective employee teams by applying the best human resource management practices for the agricultural setting. The program is unique because of its strong focus on research and extension.

Stup received his Ph.D. in workforce education and development from Pennsylvania State University, and worked in extension in Pennsylvania before going into private business. He founded Ag Workforce Development, a firm focused on improving individual and team performance through organization development and technology solutions, experience he brings to the Cornell program.

Stup spoke recently about his appreciation for agriculture, the challenges facing the industry in New York, and the path forward for farmers looking to modernize their business operations.

### ***What are the biggest challenges you see facing New York's agricultural industry?***

Having a steady, reliable and competitive workforce is one of the biggest challenges facing the industry. There literally aren't enough people in the country to get all the work done that our agricultural industry demands. Farmers are already adjusting business and crop plans because they sometimes can't find enough labor to get the work done.

Leadership development is another big challenge. Many farms are larger than they were in the past, and they have a combination of family and non-family employees. Larger operations require skilled managers and leaders to create the right business culture, com-

municate effectively, and provide the stability and direction that people need to be successful.

Consumers are increasingly interested in the lives of the many people who helped grow and prepare the foods they eat; they are very focused on the living and working experiences of farm employees. Most farmers do a good job providing suitable housing and working conditions, but just one problem situation can create a bad impression of agriculture.

### ***What trends have you seen over the past few years?***

There is a high degree of professionalism that the next generation is bringing to agriculture. Younger farm managers are highly aware of changing employee and consumer expectations, and they are rapidly adapting to meet them. These young managers are having a big impact on workforce development; they know that people have options, and farms must compete to be an attractive place to work.

### ***What are you doing in your role to support New York's farmers?***

There's a lot going on but I'll highlight a few areas. One is the industry group called the Agricultural Workforce Development Council. They identified employee onboarding as a critical area for improvement. I've been leading a team with representatives from the whole industry to develop a model onboarding program that farms can easily adapt and use. We're trying to help farms be compliant with all employment laws, help employees learn their jobs quickly and safely, and create a great working experience for both employers and employees. We want employees to be safe, productive, and engaged from day 1.

We're planning several opportunities for farmers and industry to learn more about human resource management and employment laws. There are multiple workshops planned at conferences and an event we call the Labor Road Show II, which will bring these topics to four locations across the state.

Speaking of employment laws, New York has a new sexual harassment prevention law that applies to all employers, including all farm employers. I've been heavily involved in recent months helping farmers understand and make plans to meet these new requirements.

We also developed a set of management resources for farmers who provide housing to their employees. There are three documents: guidelines for managers;



## FARM CREDIT EAST

Cornell Cooperative Extension  
Broome County

Ask the Experts: Farm Taxes

Tuesday March 19th, 5:30-8pm

**Cornell Cooperative Extension—Broome County**

Do you have questions about what tax forms you need to file as a farm?

Are you keeping copies of all the receipts and paperwork that you'll need come tax time?

How are you currently keeping track of your income and expenses?

Join Cornell Cooperative Extension of Broome County for our first "Ask the Experts" talk with Grey Bennis, Tax Associate with Farm Credit East. He will discuss typical tax forms that a farm or agribusiness would file, the best ways to keep track of all your receipts, mileage and other important numbers, and best practices for tracking income and expenses.

Cost: \$15/farm (includes 2 registrations) Veterans are FREE

Click [here](#) to register.



# CORNELL IMPACTS NEW YORK STATE

an orientation guide for employees, offered in English and Spanish; and a housing inspection checklist. Our resources were adapted by the National Milk Producers Federation and are now part of the national standards for worker care.

The Cornell Agricultural Workforce Development website is an important part of our outreach effort. The website hosts a lot of materials and resources that people can use to improve human resource management. It is also the home of the Ag Workforce Journal. The journal provides timely updates about workforce issues in agriculture, and extension educators and agribusiness can use these articles in their newsletters.

### ***What role is technology playing in agricultural workforce development?***

Certainly communications technology is a big factor. Managers go to the internet first to find answers to problems. That means building a relevant and constantly updated website is critical. It's also important

to adapt and use social media appropriately.

Online training is also growing quickly. Farmers must constantly update training for farm employees. More farmers are using online resources to supplement training and to track employee completion.

### ***How did you get involved in agriculture?***

I grew up on my family's dairy farm in southwestern Pennsylvania. When I first went to college I wanted to get away from agriculture, but my experiences at Penn State showed me that agriculture was a lot more than what I knew as a youngster. ... Today, Cornell gives me world-class experts as colleagues and the ability to leverage the research and extension resources of a great university to address agriculture's workforce challenges. I feel very blessed to be helping farm owners, managers, employees and agribusiness personnel to build fulfilling and sustainable careers in this great industry.



# ExportNY

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Please join us for an informational session on:

**February 22, 2019**

4:00 – 6:00 p.m.

Cornell Cooperative Extension – Agricultural Development Center (Taste NY Building)  
840 Upper Front Street, Binghamton, NY 13905

(Light refreshments will be provided)

RSVP by: Wednesday, February 20, 2019 to Vicki Giarratano 607.584.5022

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*"Completing the ExportNY program put on by Binghamton University's Center for International Business Advancement has been enormously helpful to our growth as exporters. Through the Program we've developed a solid, step by step plan for selecting the most productive future markets, finding and choosing partners overseas, and maintaining strong relationships from across the globe."*

– Patti Wilcox, Co-Owner of Awestruck Ciders. ExportNY participant, Spring 2018.

## Snow Covered Cows in a New York Winter Wonderland

Happy cows come from New York .... Or wait, is that cold cows. With winter just around the corner, and snow already on the ground, it is important to know that the cows you see outside are not in distress! Living in a rural community, as we do, you are likely to drive by cows outside and wonder if they are cold, and why they aren't inside a barn where they would be sheltered from the elements. Well here's why ...

Did you know that the ideal temperature for a cow ranges from 25° F and 65° F? Actually, hot weather can actually be more dangerous to cows than cold. Cows have an average body temperature of 101.5° F, and because they are ruminant animals, they partially digest their food through fermentation in the rumen, a process that produces heat. This process can be thought of as a large internal heater that takes up 1/3 of the cow's body. In the winter, this is key in helping cows keep warm.

Cows have very thick skin, in some areas, it can be as thick as a ½ inch, and this keeps the cows well insulated! To put this into perspective, the thickest skin on a human is the soles of our feet, which is a little over 1/8 of an inch thick. Another interesting fact is that cow's legs have very little muscle. They have evolved to divert warm blood in a way that keeps their legs from freezing and getting frostbite.

Another factor contributing to cow warmth is the piloerector muscles in their skin. These muscles allow the hair to stand upright in cold weather, and trap warm air in. As it gets colder, the thicker and longer hair will stand up and catch the snow, this forms a layer that creates an air pocket that is warmed by body heat and works to keep the cow warm!

Cows actually can become sick from being housed inside during the winter months if there is not proper ventilation. An illness frequently seen in livestock in the winter months is respiratory infections. Respiratory infections develop when there are "bugs" breeding in warm, moist, environments (like one that is created by a group of cows loafing in a winter barn). Instead it is recommended that cows have a solid windbreak so they can get out of the wind when they need to, which allows them to conserve heat.

Some other key factors in the keeping the cows happy include keeping cows clean and dry (wet coats have greatly reduced insulating properties and make cows more susceptible to cold stress). Mud-caked coats also reduce the insulating properties of the hair. Cows are provided additional feed in the winter, and an ample water supply in the winter is also important. Limiting water can limit feed intake and make it more difficult for cows to meet their energy requirements.

Next time you see snow covered cows, think back to this information, and know the cows are happy, and enjoying this glorious New York winter wonderland.





9340 Long Pond Road  
Croghan, NY 13327  
Phone 315-346-1222

[www.oswegatchie.org](http://www.oswegatchie.org)

## Into the Woods Forestry Training at the Oswegatchie Educational Center

March 31 – April 2, 2019

January 18, 2019

To: Interested Students, ages 14 –18, in pursuing a career in Forestry & Wood Products

From: Bill Waite, Program Director, [Oswegatchie Educational Center](#)

Todd Lighthall , [NYS FFA Leadership Training Foundation](#)

On Behalf of the [NYS Wood Products Development Council](#)

RE: Into the Woods, a Forestry Training Program at Oswegatchie

The Oswegatchie Educational Center is offering a FREE 3 day / 2 night trip, March 31st - April 2nd, 2019.

In partnership with the NYS Wood Products Development Council, The Oswegatchie Educational Center is offering an intense 3 day / 2 night program at our facility in Croghan, NY. The intent is to teach interested students about the basics of forestry management and timber production. Workshops will include timber cruising, sawmill operation, chainsaw safety, arboriculture, and wood product marketing. Team building and leadership skills will also be included.

The Oswegatchie Educational Center is situated on a 1200 acre expanse of land inside the Adirondack Park. This setting provides the perfect atmosphere for learning about forestry. The property includes 4 bodies of water, various streams, wetlands, and woodlands ideal for environmental education. Throughout the year, Oswegatchie provides programming, meals, and lodging for 4,000 students of all ages. This special program is a unique, and you do not want to miss out on this opportunity.

*This is intended for individual students to attend and not necessarily as a school group function. School groups are welcome, but the program is aimed at those students that are interested in forestry and related wood products.*

Please contact me if you have any questions about this opportunity .

Sincerely,

Bill Waite, Program Director  
[wwaite@oswegatchie.org](mailto:wwaite@oswegatchie.org)



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community and ensuring a vibrant future  
for Tioga County's Rural Landscape

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## **News, Notes and Workshops for Tioga and Chemung County Farmers and Gardeners**

### **2019 PESTICIDE TRAINING AND RECERTIFICATION CLASSES**

February- A series of pesticide training and recertification classes are being offered by Cornell Cooperative Extension. Anyone interested in obtaining a pesticide certification license and meets the D.E.C. (Department of Environmental Conservation) experience/education requirements or current applicators seeking pesticide recertification credits should attend. This training is NOT a 30-hour certification course for commercial licenses. The Pesticide Training and Recertification classes will be held at Cornell Cooperative Extension – Ontario County, 480 North Main Street, Canandaigua, NY 14424. The classes will be on Wednesdays, February 6, 13, 20, 27, 2019 from 7:00 pm to 9:30 pm with the exam being offered on Wednesday, March 6, 2019, from 6:30 pm – 11:00 pm. To receive registration material or for additional information, contact Cornell Cooperative Extension of Ontario County at (585) 394-3977 ext. 427, email nea8@cornell.edu or ext. 436, email rw43@cornell.edu The registration form and more information is available on-line at [www.cceontario.org](http://www.cceontario.org)

**Respirator Fit Testing-** By the DEC Region 8, Finger Lakes- For Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne and Yates. Held at CCE Ontario County, 480 North Main Street, Canandaigua, NY. To make appointments please call 607-547-6023. For more information please visit: [https://flgp.cce.cornell.edu/events.php?date=05\\_2018](https://flgp.cce.cornell.edu/events.php?date=05_2018)

**Ithaca Native Plant Symposium**—check here for conference information: <https://www.ithacanativelandscape.com/>

**Grafting Workshop-** Tuesday, February 26, 2019, 6:00 PM - 8:30 PM. Learn how to save and reproduce fruit for the future. Take home two grafted apple trees. Greg Rothman has been working for Cummins Nursery since 2008 in that time he has propagated upwards of forty thousand fruit trees via chip budding and grafting. Dustin Underwood has been managing orchards for close to ten years this includes pruning, grafting, top working, and spraying. Held at Human Services Complex in Montour Falls, NY Room 120. Fee is \$35 per person, space is limited so pre-registration online with full payment is required. Please call Roger Ort at 607-535-7161 or visit [cceschuyler.org/events](http://cceschuyler.org/events). To Register please click this link: [https://reg.cce.cornell.edu/CCESchuylerGraftingWorkshop19\\_244](https://reg.cce.cornell.edu/CCESchuylerGraftingWorkshop19_244)

**Trees of Life: Nuts in the Eastern US and Their Importance through-** Time Tuesday March 12th, 6-8PM at the Human Services Complex in Montour Falls in room 120. This workshop traces the importance of nut trees to ecological and social development in the northeastern US from ancient times to visions of a sustainable future. Class is \$20 and you must preregister by March 8th. About the guest speaker: Sam Bosco is a PhD student in the Horticulture Section of the School of Integrated Plant Science at Cornell University where he studies the agricultural, social, and cultural dynamics of nut tree-based agroforestry in NY. To register please visit: [https://reg.cce.cornell.edu/Treesoflife\\_244](https://reg.cce.cornell.edu/Treesoflife_244)

**Backyard Fruit Production-** Saturday, March 23, 2019, 8:30 AM - 1:00 PM. Held at Reisinger Apple Country at 2750 Apple Lane in Watkins Glen NY. Spend the morning learning about growing apples, peaches, cherries, plums and pears. This workshop will also cover growing small fruits such as raspberries (black, yellow and red), blueberries and currants. Highlights will include pruning, insects, diseases, fertility, “critter control” and netting blueberries. Fee is \$20 per person or \$35 for two pre-registration is required by March 21st. Workshop will be rain or shine, so please dress for the weather! Please visit <http://cceschuyler.org/events> or call Roger Ort 607-535-7161 if you have any questions. To register please visit [https://reg.cce.cornell.edu/Fruitproduction2019\\_244](https://reg.cce.cornell.edu/Fruitproduction2019_244)

### **Wild Mushroom Walks and Talks**

Sunday, May 5, 2019, 1:00 PM - 3:00 PM- Learning how to identify trees, and their connections to edible mushrooms in a classroom setting.

Sunday, July 21, 2019, 1:00 PM - 3:00 PM The Art of Foraging for Fungi.

Sunday, October 20, 2019, 1:00 PM - 3:00 PM Mushroom hunting, identification and their uses.

Join Dominic Costa and Cornell Cooperative Extension of Schuyler County to dive into the Art of Mushroom hunting. Knowing the forest and the plants that inhabit those eco systems will allow you to search in the right location for each species of mushroom. Classes are Sundays from 1pm-3pm. \$25 registration fee

per session or if you register for all 3 sessions you will get a free book *Mushrooms of the Northeast*. Contact: Call Roger Ort at 607-535-7161 for more details. To register please follow this link:  
[https://reg.cce.cornell.edu/wildmushroomwalksandtalks\\_244](https://reg.cce.cornell.edu/wildmushroomwalksandtalks_244)

***Join the Tompkins County Master Gardeners for these Botanical Slideshows: Glorious Gardens of NYC (Part 1 and 2)--botanical slideshows on Sundays February 10 and 24, 2:00-3:30pm; and Ireland Sunday March 10, also 2 to 3: 30 pm.***

**Part 1: NY Botanical Garden & Wave Hill Sunday, February 10, 2:00-3:30pm**  
@ CCE-Tompkins Education Center, 615 Willow Avenue, Ithaca

Pat Curran, retired horticulture educator at CCE-Tompkins, toured NYC gardens on a beautiful sunny weekend in October 2017. The New York Botanical Garden (which included a display of Dale Chihuly's glass art) and Wave Hill were both lush with fall flowers. Escape the gray and white for an hour and enjoy stories and photos of beautiful plants and refreshments provided by the Tompkins County Master Gardeners. Register here to be notified of changes due to weather: <http://db.ccetompkins.org/programs/civicrm/event/info?reset=1&id=1647>

**Part 2: The High Line, NYC Sunday, February 24, 2:00-3:30pm**

@ CCE-Tompkins Education Center, 615 Willow Avenue, Ithaca

Join retired horticulture educator Pat Curran for a tour of the NYC High Line on a sunny October day. The High Line is the transformed elevated rail line that used to supply the Meatpacking District. Now it is flowers, landscapes, art, suspended high in the air, and a major NYC destination. Stick around after the slide show for refreshments and socializing. Register here to be notified of changes due to weather: <http://db.ccetompkins.org/programs/civicrm/event/info?reset=1&id=1653>

**Walled Gardens and Wild Landscapes of Ireland, Sun. March 10, 2-3:30 pm.** Chrys Gardener will present slides of public gardens and natural areas in the west of Ireland, where she lived from 2008-2012. Ireland is a gardener's paradise, with a warm moist, temperate climate (Zone 9). One of these are-

as, the Burren, is an unusual limestone karst landscape, where alpine and arctic plant species grow side-by side.

## Food Safety for Growers and Processors

February 14, 2019

Morrisville, New York – Are you interested in expanding your wholesale vegetable production? Are you unsure of the difference between an audit and an inspection? Are you interested in bringing a value added product to market? If this is you, we hope you will join us on February 14 for the Food Safety for Growers and Processors workshop.

“Food Safety for Growers and Processors” will run from 9:30 a.m. to 3 p.m. on Thursday, February 14, 2019. Participants will learn how to navigate food safety regulations, understand the types of certifications that retailers may request, learn how to develop a value-added food product, and identify the next steps for their farm business. The day will include presentations by Betsy Bihn, Director of the Produce Safety Alliance, Steve Schirmer, Produce Safety Field Administrator for NYS Department of Ag and Markets, Bruno Xavier, Extension Associate at the Cornell Food Venture Center, and John Luker, Assistant Director for the Division of Food Safety and Inspection for NYS Department of Ag and Markets. Registration for the event is \$25 and includes lunch. Attendees will leave the program feeling more comfortable about exploring different opportunities for wholesale vegetable production, diversifying into value added production, and navigating relevant regulations. This event will be hosted at CCE Madison County (100 Eaton Street Morrisville, NY 13408).

Sign up for this event by registering at [https://reg.cce.cornell.edu/GAPS\\_225](https://reg.cce.cornell.edu/GAPS_225) or by contacting Cornell Cooperative Extension of Madison County. Any other questions may be directed to Sarah Ficken at (315)684-3001 ext. 108.



**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 that provides equal program and employment opportunities.

## **Grow Your Farm Business Course Series**

Wednesdays 6 – 9pm, January 16 – March 20, 2019 at the Just Be Cause Center, Ithaca NY. Enroll in Groundswell Center for Local Food & Farming's Grow Your Farm Business Course, which includes presentations, activities and farmer panels aimed at teaching students the core pieces of planning a farm business. Session topics include goal setting, assessing financial feasibility, marketing, justice in your business and more in order to create a business plan! Also hear about resource opportunities from local and Federal farm support agencies. This course is designed as a 10-week intensive, however, sessions are also available for individual enrollment. Course Fee: Sliding Scale. Register: <https://groundswellcenter.org/farmbusiness> Register by January 2nd at <https://groundswellcenter.org/farmbusiness> or by calling 607-319-5095.

Contact: Liz Coakley, Groundswell Center for Local Food & Farming Farm Business Incubator Program Manager 607-319-5095 liz@groundswellcenter.org

## **Raise a Home Poultry Flock**

February 6, 2019, 6:30 PM - 8:00 PM. Learn about keeping chickens in the backyard – breeds, housing, feeding and sanitation will all be discussed. This class is required for City of Ithaca residents who want to keep up to 4 chickens on city lots of at least 3000 SF. REGISTER ONLINE HERE or email mjc72@cornell.edu. \$5/person or \$8/household, pre-registration is required Contact Debbie Teeter dlt22@cornell.edu (607) 272-2292 ext. 151

## **Succession Planning Workshop Series for Farm Business**

South Central NY Location

February 13, February 27 & March 13, 2019 at 10:00am – 2:30pm

Dryden Fire Hall at 26 North St, Dryden, NY 13052

Register online: <https://scnydfc.cce.cornell.edu/events.php>

Registration contact: Shannon Myers; srm242@cornell.edu; (607) 391-2662

Specialists from Cornell Cooperative Extension and PRO-DAIRY are organizing a three-part workshop series for farm owners and managers to acquire skills, tools and tactics for success in multi-generational farm businesses. The workshop series will be offered during February and March in two locations: Morrisville,

NY and Dryden, NY. The three sessions will build on each other, starting with skills for effective communication, teamwork and problem-solving. Additional topics will include assessing business viability, setting individual and team goals, and developing a transfer plan. The interactive small-group format will incorporate presentations, activities, and peer-to-peer discussion. The cost is \$60 per person, which includes all three sessions, materials, and lunch. To get the most out of the program, members of each generation involved in the business are encouraged to attend together.

## **Maple Syrup Production Workshop and Farm Tour**

Saturday February 16, 2019 9 am to 12 pm. Do you have an interest in learning more about maple syrup production? If so, please join us for this upcoming workshop and farm tour. Jeff Benjamin of Hill Top Maple Farm will be giving us an overview of syrup production as well as giving us a tour of his maple sugaring operation. In order to help tailor this workshop to your needs, we are requesting that when you sign up that you let us know what topics you would like to learn more about in this workshop (eg. tapping, sap collection, boiling, processing, finishing, bottling, etc). Suggested donation of \$5 per person. Pre-registration is requested in order to determine topics to cover in presentation as well as to ensure enough seats, handouts, and refreshments. For more information and to register, please contact Shona Ort at 607-734-4453 ext. 227 or sb06@cornell.edu.

## **Diversity of Macrofungi in New York**

February 21, 2019 from 5:30 to 7:30pm held in CCE Chemung; Room 110. There's more to mushrooms than what you can find in the supermarket! Our state's forests are filled with incredible fungi of seemingly every shape, color, and ability. Come learn about fungi that turn wood blue, mushrooms that can glow in the dark, and even some that "farm" aphids! We'll talk a bit about our ever-evolving understanding of these amazing organisms and the astounding diversity right here in our region's backyard. This class is going to be held in Room 110 at Cornell Cooperative Extension of Chemung County (425 Pennsylvania Ave, Elmira, NY 14904). There is a \$5 per person suggested donation. Pre-registration is recommended in order to ensure enough seats, handouts, and refreshments. For more information and to register, please contact Shona Ort at 607-734-4453 ext. 227 or sb06@cornell.edu.

## **The Taste FLXpo**

Feb 22nd 5pm-8pm. The Taste FLXpo presented by Finger Lakes Farm Country is a local food and beverage festival open to the public which includes samples of local grown food, wine, and craft beverages, food trucks, and a farmer's market where guests can purchase locally sourced products. The Taste FLXpo will feature local farmers, chefs stations featuring prepared samples, and beverage producers inside the Corning Community College Commons Building. Please call CCE Steuben (607) 664-2300 for more information.

**“Healthy Soils, Whole Farms”** NOFA-NY, Inc is hosting our annual Dairy and Field Crop Conference. March 6, 2019 at the Holiday Inn/Liverpool! Our presenters are Ray “The Soil Guy” Archuleta, Gabe Brown, and Francis Thicke! This is a one-day event! Please visit [www.nofany.org](http://www.nofany.org) for more information and to register. You can also call our office at (315) 988-4000 and get information or register over the phone.

## **The Farmer 2 Farmer series**

A potluck dinner, guest speaker, and farmer discussion group. A guest presents on the topic for about 20-30 minutes followed by group discussion. Please bring a dish to share and one to eat off of, if you can. This is a great opportunity for you to meet and learn from other farmers with operations similar to yours. We meet at 6:30 at the Cornell Cooperative Ext. offices, 615 Willow Ave., Ithaca.

Thursday, Feb. 28: Livestock Handling with guest presenter Heather Birdsall, Livestock Educator with CCE-Cortland County. Proper livestock handling systems keep farmers and animals safe and make work on the farm easier. Heather will discuss different handling systems for cattle, small ruminants and swine, from purchased to homemade. Please email me by Feb. 25 if you plan to attend.

Wednesday, March 13: Solar Grazing with Lexie Hain, American Solar Grazing Association. Lexie will discuss her research and experience with solar grazing. Learn about this fascinating and exciting opportunity. Please email me by March 11 if attending.

Wednesday, April 3: Early Results from the Farmers' Market Square Project with Matt LeRoux. I'll present on what we learned after collecting detailed customer transaction data with 9 farms at markets this summer. Please email me by April 1 if attending.

Thursday, April 11: Sexual Harassment Training Information Session: A new NY state law dictates that all employers must provide sexual harassment training for employees. Learn what is required and how to get it done from CCE-Tompkin's Human Resources Manager, Krystal Kinney. Krystal will explain the law and answers questions. Please email me by Wednesday, April 9 if attending.

If you plan to come, please let me know via phone or email at [mnl28@cornell.edu](mailto:mnl28@cornell.edu) or 607-272-2292, ext. 159.

## **Low cost funds available in the Southern Tier:**

Working Capital Loans - \$5,000 to \$100,000. Term of 5 years. Fixed at 75% of prime rate at time of approval. Current rate 3.94%. Requires 10% cash equity, and collateral values at 120% of loan amount (\$50,000 loan requires securable assets ( equipment, real estate, cash) of \$60,000). Eligibility – For profit businesses located in Steuben, Schuyler, Chemung, Tioga, Tompkins, Broome, Chenango, Delaware Counties. Contact [gminer@redec.us](mailto:gminer@redec.us)

Agricultural Loans - \$ 50,000 to \$250,000. Term 5-15 years. Fixed at 75% of Prime rate at time of approval (Current rate 3.94%). Requires 10% cash equity, and collateral values at 120% of loan amount (\$50,000 loan requires securable assets ( equipment, real estate, cash) of \$60,000).

Eligibility – Agricultural businesses – growers, processors, farm markets, wholesale distributors, dairy, grapes, hops, hemp, meat, cheese, etc. located in Steuben, Schuyler, Chemung, Tioga, Tompkins, Broome, Chenango, Delaware Counties. Contact [gminer@redec.us](mailto:gminer@redec.us)

## **The Tax Tips For Forest Landowners**

Well managed forests produce timber and other forest products, provide wildlife habitat, recreational opportunities, aquifer and watershed protection, and other amenities. Non-industrial private woodlands comprise approximately 60% of the nation's total forests. Providing tailored tax information is one way in which the Forest Service is working to increase forest productivity on non-industrial forest lands. For the latest tax information and tips regarding private woodlands, visit: [www.timbertax.org](http://www.timbertax.org).